

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 476/TT/2020

Coram:

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

Date of Order: 28.03.2022

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 the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset-I:** Combined Assets of (1) 400 kV D/C Ajmer (New)-Ajmer (RVPN) Transmission Line along with associated bays at both ends; (2) 400 kV, 125 MVAR Bus Reactor along with associated bay at Ajmer (New) Sub-station; (3) 765/400 kV, 3X500 MVA ICT-I along with associated bays at Ajmer (New) Sub-station; (4) 400 kV D/C Chittorgarh (New)-Chittorgarh (RVPN) Transmission Line along with associated bays at both ends; (5) 765 kV, 240 MVAR Bus Reactor along with associated bay at Chittorgarh (New) Sub-station; (6) 400 kV, 125 MVAR Bus Reactor along with associated bay at Chittorgarh (New) Sub-station; (7) 765/400 kV, 3X500 MVA ICT-I along with associated bays at Chittorgarh (New) Sub-station; (8) 765/400 kV, 3X500 MVA ICT-II along with associated bays at Chittorgarh (New), **Asset-II:** Combined Assets of (1) 765 kV, 240 MVAR Bus Reactor along with associated bay at Ajmer (New) Sub-station; (2) 765/400 kV, 3X500 MVA ICT-II along with associated bays at Ajmer (New) Sub-station, **Asset-III:** 2X400 kV D/C (Quad) Tirunelveli Pooling Station-Tuticorin Pooling station line along with new 400/230 kV (GIS) Tirunelveli Pooling Sub-station with 2X125 MVAR 400 kV Bus reactors and associated bays at 400/230 kV Tuticorin Pooling station and **Asset-IV:** 2X500 MVA 400/230 kV transformers along with associated bays and equipment at new 400/230 kV (GIS) Tirunelveli Pooling Sub-station covered under Green Energy Corridors: Inter-State Transmission Scheme (ISTS)- Part-A.

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. Haryana Power Purchase Centre,
2nd Floor, Shakti Bhawan, Sector-6,
Panchkula-134109.
3. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Shimla-171004 (H.P.).
4. Punjab State Power Corporation Limited,
Thermal Shed Tia, Near 22 Phatak,
Patiala-147001.
5. Power Development Department,
Janipura Grid Station,
Jammu (Tawi)-180007.
6. Uttar Pradesh Power Corporation Limited,
10th Floor, Shakti Bhawan Extension,
14, Ashok Marg, Lucknow-226001.
7. Delhi Transco Limited,
Shakti Sadan, Kotla Road (Near ITO)
New Delhi.
8. Chandigarh Electricity Department,
UT-Chandigarh, Div.-11, Opposite, Transport Nagar,
Industrial Area Phase-I, Sector-9, Chandigarh.
9. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun.
10. 132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
11. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
12. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
13. Northern Central Railway,
Allahabad.
14. BSES Yamuna Power Limited,
B Block, Shakti Kiran Building (Near Karkadooma Courts),
Karkadooma, 2nd Floor, Delhi-110092.
15. BSES Rajdhani Power Limited,
Bus Terminal, Nehru Place, BSES Bhawan,
Behind Nehru Place, New Delhi-110019.



16. Tata Power Delhi Distribution Limited,
33 kV Sub-station Building, Hudson Lane,
Kingsway Camp, North Delhi-110009.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. Mytrah Energy (India) Limited,
8001, 8th Floor, Q-City, Nanakramguda, Gachibowli,
Hyderabad-500032 (Telangana).
19. Suzlon Power Infrastructure,
Near Shree Krishna Centre,
Navrangpura, Ahmedabad.
20. Karnataka Power Transmission Corporation Limited,
Kaveri Bhavan, Bangalore-560009.
21. Transmission Corporation of Andhra Pradesh Limited,
Vidyut Soudha, Hyderabad-500082.
22. Kerala State Electricity Board,
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram-695004.
23. Tamil Nadu Generation and Distribution Corporation Limited,
(Formerly Tamil Nadu Electricity Board-TNEB),
NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
24. Electricity Department,
Government of Pondicherry,
Pondicherry-605001.
25. Eastern Power Distribution Company of Andhra Pradesh Limited,
P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
26. Southern Power Distribution Company of Andhra Pradesh Limited,
Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana
Gunta, Chittoor District, Tirupati-517501 (Andhra Pradesh).
27. Central Power Distribution Company of Andhra Pradesh Limited,
Corporate Office, Mint Compound, Hyderabad-500063 (Telangana).
28. Northern Power Distribution Company of Andhra Pradesh Limited,
Opposite NIT Petrol Pump, Chaitanyapuri, Kazipet,
Warangal-506004 (Telangana).
29. Bangalore Electricity Supply Company Limited,
Corporate Office, K.R. Circle, Bangalore – 560001 (Karnataka).



30. Gulbarga Electricity Supply Company Limited,
Station Main Road, Gulbarga, Karnataka.
31. Hubli Electricity Supply Company Limited,
Navanagar, PB Road, Hubli, Karnataka.
32. Mangalore Electricity Supply Company Limited,
MESCOM Corporate Office, Paradigm Plaza,
AB Shetty Circle, Mangalore-575001 (Karnataka).
33. Chamundeswari Electricity Supply Corporation Limited,
927, LJ Avenue, Ground Floor, New Kantharaj URS Road,
Saraswatipuram, Mysore-570009 (Karnataka).
34. Betam Wind Energy Private Limited,
1st floor, Orchid Centre, Sector 53, Golf Course Road,
Gurugram-122002 (Haryana).
35. Green Infra Renewable Energy Limited,
5th floor, Tower C, Building No. 8,
DLF Cyber City, Gurugram-122002 (Haryana).
36. Orange Sironj Wind Power Private Limited,
301 B, 3rd floor, D-21 Corporate Park, Dwaraka,
Delhi-110075.

.....Respondent(s)

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

For Respondents : None

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and for determination of transmission tariff for 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”) for the following assets (hereinafter collectively referred to as “the transmission assets”) covered under Green



Energy Corridors: Inter-State Transmission Scheme (ISTS)-Part-A (hereinafter referred to as “the transmission project”):

Asset-I: Combined Assets of (1) 400 kV D/C Ajmer (New)-Ajmer (RVPN) Transmission Line along with associated bays at both ends; (2) 400 kV, 125 MVAR Bus Reactor along with associated bay at Ajmer (New) Sub-station; (3) 765/400 kV, 3X500 MVA ICT-I along with associated bays at Ajmer (New) Sub-station; (4) 400 kV D/C Chittorgarh (New)-Chittorgarh (RVPN) Transmission Line along with associated bays at both ends; (5) 765 kV, 240 MVAR Bus Reactor along with associated bay at Chittorgarh (New) Sub-station; (6) 400 kV, 125 MVAR Bus Reactor along with associated bay at Chittorgarh (New) Sub-station; (7) 765/400 kV, 3X500 MVA ICT-I along with associated bays at Chittorgarh (New) Sub-station; (8) 765/400 kV, 3X500 MVA ICT-II along with associated bays at Chittorgarh (New):

Asset-II: Combined Assets of (1) 765 kV, 240 MVAR Bus Rector along with associated bay at Ajmer (New) Sub-station; (2) 765/400 kV, 3X500 MVA ICT-II along with associated bays at Ajmer (New) Sub-station;

Asset-III: 2X400 kV D/C (Quad) Tirunelveli Pooling Station-Tuticorin Pooling station line along with new 400/230 kV (GIS) Tirunelveli Pooling Sub-station with 2X125 MVAR 400 kV Bus reactors and associated bays at 400/230 kV Tuticorin Pooling station; and

Asset-IV: 2X500 MVA 400/230 kV transformers along with associated bays and equipment at new 400/230 kV (GIS) Tirunelveli Pooling Sub-station.

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

- “1) Allow the Add Cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5.14 and 7.2 above.*
- 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6.2 and 7.4 above.*
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulations, 2014 and Tariff*



Regulations, 2019 as per para 6.2 and 7.4 above for respective block.

- 4) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 6) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*
- 7) *Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 7.10 above.*
- 8) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

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

3. Backdrop of the case:

a) The Petitioner was entrusted with implementation of the transmission project. In the 32nd Standing Committee Meeting (SCM) of Power System Planning of Northern Region held on 31.8.2013, a comprehensive ISTS strengthening scheme was proposed and due to early requirement of this transmission strengthening scheme, a part of the scope (Northern Region) of the transmission project was agreed to be implemented by the Petitioner in compressed time schedule. In the 36th SCM on Power System Planning of Southern Region held on 4.9.2013, the scope (Southern Region) of the transmission project was proposed and agreed to be taken up for implementation.

b) Further, in the 26th Meeting of Technical Coordination Sub-Committee and 29th Meeting of Northern Regional Power Committee (NRPC) held on 12.9.2013 and 13.9.2013 respectively, the Northern Region scope of the



transmission project was further recommended to be implemented by the Petitioner. In the 23rd meeting of Southern Regional Power Committee held on 26.10.2013, the scope (Southern Region) of the transmission project as finalized in the 36th SCM was further approved.

c) Investment Approval (IA) of the transmission project was accorded by the Board of Directors (BOD) of the Petitioner's company (in its 313th meeting held on 17.4.2015) vide Memorandum Ref. No. C/CP/GEC: ISTS Part A dated 22.4.2015 at estimated cost of ₹147930.00 lakh including IDC of ₹6283.00 lakh (based on December 2014 Price Level) with the broad scope of work as follows:

Transmission Lines:

- i. Ajmer (New)-Ajmer (RVPN) 400 kV D/C (Quad) line-57 km;
- ii. Chittorgarh (New)-Chittorgarh (RVPN) 400 kV D/C (Quad) line-25 km;
- iii. Tirunelveli Pooling Station-Tuticorin Pooling Station 400 kV D/C (Quad) Line 1-58 km;
- iv. Tirunelveli Pooling Station-Tuticorin Pooling Station 400 kV D/C (Quad) Line 2-57 km.

Sub-station:

i. 765/400 kV Chittorgarh Sub-station (New)

765 kV

- | | |
|------------------------------------|-------------|
| — Transformer Bays | : 2 numbers |
| — 1500 MVA, 765/400 kV Transformer | : 2 numbers |
| — Bus Reactor Bays | : 1 number |
| — 240 MVAR Bus Reactors | : 1 number |

400 kV

- | | |
|-------------------------|-------------|
| — Line Bays | : 2 numbers |
| — Transformer Bays | : 2 numbers |
| — Bus Reactor Bays | : 1 number |
| — 125 MVAR Bus Reactors | : 1 number |

ii. 400/ 220 kV Chittorgarh (RVPN) Sub-station Extn.*

400 kV

- | | |
|-------------|-------------|
| — Line Bays | : 2 numbers |
|-------------|-------------|

iii. 765/400 kV Ajmer Sub-station (New)

765 kV

- | | |
|------------------------------------|-------------|
| — Transformer Bays | : 2 numbers |
| — 1500 MVA, 765/400 kV Transformer | : 2 numbers |
| — Bus Reactor Bays | : 1 number |
| — 240 MVAR Bus Reactors | : 1 number |



<u>400 kV</u>		
— Line Bays	:	2 numbers
— Transformer Bays	:	2 numbers
— Bus Reactor bays	:	1 number
— 125 MVAR Bus Reactors	:	1 number

iv. 400/220 kV Ajmer (RVPN) Sub-station Extn.*

<u>400 kV</u>		
— Line Bays	:	2 numbers

v. 400/230 kV (GIS) Tirunelveli Pooling Sub-station (New)

<u>400 kV</u>		
— Line Bays	:	4 numbers
— Transformer Bays	:	2 numbers
— 500 MVA, 400/230 kV Transformer	:	2 numbers
— Bus Reactor Bays	:	2 numbers
— 125 MVAR Bus Reactors	:	2 numbers

<u>230 kV</u>		
— Transformer Bays	:	2 numbers

vi. 400/230 kV Tuticorin Pooling Station Extn.

<u>400 kV</u>		
— Line Bays	:	4 numbers

* NOTE: Bay Extension works at these sub-stations are to be carried out by RVPNL on Deposit work basis for POWERGRID.

Reactive Compensation

Sub-station	Bus Reactors
765/400 kV Chittorgarh Sub-station (New)	1 X 240 MVA _r (765 kV)
	1X 125 MVA _r (400 kV)
765/400 kV Ajmer Sub-station (New)	1 X 240 MVA _r (765 kV)
	1X 125 MVA _r (400 kV)
400/230 kV (GIS) Tirunelveli Pooling Sub-station (New)	2 X 125 MVA _r (400 kV)

d) The scope of the transmission project was noted and agreed in the 37th TCC meeting held on 27.10.2017 and the deliberations in the said TCC were noted in the 40th meeting of NRPC held on 28.10.2017.

e) The transmission tariff of Asset-I, Asset-II, Asset-III and Asset-IV from their respective COD of 30.12.2017, 31.12.2017, 10.6.2018 and 10.6.2018 to 31.3.2019 was allowed by the Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018. COD of Asset-IV was allowed under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The time over-run of 258 days and 259 days



in case of Asset-I and Asset-II respectively was condoned. Also, the time over-run of 383 days (out of 420 days) was not condoned in case of Asset-III and Asset-IV.

f) Revised Cost Estimate (RCE) of the transmission project was accorded approval by the Petitioner company (in its 378th meeting held on 10.8.2020) vide Memorandum Ref. No. C/CP/PA2021-06-0J-RCE004 dated 17.9.2020 with RCE of ₹120021.00 lakh including IDC of ₹3936.00 lakh (based on December 2019 Price Level).

g) As per IA, the scope of work covered under the transmission project is complete and is covered in this petition.

4. The Respondents are distribution licensees, transmission licensees, power utilities and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of 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 objections have been received from the general public in response to the aforesaid notices published in the newspapers. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 23 has filed its reply vide affidavit dated 9.8.2021 and has raised issues of restriction on excess capital cost claimed for Asset-IV, time over-run, IDC, IEDC, additional RoE and sharing of transmission charges. The Petitioner vide affidavit dated 3.9.2021 has filed rejoinder to TANGEDCO's reply. The issues raised by TANGEDCO and the clarifications given by the Petitioner are dealt in the relevant portions of the instant order.



6. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 28.1.2020 and 27.11.2020, additional information filed by vide affidavits dated 1.4.2021 and 8.7.2021 and affidavit dated 29.7.2021 filed in compliance of directions vide Record of Proceedings dated 9.7.2021, TANGEDCO's reply filed vide affidavit dated 9.8.2021 and the Petitioner's rejoinder to TANGEDCO's reply filed vide affidavit dated 3.9.2021.

7. The hearing in this matter was held on 9.7.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

8. The details of the trued-up transmission charges as claimed by the Petitioner for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Depreciation	791.16	3350.34
Interest on Loan	358.73	1505.91
Return on Equity	927.72	3965.09
O&M Expenses	345.52	1416.40
Interest on Working Capital	62.36	262.14
Total	2485.49	10499.88

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Depreciation	145.01	631.09
Interest on Loan	61.42	261.63
Return on Equity	167.32	730.01
O&M Expenses	63.00	261.11
Interest on Working Capital	11.26	48.25
Total	448.01	1932.09



(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Depreciation	879.33
Interest on Loan	470.14
Return on Equity	1015.23
O&M Expenses	498.23
Interest on Working Capital	73.90
Total	2936.83

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Depreciation	347.10
Interest on Loan	183.75
Return on Equity	407.75
O&M Expenses	172.70
Interest on Working Capital	28.09
Total	1139.39

9. The details of the trued-up Interest on Working Capital (IWC) as claimed by the Petitioner for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
O&M Expenses	114.25	118.03
Maintenance Spares	205.65	212.46
Receivables	1643.51	1749.98
Total Working Capital	1963.41	2080.47
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	62.36	262.14

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
O&M Expenses	21.06	21.76
Maintenance Spares	37.91	39.17
Receivables	299.50	322.02
Total Working Capital	358.47	382.95
Rate of Interest (in%)	12.60	12.60
Interest on Working Capital	11.26	48.25



(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
O&M Expenses	51.37
Maintenance Spares	92.46
Receivables	605.61
Total Working Capital	749.44
Rate of Interest (in %)	12.20
Interest on Working Capital	73.90

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
O&M Expenses	17.81
Maintenance Spares	32.05
Receivables	234.95
Total Working Capital	284.81
Rate of Interest (in %)	12.20
Interest on Working Capital	28.09

Capital Cost

10. The Petitioner has submitted the details of the approved apportioned capital cost (FR) along with capital cost allowed as on COD, Additional Capital Expenditure (ACE) allowed for 2017-18 and 2018-19 and total estimated completion cost allowed as on 31.3.2019 for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018 as follows:

(₹ in lakh)

Asset	Approved Apportioned Capital Cost (as per FR)	Capital Cost allowed as on COD	ACE allowed		Total Estimated Completion Cost allowed as on 31.3.2019
			2017-18	2018-19	
Asset-I	79543.25	54479.55	17338.15	5093.62	76911.32
Asset-II	14925.89	9968.63	3268.26	1177.91	14414.80
Asset-III	46032.82	18652.94	-	2801.28	21454.22
Asset-IV	7428.05	6920.61	-	131.04	7051.65

11. Based on the Auditor's Certificates dated 21.1.2020 (Asset-I), 11.12.2019 (Asset-II), 30.7.2019 (Asset-III) and 30.7.2019 (Asset-IV), the Petitioner has claimed



the capital cost as on COD, actual ACE during the 2014-19 period and capital cost as on 31.3.2019 as follows:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost (RCE)	Capital Cost (as on COD as per Auditor's Certificates)	ACE claimed (as per Auditor's Certificates)		Total Capital Cost (as on 31.3.2019)
			2017-18	2018-19	
Asset-I	73005	58408.06	3841.53	5123.02	67372.61
Asset-II	13779	10846.41	307.92	1556.19	12710.52
Asset-III	23726	20128.87	-	2038.19	22167.06
Asset-IV	9511	8097.18	-	739.94	8837.12

12. The Petitioner has submitted that the Commission, vide order dated 6.8.2019 in Petition No. 172/TT/2018, restricted IEDC to 5% of the hard cost based on the abstract cost estimates for Asset-III and Asset-IV.

13. The details of the capital cost as on COD, actual ACE during the 2014-19 period and total capital cost as on 31.3.2019 as claimed by the Petitioner after reducing IDC and IEDC dis-allowed due to non-condonation of time over-run in respect of Asset-III and Asset-IV are as follows:

(₹ in lakh)

Asset	Capital Cost (as on COD)	ACE Claimed		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
Asset-III	19510.93	-	2038.19	21549.12
Asset-IV	7875.55	-	739.94	8615.49

14. We have considered the submissions and claims of the Petitioner and have given our findings on the capital cost and ACE in the relevant portions of this order.

15. The Petitioner has submitted that total estimated completion cost of the transmission project as on 31.3.2019 is ₹110247.74 lakh against approved apportioned cost of ₹147930.01 lakh. Therefore, on overall project basis, there is no cost over-run with respect to approved cost as on 31.3.2019. The individual capital cost of Asset-I, Asset-II and Asset-III is within the apportioned approved amount



except in case of Asset-IV where the claimed capital cost of ₹8615.49 lakh exceeds the apportioned cost of ₹7428.05 lakh.

16. The Petitioner vide affidavit dated 27.11.2020 has submitted RCE for the transmission project and asset-wise approved apportioned cost as per RCE is as follows:

Asset	Apportioned Approved cost (₹ in lakh)	
	As per FR	As per RCE
Asset-I	79543.25	73005.00
Asset-II	14925.89	13779.00
Asset-III	46032.82	23726.00
Asset-IV	7428.05	9511.00
Total	147930.01	120021.00

17. The Petitioner vide affidavit dated 27.11.2020 has submitted that the cost overrun in case of Asset-IV is due to increase in award cost received in competitive bidding with respect to the initial estimated cost. Being a Government enterprise, the Petitioner has the obligation for indigenous development of manufacturer as well as to adhere to Government of India guidelines in vogue. The Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Route of International Competitive Bidding as well as Domestic Competitive Bidding process have been followed to award this special mega project. Through this process, lowest possible market prices for required product/ services as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements. Whereas the estimates are prepared by the Petitioner as per well-defined procedures for cost estimate. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of



recently awarded contracts/ general practice and the initial cost estimate of the transmission project is on the basis of December 2014 Price Level.

18. TANGEDCO has submitted that the Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018 had restricted the capital cost of Asset-IV to the apportioned approved cost. The comments and objections of TANGEDCO, rejoinder filed by the Petitioner and the Commission's observations in the said order have been mentioned. Based on the said observations, TANGEDCO has submitted that the Commission had restricted the estimated completion cost of Asset-IV, while admitting the estimated completion cost of other assets, since the claims made by the Petitioner for Asset-IV were not prudent and not justifiable. The Petitioner was neither given the liberty to file RCE nor to revisit the claim during true up as the liberty was given to revisit IDC during true up.

19. TANGEDCO has submitted that the Petitioner has stated that an Appeal No. 359 of 2019 is filed before the Appellate Tribunal for Electricity (APTEL) challenging the restriction on IEDC and non-condonation of delay/ time over-run of 383 days but has not mentioned anything about challenging the order on the grounds of restriction of the capital cost in respect of Asset-IV. Under such circumstances, the order in terms of restriction/ disallowance of capital cost of Asset-IV has already reached finality and, hence, the capital cost claimed by the Petitioner for Asset-IV may be restricted in terms of order dated 6.8.2019 in Petition No. 172/TT/2018.

20. In response, the Petitioner has submitted that all the transmission assets have been put into commercial operation during the 2014-19 tariff period. This petition is the first true-up petition filed for the transmission project wherein the project costs are subject to true-up based on actual expenditure and projected expenditure, if any. The



Petitioner has submitted that RCE is approved by the Petitioner's BOD after following due process. Sometimes, due to delay in the approval of RCE, the Petitioner may not be able to submit the same at the time of determination of tariff and the Commission, as a standard practice, restricts the capital cost to approved apportioned cost across petitions. However, in such cases, the Petitioner can submit RCE only at the time of truing up of the petition. Upon submission of RCE, the Commission considers the restricted costs for prudence check and when the Commission is satisfied with the reasons provided for cost over-run exceeding initial approved apportioned cost, only then capital cost which is within the approved RCE is considered. For similar restrictions, in multiple cases, after prudence check and upon submission of RCE, actual capital costs are allowed.

21. The Petitioner has submitted that on similar issue, the Commission vide order dated 28.9.2017 in Review Petition Nos. 30/RP/2017 and 31/RP/2017 (filed by the Petitioner for review and modification of the orders dated 15.3.2016 in Petition No. 562/TT/2014 and order dated 23.5.2016 in Petition No. 313/TT/2015 respectively) had allowed consideration of RCE at the time of truing up.

22. The Petitioner has further submitted that in view of the observations of the Commission made in the orders mentioned in the preceding paragraph, the legitimate expenditure incurred is included in the RCE after the payments are settled by the Petitioner. Therefore, RCE needs to be considered to recover the actual cost incurred in tariff since the beneficiaries have enjoyed the benefits of the said assets.

23. We have considered the submissions of the Petitioner and TANGEDCO. The total project cost as per FR is ₹147930.01 lakh and as per RCE it is ₹120021.00 lakh. It is observed that the completion cost claimed by the Petitioner as on 31.3.2019 in



respect of Asset-I, Asset-II and Asset-III is within the FR apportioned approved cost. In case of Asset-IV, the completion cost as on 31.3.2019 claimed by the Petitioner exceeds the FR apportioned approved cost. The Petitioner has revised the apportioned approved cost of Asset-IV in the RCE to ₹ 9511.00 lakh and accordingly the estimated completion cost of Asset-IV is within RCE apportioned cost. The Petitioner in Form-5 has submitted that the variation in the cost of Asset-IV is on account of increase in the cost of transformer and switchgear equipment. From the above, we observe that the total project has not increased from the original FR cost. However, the Petitioner has re-apportioned the cost of the various assets covered in the instant petition. It is further observed that the variation in cost of Asset-IV is mainly of account of increase in the cost of transformer and switchgear equipment. Taking into consideration that the cost is discovered through competitive bidding and total project cost is within the FR cost as well RCE, the completion cost in respect of Asset-IV as claimed by the Petitioner is allowed.

24. It is further observed that the Petitioner has approved the RCE on 17. 9.2020 based on the actual completion cost of the assets. The COD of the transmission assets was in the year 2017 and 2018 whereas the Petitioner submitted RCE after lapse of more than 2 years from the COD of the transmission asset. The Petitioner is directed to be more diligent and obtain RCE of the transmission systems/ projects well before the COD of the transmission asset. The Petitioner is further directed to take proper diligence at the time of preparing FR and apportioning costs between various elements of the transmission system/ project.

Time Over-run

25. As per IA dated 17.4.2015, the transmission project was scheduled to be put into commercial operation in 24 months from the date of IA. Accordingly, the



scheduled COD was 16.4.2017 against which Asset-I, Asset-II, Asset-III and Asset-IV were put under commercial operation with effect from 30.12.2017, 31.12.2017, 10.6.2018 and 10.6.2018 respectively. Thus, there was a delay of 258 days, 259 days, 420 days and 420 days in the respective commissioning of Asset-I, Asset-II, Asset-III and Asset-IV. The Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018 had already condoned the entire time over-run in respect of Asset-I and Asset-II and out of the total time over-run of 420 days in case of Asset-III and Asset-IV, 383 days were not condoned and 37 days, i.e., from 5.5.2018 to 10.6.2018 were condoned.

26. TANGEDCO referring to the order dated 31.7.2017 in Review Petition No. 51/RP/2016 submitted that the second proviso to Regulation 4(3) of the 2014 Tariff Regulations has two parts. The first part pertains to a situation where the generating station does not achieve COD as on SCOD of the associated transmission system. If the transmission system is ready for declaration of COD but is prevented from doing so, then the generating company is required to pay IDC from SCOD of the transmission system till COD of the generation station. The second part of the second proviso to Regulation 12(2) specifies that the generating company shall bear the transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with second proviso to Regulation 4(3) of the 2014 Tariff Regulations till the generating station is commissioned. When deemed COD has been approved by the Commission, the transmission charges shall be paid by the generating company till the generating unit achieves COD. Since the capital cost is determined as on COD considering IDC during the construction period, therefore, after COD, IDC is not applicable.

27. TANGEDCO has further submitted that, in the instant matter, the generators are liable to bear IDC and IEDC from the deemed COD of the associated transmission



system i.e. 5.5.2018 when Asset-III and Asset-IV were ready for commissioning till the actual COD of the asset i.e. 10.6.2018 and applicable transmission charges from COD of the transmission assets till COD of the generating stations/ units. Since COD was deferred based on the request of RE generator Mytrah Energy (India) Limited, the Petitioner is duty bound to raise bilateral bills against the generator till the entire generation capacity is commissioned. Hence, the Petitioner may be directed to bring on record the date/ dates of commissioning of RE generators and the bilateral bills raised till the commissioning of all the units.

28. TANGEDCO has also requested to direct the Petitioner to segregate IDC and IEDC up to SCOD, from SCOD to 5.5.2018 and from 5.5.2018 to 10.6.2018 and has further requested that IDC and IEDC may be restricted up to SCOD and directions may be given to the Petitioner to recover IDC and IEDC from 5.5.2018 to 10.6.2018 from the generator. TANGEDCO has submitted that the Petitioner has failed to furnish split up of IEDC for the time over-run period which was not condoned in case of Asset-III and Asset-IV based on actuals and in absence of documentary proof/ statement, IEDC claimed by the Petitioner may be disallowed.

29. In response, the Petitioner has submitted that the issue raised by TANGEDCO has already been dealt in order dated 6.8.2019 in Petition No. 172/TT/2018 and TANGEDCO has not sought any review of the order. Raising a settled issue at the stage of truing up may not be permitted. The Petitioner has filed Appeal No. 359 of 2019 before APTEL, which *inter-alia* includes prayers to condone the time over-run of in respect of Asset-III and Asset-IV. The decision in the said appeal is awaited. As the appeal is currently pending in the APTEL, pro-rata IDC and IEDC deduction on account of time over-run with respect to Asset-III and Asset-IV is considered in this petition.



30. The Petitioner has further submitted that regarding IEDC, the Statement of IEDC discharge for the transmission assets with details of discharge up to Scheduled COD, from SCOD to COD and beyond COD has been submitted vide affidavit dated 27.11.2020 which is as follows:

Asset	Scheduled COD	COD	IEDC as per Auditor's Certificate	IEDC up to Scheduled COD	IEDC from Scheduled COD to COD
Asset-I	16.4.2017	30.12.2017	1642.31	913.35	728.96
Asset-II	16.4.2017	31.12.2017	309.46	165.73	143.73
Asset-III	16.4.2017	10.6.2018	1291.68	658.93	632.75
Asset-IV	16.4.2017	10.6.2018	514.37	277.26	237.11

31. We have considered the submissions of the Petitioner and TANGEDCO. We have considered the time over-run as decided in order dated 6.8.2019 in Petition No. 172/TT/2018, which is given in the table below, subject to the outcome of the appeal before APTEL.

Asset	Scheduled COD	Actual COD	Time over-run	Time Over-run condoned/ not condoned
Asset-I	16.4.2017	30.12.2017	258 days	Condoned
Asset-II		31.12.2017	259 days	Condoned
Asset-III		10.6.2018	420 days	383 days from Scheduled COD (16.4.2017) to 4.5.2018 is not condoned; 37 days from 5.5.2018 to 10.6.2018 is condoned
Asset-IV		10.6.2018	420 days	

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

32. The Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018 had not allowed any IDC in respect of the transmission assets owing to certain discrepancies and the Petitioner was directed to furnish IDC details for consideration of the Commission at the time of truing up exercise. The relevant portion of the order dated 6.8.2019 in Petition No. 172/TT/2018 is as follows:

"40. It is observed from the submissions of the petitioner that both the domestic as well as foreign loans were deployed in each asset. There are certain inadequacies in the IDC claimed by the petitioner where no calculation has been furnished with respect to



the foreign loans in case of Asset-I and Asset-II. Further the petitioner has not specified the interest rate for SBI loan and instead mentioned 'floating rate'. The petitioner has not furnished the computation of floating interest rate and in this regard the documentary proofs given are not reconcilable. Further the loan portfolio as mentioned in IDC statement are different from Form 9C. The details of loans as submitted by the petitioner are not adequate to check/re-workout the admissible IDC for the purpose of tariff. Accordingly, for the present, the IDC has not been allowed for the purpose of tariff as prudence of claimed IDC could not be taken. However, the same will be considered at the time of truing up after rectifying the above mentioned deviations with the details of the foreign loan drawn/IDC allocated to the project including the instant transmission assets and submission of adequate information relating to applicable rate of interest/exchange rates together with date of drawl and repayments of various loans.”

33. The Petitioner in the instant petition has claimed IDC in respect of the transmission assets covered and has submitted the Auditor’s Certificates and other details in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of IDC discharged which is as follows:

Asset	IDC (as per Auditor’s Certificates)	IDC discharged up to COD	IDC discharged during		Total IDC
			2017-18	2018-19	
Asset-I	1155.84	1141.21	2.45	12.19	1155.85
Asset-II	218.07	215.57	0.00	2.50	218.07
Asset-III	563.74	403.40	0.00	160.34	563.74
Asset-IV	151.11	118.97	0.00	32.14	151.11

34. The Petitioner has reduced the pro-rata IDC deduction on account of time over-run of 383 days with respect to Asset-III and Asset-IV and the same are summarized as follows:

Asset	IDC claimed as per Auditor’s Certificates	Pro-rata deduction	IDC considered for tariff
Asset-III	563.74	187.75	375.99
Asset-IV	151.11	50.33	100.78

35. We have considered the submissions of the Petitioner. The Petitioner vide affidavit dated 1.4.2021 has submitted the additional details of IDC in respect of the transmission assets and the revised Auditor Certificates for Asset-I and Asset-II. The Petitioner has submitted IDC computation statement for domestic as well as foreign currency loans which contains the name of loan, drawl date, loan amount, interest



rate, exchange rate and interest claimed. IDC is worked out based on the details given in the IDC statement. Further, the loan amount as on the COD has been mentioned in Forms 6 and 9C has been considered. The allowable IDC has been worked out based on the information available on record and relying on loan amount as per Form 9C. IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)

Asset	IDC as per Auditor's Certificates	IDC disallowed due to time over-run not condoned	IDC dis-allowed as on COD due to computational error	IDC allowed	IDC discharged up to COD	IDC un-discharged upto COD	IDC discharged during the year	
							2017-18	2018-19
1	2	3	4	5=2-3-4	6	7	8	9
Asset-I	1155.84	0.00	0.01	1155.83	1141.21	14.62	2.45	12.16
Asset-II	218.07	0.00	0.01	218.06	215.57	2.49	0.00	2.49
Asset-III	563.74	408.98	0.00	154.76	154.76	0.00	0.00	0.00
Asset-IV	151.11	111.28	0.00	39.83	39.83	0.00	0.00	0.00

36. IDC disallowed in respect of Asset-III and Asset-IV are summarised as follows:

(₹ in lakh)

Asset	IDC dis-allowed due to time over-run not condoned	IDC to be dis-allowed from capital cost as on COD	IDC to be dis-allowed during 2018-19
Asset-III	408.98	248.64	160.34
Asset-IV	111.28	79.14	32.14

37. The Commission in order dated 6.8.2019 in Petition No. 172/TT/2018 had restricted IEDC for Asset-III and Asset-IV to 5% of hard cost based on the abstract cost estimate. Further, IEDC was reduced due to time over-run (that was not condoned) for Asset-III and Asset-IV.

38. The Petitioner vide Auditor's Certificates has claimed the following IEDC in respect of the transmission assets:



(₹ in lakh)

Asset	IEDC claimed as per Auditor's Certificates
Asset-I	1642.31
Asset-II	309.46
Asset-III	1291.68
Asset-IV	514.37

39. The Petitioner vide affidavit dated 27.11.2020 has submitted the details of IEDC discharge as follows:

(₹ in lakh)

Asset	Capital Cost	IEDC claimed as per Auditor's Certificates	IEDC discharged up to Scheduled COD	IEDC discharged from Scheduled COD to COD
Asset-I	71869.86	1642.31	913.35	728.96
Asset-II	13335.52	309.46	165.73	143.73
Asset-III	23601.00	1291.68	658.93	632.75
Asset-IV	9432.28	514.37	277.26	237.11
Total	118238.66	3757.82	2015.27	1742.55
Percentage of IEDC				3.18%

40. The Petitioner has submitted that Appeal No. 359 of 2019 has been filed by the Petitioner before APTEL against restriction of IEDC to a certain percentage of the hard cost and to condone the time over run in respect of Asset-III and Asset-IV. As the appeal is pending before APTEL, the Petitioner has considered the pro-rata IEDC deduction on account of time over-run with respect to Asset-III and Asset-IV in the instant petition as given in the following table. As regards restriction of IEDC, the Petitioner vide affidavit dated 27.11.2020 has submitted that APTEL in judgment dated 2.12.2019 in Appeal No. 95 and Appeal No. 140 of 2018 held that IEDC should be computed only on actual basis after due prudence check and restricting the actual IEDC based on certain percentage of hard cost is not in terms of Tariff Regulations.

(₹ in lakh)

Asset	IEDC claimed as per Auditor's Certificates	Pro-rata deduction	IEDC considered for tariff
Asset-III	1291.68	430.19	861.49
Asset-IV	514.37	171.31	343.06

41. The Petitioner has prayed for allowing IEDC in Asset-III and Asset-IV, which has been earlier deducted in order dated 6.8.2019 in Petition No. 172/TT/2018 based



on certain percentage of the hard cost. In view of the above, the Petitioner has claimed IEDC on actual basis as per the Auditor's Certificates and considering IEDC deduction due to non-condonation of time over-run for Asset-III and Asset-IV.

42. We have considered the submissions of the Petitioner. In line with the APTEL's judgement dated 2.12.2019, the IEDC is not restricted to the percentage mentioned in the abstract cost estimate and the actual IEDC is considered. However, IEDC corresponding to the time over-run of 383 days not condoned in case of Asset-III and Asset-IV is disallowed. Hence, the IEDC considered as on COD for the purpose of tariff determination is as follows:

			(₹ in lakh)
Asset	IEDC as per Auditor's Certificates	IEDC disallowed due to time over-run not condoned	IEDC allowed
Asset-I	1642.31	0.00	1642.31
Asset-II	309.46	0.00	309.46
Asset-III	1291.68	429.06	862.62
Asset-IV	514.37	170.86	343.51

Initial Spares

43. The Petitioner has submitted that the Initial Spares for sub-station and transmission line have been calculated as per Regulation 13 of the 2014 Tariff Regulations and are within the specified ceiling.

44. We have considered the submissions of the Petitioner. The Initial Spares allowed for the transmission assets as per the norms in the 2014 Tariff Regulations are as follows:



Asset	Particulars	Plant and Machinery cost (excluding IDC and IEDC, land cost & cost of civil works) upto cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Excess initial spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
		A	B	D	$E = (A - B) * C / (100 - C)$	B-E	
Asset-I	Transmission Line	24228.65	279.92	1.00	241.91	38.01	241.91
	Sub-station	39160.01	1503.06	4.00	1569.04	NA	1503.06
Asset-II	Sub-station (Brownfield GIS)	12571.15	476.94	4.00	503.93	NA	476.94
Asset-III	Sub-station (Brownfield GIS)	14639.56	715.78	5.00	732.83	NA	715.78
Asset-IV	Sub-station (Brownfield)	8379.50	262.98	5.00	427.19	NA	262.98

45. Disallowed Initial Spares of ₹38.01 lakh in case of Asset-I are deducted from ACE in 2018-19.

Capital Cost as on COD

46. The capital cost of the transmission project has been calculated in accordance with the Regulation 9(3) of the 2014 Tariff Regulations. Accordingly, the details of the capital cost now approved as on COD after adjustment of IDC and IEDC are as follows:

							(₹ in lakh)
Asset	Capital Cost claimed as on COD as per Auditor's Certificates (A)	Un-discharged IDC (B)	IDC dis-allowed due to time over-run not condoned (C)	IDC dis-allowed due to computational error (D)	IEDC dis-allowed due to time over-run (E)	Capital Cost allowed as on COD (E) = (A-B-C-D-E)	
Asset-I	58408.06	14.61	0.00	0.01	0.00	58393.44	
Asset-II	10846.41	2.49	0.00	0.01	0.00	10843.91	
Asset-III	20128.87	0.00	248.64	0.00	429.06	19451.17	
Asset-IV	8097.18	0.00	79.14	0.00	170.86	7847.18	



Additional Capital Expenditure

47. ACE for Asset-I, Asset-II and Asset-III was allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018 under Regulation 14(1) of the 2014 Tariff Regulations. The entitled un-discharged IDC and initial spares liability as on COD was allowed as ACE during the year of its discharge.

48. ACE allowed earlier by the Commission for the transmission assets is as follows:

(₹ in lakh)

Asset	ACE	
	2017-18	2018-19
Asset-I	17338.15	5093.62
Asset-II	3268.26	1177.91
Asset-III	-	2801.28
Asset-IV	-	131.04

49. The Petitioner has claimed ACE for the transmission assets up to the cut-off date in accordance with Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as follows:

(₹ in lakh)

Asset-I			
Particulars	Regulation	ACE claimed	
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	401.24	3894.32
Addition in Gross block	14(1)(ii)	3440.29	1228.70
IDC Discharged after COD	14(1)(i)	2.45	12.19
Total ACE		3843.98	5135.21

(₹ in lakh)

Asset-II			
Particulars	Regulation	ACE claimed	
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	71.45	699.71
Addition in Gross block	14(1)(ii)	236.47	856.47
IDC Discharged after COD	14(1)(i)	0.00	2.50
Total ACE		307.92	1558.69

(₹ in lakh)



Asset-III		
Particulars	Regulation	ACE claimed
		2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	710.00
Addition in Gross block	14(1)(ii)	1167.86
IDC Discharged after COD	14(1)(i)	160.33
Total ACE		2038.19

(₹ in lakh)

Asset-IV		
Particulars	Regulation	ACE claimed
		2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	209.37
Addition in Gross block	14(1)(ii)	498.43
IDC Discharged after COD	14(1)(i)	32.14
Total ACE		739.94

50. The Petitioner vide affidavit dated 27.11.2020 has submitted the package-wise breakup. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. IDC disallowed due to time over-run not condoned in case of Asset-III and Asset-IV and Initial Spares disallowed in case of Asset-I is deducted from the ACE during 2018-19. The un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. Accordingly, ACE allowed for the transmission assets is as follows:

(₹ in lakh)

Asset-I			
Particulars	Regulation	ACE allowed	
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	401.24	3894.32
Addition in Gross block	14(1)(ii)	3440.29	1228.70
IDC Discharged after COD	14(1)(i)	2.45	12.17
Less: Excess Initial Spares		0.00	38.01
Total ACE		3843.98	5097.17

(₹ in lakh)

Asset-II			
Particulars	Regulation	ACE allowed	
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	71.45	699.71



Asset-II			
Particulars	Regulation	ACE allowed	
		2017-18	2018-19
Addition in Gross block	14(1)(ii)	236.47	856.47
IDC Discharged after COD	14(1)(i)	0.00	2.49
Total ACE		307.92	1558.68

(₹ in lakh)

Asset-III		
Particulars	Regulation	ACE allowed
		2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	710.00
Addition in Gross block	14(1)(ii)	1167.86
IDC Discharged after COD	14(1)(i)	160.33
Less: IDC disallowed due to time over-run not condoned		160.34
Total ACE		1877.85

(₹ in lakh)

Asset-IV	
Particulars	ACE allowed 2018-19
Balance and retention payments for liabilities other than IDC	209.37
Addition in Gross block	498.43
IDC Discharged after COD	32.14
Less: IDC disallowed due to time over-run not condoned	32.14
Total ACE	707.80

51. Accordingly, the capital cost considered for truing up of transmission tariff for the 2014-19 period is as follows:

(₹ in lakh)

Asset	Capital Cost (as on 1.4.2014/ COD)	ACE allowed		Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
Asset-I	58393.44	3843.98	5097.17	67334.59
Asset-II	10843.91	307.92	1558.68	12710.51
Asset-III	19451.17	-	1877.85	21329.02
Asset-IV	7847.18	-	707.80	8554.98

Debt-Equity Ratio

52. The Petitioner has claimed debt-equity ratio of 70:30 as on COD of the transmission assets. Debt-Equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2019 for the transmission assets considered for the purpose of truing up of tariff for the 2014-19 tariff period is as follows:



Asset-I				
Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	40875.40	70.00	47134.21	70.00
Equity	17518.03	30.00	20200.37	30.00
Total	58393.44	100.00	67334.58	100.00
Asset-II				
Debt	7590.74	70.00	8897.36	70.00
Equity	3253.17	30.00	3813.15	30.00
Total	10843.91	100.00	12710.51	100.00
Asset-III				
Debt	13615.82	70.00	14930.31	70.00
Equity	5835.35	30.00	6398.70	30.00
Total	19451.17	100.00	21329.02	100.00
Asset-IV				
Debt	5493.03	70.00	5988.49	70.00
Equity	2354.15	30.00	2566.49	30.00
Total	7847.18	100.00	8554.98	100.00

Depreciation

53. The Petitioner's claim towards depreciation for Asset-I to Asset-III is found to be higher than the depreciation allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than what was allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is noted that the Petitioner has segregated cost for IT equipment from cost of the sub-station and claimed higher depreciation at the truing-up stage. The Commission has already given its finding on similar issue in Petition No. 19/TT/2020 vide order dated 9.5.2020.

54. In terms of the order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT Equipment @ 5.28% as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period.

55. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I,



Annexure-II, Annexure-III and Annexure-IV for Asset-I, Asset-II, Asset-III and Asset-IV respectively has been worked out considering the depreciation rates of asset as specified in the 2014 Tariff Regulations and the trued-up depreciation allowed for the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Opening Gross Block (A)	58393.44	62237.42
ACE (B)	3843.98	5097.17
Closing Gross Block (C)=(A)+(B)	62237.42	67334.58
Average Gross Block (D)= [(A)+(C)]/2	60315.43	64786.00
Freehold land	785.30	785.30
Weighted average rate of Depreciation (WAROD) (in %) (E)	5.16	5.13
Balance useful life of the asset (Year)	29	29
Elapsed life (Year)	0	0
Aggregate Depreciable Value	53577.11	57600.63
Combined Depreciation during the year (G)=(D)*(E)	784.11	3320.91
Aggregate Cumulative depreciation at the end of the year	784.11	4105.02
Remaining Aggregate Depreciable Value at the end of the year	52793.00	53495.61

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Opening Gross Block (A)	10843.91	11151.83
ACE (B)	307.92	1558.68
Closing Gross Block (C)=(A)+(B)	11151.83	12710.51
Average Gross Block (D)= [(A)+(C)]/2	10997.87	11931.17
Freehold land	50.80	50.80
Weighted average rate of Depreciation (WAROD) (in %) (E)	5.22	5.23
Balance useful life of the asset (Year)	25	25
Elapsed life (Year)	0	0
Aggregate Depreciable Value	9852.36	10692.33
Combined Depreciation during the year (G)=(D)*(E)	143.20	623.51
Aggregate Cumulative depreciation at the end of the year	143.20	766.71
Remaining Aggregate Depreciable Value at the end of the year	9709.16	9925.62



(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Opening Gross Block (A)	19451.17
ACE (B)	1877.85
Closing Gross Block (C)=(A)+(B)	21329.02
Average Gross Block (D)= [(A)+(C)]/2	20390.09
Freehold land	151.55
Weighted average rate of Depreciation (WAROD) (in %) (E)	5.10
Balance useful life of the asset (Year)	28
Elapsed life (Year)	0
Aggregate Depreciable Value	18214.69
Combined Depreciation during the year (G)=(D)*(E)	840.11
Aggregate Cumulative depreciation at the end of the year	840.11
Remaining Aggregate Depreciable Value at the end of the year	17374.58

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Opening Gross Block (A)	7847.18
ACE (B)	707.80
Closing Gross Block (C)=(A)+(B)	8554.98
Average Gross Block (D)= [(A)+(C)]/2	8201.08
Freehold land	5.21
Weighted average rate of Depreciation (WAROD) (in %) (E)	25
Balance useful life of the asset (Year)	0
Elapsed life (Year)	7380.97
Aggregate Depreciable Value	345.21
Combined Depreciation during the year (G)=(D)*(E)	345.21
Aggregate Cumulative depreciation at the end of the year	7035.76

56. Depreciation allowed for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	816.73	3782.14
Claimed by the Petitioner in the instant petition	791.16	3350.34
Approved after true-up in this order	784.11	3320.91



(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	149.15	706.23
Claimed by the Petitioner in the instant petition	145.01	631.09
Approved after true-up in this order	143.20	623.51

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	825.84
Claimed by the Petitioner in the instant petition	879.33
Approved after true-up in this order	840.11

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	293.85
Claimed by the Petitioner in the instant petition	347.10
Approved after true-up in this order	345.21

Interest on Loan (IoL)

57. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed for the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Gross Normative Loan	40875.40	43566.19
Cumulative Repayments up to Previous Year	0.00	784.11
Net Loan-Opening	40875.40	42782.08
Additions due to ACE	2690.79	3568.02
Repayment during the year	784.11	3320.91
Net Loan-Closing	42782.08	43029.18
Average Loan	41828.74	42905.63
Weighted Average Rate of Interest on Loan (in %)	3.4028	3.5105
Interest on Loan	358.76	1506.20

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Gross Normative Loan	7590.74	7806.28
Cumulative Repayments up to Previous Year	0.00	143.20



Asset-II		
Particulars	2017-18 (91 days)	2018-19
Net Loan-Opening	7590.74	7663.08
Additions due to ACE	215.54	1091.08
Repayment during the year	143.20	623.51
Net Loan-Closing	7663.08	8130.65
Average Loan	7626.91	7896.86
Weighted Average Rate of Interest on Loan (in %)	3.2307	3.3154
Interest on Loan	61.43	261.82

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Gross Normative Loan	13615.82
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	13615.82
Additions due to ACE	1314.50
Repayment during the year	840.11
Net Loan-Closing	14090.21
Average Loan	13853.01
Weighted Average Rate of Interest on Loan (in %)	4.1755
Interest on Loan	467.50

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Gross Normative Loan	5493.03
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	5493.03
Additions due to ACE	495.46
Repayment during the year	345.21
Net Loan-Closing	5643.27
Average Loan	5568.15
Weighted Average Rate of Interest on Loan (in %)	4.0610
Interest on Loan	182.76

58. IoL allowed for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	342.71	1532.32
Claimed by the Petitioner in the instant petition	358.73	1505.91
Approved after true-up in this order	358.76	1506.20

(₹ in lakh)



Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	60.46	276.55
Claimed by the Petitioner in the instant petition	61.42	261.63
Approved after true-up in this order	61.43	261.82

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	433.64
Claimed by the Petitioner in the instant petition	470.14
Approved after true-up in this order	467.50

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	145.92
Claimed by the Petitioner in the instant petition	183.75
Approved after true-up in this order	182.76

Return on Equity (RoE)

59. The Petitioner has claimed RoE for the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.757

60. The Petitioner has submitted that the transmission assets have achieved COD within timelines specified as per Regulation 24(2) of 2014 Tariff Regulations. Thus, additional RoE is claimed for all the transmission assets in the instant petition. The Petitioner has further submitted that the same has already been approved by the Commission in vide order dated 6.8.2019 in Petition No. 172/TT/2018.



61. TANGEDCO has submitted that the Commission in order dated 6.8.2019 in Petition No. 172/TT/2018 allowed additional RoE despite the objections raised by TANGEDCO and BRPL. As per Annexure-I of the 2014 Tariff Regulations, the timelines are given as qualifying time schedule as follows:

Transmission work	Plain area (months)	Hilly terrain	Snow bound area / very difficult terrain
400 kV D/C Quad Transmission line	38	46	50
New 400 kV AC sub-station	30	33	36
New 765 kV AC sub-station	36	40	

62. TANGEDCO has further submitted that Asset-I comprises of 765/400 kV sub-station, 400 kV D/C transmission lines; Asset-II comprises of 765/400 kV sub-station; Asset-III comprises of 400 kV D/C transmission lines and 400/230 kV sub-station and Asset-IV comprises of 400/230 kV ICTs. Even though 400 kV D/C transmission line has a qualifying timeline of 38 months, there is a prohibition under Regulation 24(2)(vi) of the 2014 Tariff Regulations for claiming tariff for transmission lines having length of less than 50 km. Though COD of Asset-III was within 38 months, it is not qualifying for additional RoE. The qualifying timeline for new 400 kV AC sub-station is 30 months and Asset-IV was declared under COD after 37 months and 25 days and, hence, it is also not qualified for additional RoE. TANGEDCO has requested to exclude the capital cost of Asset-III and Asset-IV for computation of additional RoE of 0.5%.

63. In response, the Petitioner referring to Note (i) under the table specifying timeline for transmission schemes given in Appendix-I of the 2014 Tariff Regulations, has submitted that the maximum time of 38 months specified for 400 kV D/C Quad transmission line is the qualifying time schedule for the instant transmission project as a whole. The transmission assets have been commissioned within this timeline of 38 months and, accordingly, additional RoE @0.5% has been claimed for all the transmission assets. The Petitioner has prayed to allow additional RoE for 2014-19



tariff period as already approved. The Petitioner has further submitted that the contention of TANGECO is repetition of submissions made in Petition No. 172/TT/2018 and the issue has already been decided by the Commission.

64. We have considered the submissions of the Petitioner and TANGEDCO. The transmission assets have achieved COD within 38 months from the date of IA and is in line with Regulation 24(2) of the 2014 Tariff Regulations and additional RoE was already granted by the Commission in order dated 6.8.2019 in Petition No. 172/TT/2018. Accordingly, additional RoE is allowed in respect of the transmission assets.

65. The Commission in 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

66. 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 tariff 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)	Base rate of RoE (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	20.961	16.00	20.243
2015-16	21.342	16.00	20.341
2016-17	21.342	16.00	20.341
2017-18	21.342	16.00	20.341
2018-19	21.549	16.00	21.395



67. The Petitioner has claimed RoE for the 2014-19 tariff period after grossing up the RoE @16.00% with Effective Tax rates (based on MAT rates) each year. RoE is trued up on the basis of MAT rates applicable in the respective years and is approved for the transmission assets for the 2014-19 tariff period as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Opening Equity (A)	17518.03	18671.22
Additions due to ACE (B)	1153.19	1529.15
Closing Equity (C)= (A)+(B)	18671.22	20200.37
Average Equity (D)= [(A)+(C)]/2	18094.63	19435.80
Return on Equity (Base Rate) (in %)	16.000	16.000
MAT Rate for respective year (in %)	21.342	21.549
Rate of Return on Equity (in %)	20.341	20.395
Return on Equity	927.72	3963.93

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Opening Equity (A)	3253.17	3345.55
Additions due to ACE (B)	92.38	467.60
Closing Equity (C)= (A)+(B)	3345.55	3813.15
Average Equity (D)= [(A)+(C)]/2	3299.36	3579.35
Return on Equity (Base Rate) (in %)	16.000	16.000
MAT Rate for respective year (in %)	21.342	21.549
Rate of Return on Equity (in %)	20.341	20.395
Return on Equity	167.32	730.01

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Opening Equity (A)	5835.35
Additions due to ACE (B)	563.36
Closing Equity (C)= (A)+(B)	6398.70
Average Equity (D)= [(A)+(C)]/2	6117.03
Return on Equity (Base Rate) (in %)	16.000
MAT Rate for respective year (in %)	21.549
Rate of Return on Equity (in %)	20.395
Return on Equity	1008.31

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Opening Equity (A)	2354.15
Additions due to ACE (B)	212.34
Closing Equity (C)= (A)+(B)	2566.49
Average Equity (D)= [(A)+(C)]/2	2460.32



Asset-IV	
Particulars	2018-19 (295 days)
Return on Equity (Base Rate) (in %)	16.000
MAT Rate for respective year (in %)	21.549
Rate of Return on Equity (in %)	20.395
Return on Equity	405.55

68. RoE allowed for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and true-up in the instant order are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	966.62	4516.08
Claimed by the Petitioner in the instant petition	927.72	3965.09
Approved after true-up in this order	927.72	3963.93

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	175.67	839.63
Claimed by the Petitioner in the instant petition	167.32	730.01
Approved after true-up in this order	167.32	730.01

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Approved vide order dated 6.8.2019 in Petition No. 172/TT/2018	984.28
Claimed by the Petitioner in the instant petition	1015.23
Approved after true-up in this order	1008.31

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	342.90
Claimed by the Petitioner in the instant petition	407.75
Approved after true-up in this order	405.55

Operation & Maintenance Expenses (O&M Expenses)

69. O&M Expenses claimed by the Petitioner for the transmission assets are as follows:



(₹ in lakh)

Asset-I	
2017-18	2018-19
345.52	1416.40

(₹ in lakh)

Asset-II	
2017-18	2018-19
63.00	261.11

(₹ in lakh)

Asset-III
2018-19
498.23

(₹ in lakh)

2018-19
172.70

70. O&M Expenses norms for the elements covered under the transmission assets in Regulation 29(3) of the 2014 Tariff Regulations are as follows:

Particulars	2017-18	2018-19
Sub-station Bays 765 kV (Conventional)		
Norms (₹ lakh/bays)	93.11	96.2
Sub-station Bays 400 kV (Conventional)		
Norms (₹ lakh/bays)	66.51	68.71
Sub-station Bays 400 kV (GIS)		
Norms (₹ lakh/bays)	56.84	58.73
Sub-station Bays 220 kV (GIS)		
Norms (₹ lakh/bays)	46.55	48.1
Transmission Line (Double Circuit Bundled – 4 or more sub conductor)		
Norms (₹ lakh/km)	1.171	1.21

71. We have considered the submissions of the Petitioner. The O&M Expenses approved for the various elements covered under the transmission assets under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

Asset-I

Asset-I		
Particulars	2017-18	2018-19
Transmission Line (Double Circuit Bundled-4 or more sub conductor)		
400 kV D/C Ajmer (New)-Ajmer (RVPN) (km)	65.615	65.615
Chittorgarh (New)- Chittorgarh (RVPN) (km)	48.740	48.740



Asset-I		
Particulars	2017-18	2018-19
Norms (₹ lakh/km)	1.171	1.21
O&M Expenses (₹ in lakh)	133.91	138.37
Sub-station Bays 765 kV (Conventional)		
Rajpura: Rajpura 400 kV Bay	4	4
Norms (₹ lakh/bay)	93.11	96.2
O&M Expenses (₹ in lakh)	372.44	384.80
Sub-station Bays 400 kV (Conventional)		
Rajpura: Rajpura 400 kV Bay	13	13
Norms (₹ lakh/bay)	66.51	68.71
O&M Expenses (₹ in lakh)	864.63	893.23
Total O&M Expenses (₹ in lakh)	345.56	1416.40

Asset-II		
Particulars	2017-18	2018-19
Sub-station Bays 765 kV (Conventional)		
Rajpura: Rajpura 400 kV Bay	2	2
Norms (₹ lakh/bay)	93.11	96.2
O&M Expenses (₹ in lakh)	186.22	192.40
Sub-station Bays 400 kV (Conventional)		
Rajpura: Rajpura 400 kV Bay	1	1
Norms (₹ lakh/bay)	66.51	68.71
O&M Expenses (₹ in lakh)	66.51	68.71
Total O&M Expenses (₹ in lakh)	63.01	261.11

Asset-III	
Particulars	2018-19
Transmission Line (Double Circuit Bundled-4 or more sub conductor)	
2X400 kV D/C (Quad) Tirunelveli PS-Tuticorin (km)	24.06
Norms (₹ lakh/km)	1.21
O&M Expenses (₹ in lakh)	29.11
Sub-station Bays 400 kV (GIS)	
Chamera: 220 kV Bay	10
Norms (₹ lakh/bay)	58.73
O&M Expenses (₹ in lakh)	587.30
Total O&M Expenses (₹ in lakh)	498.20

Asset-IV	
Particulars	2018-19
Sub-station Bays 400 kV (GIS)	
Tuticorin GIS:ICT I Bay (400/220 kV)-Tuticorin GIS-Tirunelveli (GIS) Tuticorin GIS:ICT II Bay (400/220 kV)- Tuticorin GIS- Tirunelveli (GIS)	2
Norms (₹ lakh/bay)	68.71
O&M Expenses (₹ in lakh)	117.46
Sub-station Bays 220 kV (GIS)	
Tuticorin GIS:ICT I Bay (400/220 kV)- Tuticorin GIS-Tirunelveli (GIS) Tuticorin GIS:ICT II Bay (400/220 kV)- Tuticorin GIS-Tirunelveli (GIS)	2
Norms (₹ lakh/bay) -	48.10



O&M Expenses (₹ in lakh)	96.20
Total O&M Expenses (₹ in lakh)	172.68

72. O&M Expenses allowed for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)		
Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	374.79	1554.81
Claimed by the Petitioner in the instant petition	345.52	1416.40
Approved after true-up in this order	345.56	1416.40

(₹ in lakh)		
Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	39.31	261.11
Claimed by the Petitioner in the instant petition	63.00	261.11
Approved after true-up in this order	63.01	261.11

(₹ in lakh)	
Asset-III	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	496.20
Claimed by the Petitioner in the instant petition	498.23
Approved after true-up in this order	498.20

(₹ in lakh)	
Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	171.99
Claimed by the Petitioner in the instant petition	172.70
Approved after true-up in this order	172.68

Interest on Working Capital

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

(₹ in lakh)		
Asset-I		
Particulars	2017-18 (92 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for 1 month)	114.25	118.03



Asset-I		
Particulars	2017-18 (92 days)	2018-19
Working Capital for Maintenance Spares (15% of O&M Expenses)	205.65	212.46
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost)	1638.77	1744.82
Total Working Capital	1958.67	2075.31
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	62.21	261.49

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for 1 month)	21.06	21.76
Working Capital for Maintenance Spares (15% of O&M Expenses)	37.91	39.17
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost)	298.28	320.76
Total Working Capital	357.25	381.68
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	11.22	48.09

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Working Capital for O&M Expenses (O&M Expenses for 1 month)	51.37
Working Capital for Maintenance Spares (15% of O&M Expenses)	92.46
WC for Receivables (Equivalent to 2 months of annual fixed cost)	595.34
Total Working Capital	739.17
Rate of Interest (in %)	12.20
Interest on Working Capital	72.88

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Working Capital for O&M Expenses (O&M Expenses for 1 month)	17.81
Working Capital for Maintenance Spares (15% of O&M Expenses)	32.05
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost)	233.89
Total Working Capital	283.74
Rate of Interest (in %)	12.20
Interest on Working Capital	27.98



74. IWC allowed for the transmission assets vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	64.90	290.91
Claimed by the Petitioner in the instant petition	62.36	262.14
Approved after true-up in this order	62.21	261.49

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	10.29	52.53
Claimed by the Petitioner in the instant petition	11.26	48.25
Approved after true-up in this order	11.22	48.09

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	71.29
Claimed by the Petitioner in the instant petition	73.90
Approved after true-up in this order	72.88

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	24.81
Claimed by the Petitioner in the instant petition	28.09
Approved after true-up in this order	27.98

Approved Annual Fixed Charges for the 2014-19 Tariff Period

75. The trued-up Annual Fixed Charges (AFC) approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Depreciation	784.11	3320.91
Interest on Loan	358.76	1506.20



Asset-I		
Particulars	2017-18 (92 days)	2018-19
Return on Equity	927.72	3963.93
O&M Expenses	345.56	1416.40
Interest on Working Capital	62.21	261.49
Total	2478.36	10468.93

(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Depreciation	143.20	623.51
Interest on Loan	61.43	261.82
Return on Equity	167.32	730.01
O&M Expenses	63.01	261.11
Interest on Working Capital	11.22	48.09
Total	446.19	1924.53

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Depreciation	840.11
Interest on Loan	467.50
Return on Equity	1008.31
O&M Expenses	498.20
Interest on Working Capital	72.88
Total	2887.00

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Depreciation	345.21
Interest on Loan	182.76
Return on Equity	405.55
O&M Expenses	172.68
Interest on Working Capital	27.98
Total	1134.18

76. Accordingly, the Annual Transmission Charges for the transmission assets allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (92 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	2565.75	11676.26
Claimed by the Petitioner in the instant petition	2485.49	10499.88
Approved after true-up in this order	2478.36	10468.93



(₹ in lakh)

Asset-II		
Particulars	2017-18 (91 days)	2018-19
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	434.88	2136.05
Claimed by the Petitioner in the instant petition	448.01	1932.09
Approved after true-up in this order	446.19	1924.53

(₹ in lakh)

Asset-III	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	2811.24
Claimed by the Petitioner in the instant petition	2936.83
Approved after true-up in this order	2887.00

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (295 days)
Allowed vide order dated 6.8.2019 in Petition No. 172/TT/2018	979.46
Claimed by the Petitioner in the instant petition	1139.39
Approved after true-up in this order	1134.18

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

77. The Petitioner vide affidavit dated 29.7.2021 has submitted that the Commission in order dated 6.8.2019 in Petition No. 172/TT/2018 had directed that Asset-I, Asset-II and Asset-III should be included in the PoC computation with effect from their respective COD. However, in case of Asset-IV, the Commission held that as the start dates for associated LTAs granted to Mytrah Energy, Orange Sironj, GIREL and Betam Wind are after COD of Asset-IV i.e. 10.6.2018, these LTA grantees shall pay the transmission charges from the date of operationalisation of the respective LTAs as per the start date of LTA till the commissioning of their respective generation. After the commissioning of the generation by these LTA grantees, the transmission charges of Asset-IV shall be included in the PoC computation. The Petitioner has submitted that accordingly the transmission assets cannot be clubbed together as a Combined Asset for tariff purpose for the 2019-24 tariff period. Thus, in the instant



case, the Petitioner has claimed the tariff for Combined Asset comprising of Asset-I, Asset-II and Asset-III.

78. We have considered the submissions of the Petitioner. As per the directions of the Commission in order dated 6.8.2019 in Petition No. 172/TT/2018, the LTA grantees, i.e. the renewable generators are required to bear the transmission charges of Asset-IV till their generation is commissioned. Accordingly, it is required to determine tariff for Asset-IV separately. Therefore, tariff for Asset-IV is approved separately for the 2019-24 tariff period and Asset-I, Asset-II and Asset-III are combined together and tariff is determined accordingly for the 2019-24 tariff period.

79. The details of the transmission charges claimed by the Petitioner for Combined Asset and Asset-IV for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5418.90	5580.77	5621.52	5621.52	5621.52
Interest on Loan	2237.04	2145.03	1986.52	1808.92	1642.37
Return on Equity	5868.38	6053.09	6095.99	6095.99	6095.99
O&M Expenses	4087.91	4229.54	4378.55	4535.00	4692.87
Interest on Working Capital	381.53	392.28	397.66	401.80	405.42
Total	17993.76	18400.71	18480.24	18463.23	18458.17

(₹ in lakh)

Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	457.33	473.04	480.41	480.41	480.41
Interest on Loan	222.50	213.03	200.04	182.99	165.75
Return on Equity	494.35	511.11	518.98	518.98	518.98
O&M Expenses	434.54	450.22	466.00	482.86	498.86
Interest on Working Capital	36.59	37.69	38.41	38.89	39.26
Total	1645.31	1685.09	1703.84	1704.13	1703.26

80. The details of IWC claimed by the Petitioner for Combined Asset and Asset-IV for the 2019-24 tariff period are as follows:



(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	340.66	352.46	364.88	377.92	391.07
Maintenance Spares	613.19	634.43	656.78	680.25	703.93
Receivables	2212.35	2268.58	2278.39	2276.29	2269.45
Total Working Capital	3166.20	3255.47	3300.05	3334.46	3364.45
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	381.53	392.28	397.66	401.80	405.42

(₹ in lakh)

Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	36.21	37.52	38.83	40.24	41.57
Maintenance Spares	65.18	67.53	69.90	72.43	74.83
Receivables	202.29	207.75	210.06	210.10	209.42
Total Working Capital	303.68	312.80	318.79	322.77	325.82
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	36.59	37.69	38.41	38.89	39.26

Effective Date of Commercial Operation (E-COD) of Combined Asset

81. The Petitioner has claimed E-COD of Combined Asset as 2.2.2018. Based on the trued-up capital cost and COD of Asset-I, Asset-II and Asset-III, E-COD of Combined Asset has been worked out as follows:

Asset	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	COD	Number of days from last COD	Weightage of cost (in %)	Weighted Days	E-COD (Latest COD – Total Weighted Days)
Asset-I	67334.58	30.12.2017	162	66.42	107.60	2.2.2018
Asset-II	12710.51	31.12.2017	161	12.54	20.19	
Asset-III	21329.02	10.6.2018	0	21.04	0.00	
Total	101374.11			100.00	127.79	

82. E-COD is used to determine the lapsed life of the project as a whole, which works out as 1 (one) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Further, as tariff for the 2019-24 period in respect of Asset-IV has been worked out separately, E-COD for the transmission project as a whole will be worked out and considered in the next tariff period while determining tariff for combined assets for the transmission project.



Weighted Average Life (WAL)

83. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the transmission project as a whole.

84. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. Accordingly, WAL of Combined Asset has been worked out as 28 years as follows:

Particulars	Capital Cost as on 31.3.2019 (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1)x(2)	WAL (in years) (4) = (3)/(1)
Building & Civil Works	5212.15	25	130303.80	27.7563 (rounded off to 28 years)
Transmission Line	29791.31	35	1042695.93	
Sub Station	63929.18	25	1598229.46	
PLCC	651.74	15	9776.14	
IT Equipment (Including Software)	802.07	6.67	5347.15	
Total	100386.46		2786352.49	

85. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for the 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of Combined Asset is 2.2.2018 and the lapsed life of the transmission project as a whole works out as one (1) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 27 years.



Capital Cost

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

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

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

(a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*

(b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*

(c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*

(d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*

(e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*

(f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*

(g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*

(h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*

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

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

(k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*

(l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*

(m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*

(n) *Expenditure on account of change in law and force majeure events; and*

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

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

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

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

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



(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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 Jyoti Yojana (DDUGJY) project in the affected area.

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

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

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

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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

87. The Petitioner has claimed the capital cost of ₹101632.25 lakh and ₹8615.49 lakh as on 31.3.2019 for Combined Asset and Asset-IV respectively. The Petitioner has submitted that the estimated completion cost is within the approved apportioned cost as per RCE.



88. The capital cost of ₹101374.11 lakh and ₹8554.98 lakh admitted for Combined Asset and Asset-IV respectively as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure

89. 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;*
- (g) *Raising of ash dyke as a part of ash disposal system.*

.....”

90. The Petitioner has claimed ACE of ₹6556.19 lakh and ₹595.16 lakh for Combined Asset and Asset-IV respectively during the 2019-24 period under Regulation 25(1)(d) of the 2019 Tariff Regulations on account of undischarged liability towards final payment for works executed prior to the cut-off date/ works deferred for execution. The same has been summarised as follows:

Asset	ACE Claimed		Decapitalisation claimed
	2019-20	2020-21	2019-20
Combined Asset	5077.73	1522.59	44.13
Asset-IV	315.82	279.34	0.00

91. The Petitioner vide affidavit dated 27.11.2020 has submitted the package-wise breakup of ACE incurred during 2019-24.



92. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations, as it is towards undischarged liabilities for works executed prior to the cut-off date. Accordingly, ACE for the 2019-24 tariff period and the capital cost as on 31.3.2024 considered for Combined Asset and Asset-IV are as follows:

(₹ in lakh)

Asset	Capital Cost admitted as on 1.4.2019 (A)	ACE allowed for 2019-20 (B)	De-capitalisation allowed for 2019-20 (C)	ACE allowed for 2020-21 (D)	Capital Cost allowed as on 31.3.2024 (D)=(A)+(B)-(C)+(D)
Combined Asset	101374.11	5077.73	44.13	1522.59	107930.30
Asset-IV	8554.98	315.82	0.00	279.34	9150.14

Debt-Equity Ratio

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

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

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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



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

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

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

94. The debt-equity considered for the purpose of computation of tariff for Combined Asset and Asset-IV for the 2019-24 tariff period is as follows:

Combined Asset						
Funding	Capital Cost (as on 1.4.2019) (₹ in lakh) (A)	(in %)	ACE in 2019-20 (₹ in lakh) (B)	(in %)	ACE in 2020-21 (₹ in lakh) (C)	(in %)
Debt	70961.88	70.00	3554.41	70.00	1065.81	70.00
Equity	30412.23	30.00	1523.32	30.00	456.78	30.00
Total	101374.11	100.00	5077.73	100.00	1522.59	100.00

Funding	De-capitalisation in 2019-20 (₹ in lakh) (D)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)(E)=(A)+ (B)+(C)-(D)	(in %)
Debt	30.89	70.00	75551.21	70.00
Equity	13.24	30.00	32379.09	30.00
Total	44.13	100.00	107930.30	100.00



Asset-IV					
Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)	
Debt	5988.49	70.00	6405.10	70.00	
Equity	2566.49	30.00	2745.04	30.00	
Total	8554.98	100.00	9150.14	100.00	

Depreciation

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

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

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

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

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

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

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

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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at



rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

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

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

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

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

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

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

96. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD at Annexure-V and Annexure-VI has been worked out considering the



depreciation rates of IT and non-IT assets specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100% depreciable. The depreciation allowed for Combined Asset and Asset-IV for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	101374.11	106407.71	107930.30	107930.30	107930.30
ACE (B)	5077.73	1522.59	0.00	0.00	0.00
Less: De-capitalisation (C)	44.13	0.00	0.00	0.00	0.00
Closing Gross Block (D)=(A)+(B)-(C)	106407.71	107930.30	107930.30	107930.30	107930.30
Average Gross Block (E)=[(A)+(D)]/2	103890.91	107169.00	107930.30	107930.30	107930.30
Freehold land	987.65	987.65	987.65	987.65	987.65
Weighted average rate of Depreciation (WAROD) (in %) (F)	5.20	5.19	5.20	5.20	5.20
Balance useful life of the asset (Year)	27	26	25	24	23
Elapsed life at the beginning of the year (Year)	1	2	3	4	5
Aggregate Depreciable Value	92696.64	95651.43	96337.59	96337.59	96337.59
Depreciation during the year G=(E)*(F)	5406.38	5569.42	5610.17	5610.17	5610.17
Cumulative Depreciation at the end of the year	11115.30	16684.71	22294.88	27905.05	33515.22
Remaining Depreciable Value at the end of the year	81581.34	78966.71	74042.71	68432.54	62822.37

(₹ in lakh)

Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	8554.98	8870.80	9150.14	9150.14	9150.14
ACE (B)	315.82	279.34	0.00	0.00	0.00
Closing Gross Block (C)=(A)+(B)	8870.80	9150.14	9150.14	9150.14	9150.14
Average Gross Block D=[(A)+(C)]/2	8712.89	9010.47	9150.14	9150.14	9150.14
Weighted Average Rate of Depreciation (in %) (E)	5.21	5.21	5.22	5.22	5.22
Balance useful life at the beginning of the year (Year)	25	24	23	22	21



Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Elapsed Life at the beginning of the year (Year)	0	1	2	3	4
Aggregate Depreciable Value	7841.60	8109.42	8235.13	8235.13	8235.13
Combined Depreciation during the year (F)=(D)*(E)	454.15	469.86	477.24	477.24	477.24
Aggregate Cumulative depreciation at the end of year	799.36	1269.23	1746.46	2223.70	2700.94
Remaining Aggregate Depreciable Value at the end of year	7042.24	6840.20	6488.66	6011.42	5534.19

Interest on Loan

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

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

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

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

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

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



(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

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

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

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	70961.88	74485.40	75551.21	75551.21	75551.21
Cumulative Repayments upto Previous Year	5711.84	11115.30	16684.71	22294.88	27905.05
Net Loan-Opening	65250.04	63370.10	58866.50	53256.33	47646.16
Additions due to ACE	3554.41	1065.81	0.00	0.00	0.00
De-capitalisation	30.89	0.00	0.00	0.00	0.00
Repayment during the year	5406.38	5569.42	5610.17	5610.17	5610.17
Adjustment of cumulative repayment pertaining to decapitalised asset	2.92	0.00	0.00	0.00	0.00
Net Loan-Closing	63370.10	58866.50	53256.33	47646.16	42035.99
Average Loan	64310.07	61118.30	56061.41	50451.24	44841.07
Weighted Average Rate of Interest on Loan (in %)	3.4737	3.5052	3.5393	3.5816	3.6591
Interest on Loan	2233.93	2142.33	1984.19	1806.99	1640.79

(₹ in lakh)					
Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	5988.49	6209.56	6405.10	6405.10	6405.10
Cumulative Repayments up to Previous Year	345.21	799.36	1269.23	1746.46	2223.70
Net Loan-Opening	5643.27	5410.20	5135.87	4658.63	4181.40
Additions due to ACE	221.07	195.54	0.00	0.00	0.00
Repayment during the year	454.15	469.86	477.24	477.24	477.24
Net Loan-Closing	5410.20	5135.87	4658.63	4181.40	3704.16



Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Average Loan	5526.74	5273.03	4897.25	4420.02	3942.78
Weighted Average Rate of Interest on Loan (in %)	3.9977	4.0128	4.0577	4.1127	4.1761
Interest on Loan	220.94	211.60	198.71	181.78	164.66

Return on Equity

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

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

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

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

Provided further that:

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

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

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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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



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

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

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

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

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

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”



100. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate prescribed under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up the RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for the 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period on actual gross income. However, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by it. Any under-recovery or over-recovery of grossed up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during the 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

101. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for Combined Asset and Asset-IV for the 2019-24 tariff period is as follows:



(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	30412.23	31922.31	32379.09	32379.09	32379.09
Additions due to ACE	1523.32	456.78	0.00	0.00	0.00
Decapitalisation	13.24	0.00	0.00	0.00	0.00
Closing Equity	31922.31	32379.09	32379.09	32379.09	32379.09
Average Equity	31167.27	32150.70	32379.09	32379.09	32379.09
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	5853.84	6038.54	6081.44	6081.44	6081.44

(₹ in lakh)

Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	2566.49	2661.24	2745.04	2745.04	2745.04
Additions due to ACE	94.75	83.80	0.00	0.00	0.00
Closing Equity	2661.24	2745.04	2745.04	2745.04	2745.04
Average Equity	2613.87	2703.14	2745.04	2745.04	2745.04
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	490.94	507.70	515.57	515.57	515.57

Operation & Maintenance Expenses

102. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011



Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple 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
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;

ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;



iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

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

(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.”

103. O&M Expenses have been worked out for various elements covered under Combined Asset and Asset-IV in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations and the same are allowed as follows:

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line (Double Circuit Bundled-4 or more sub conductor)					
400 kV D/C Ajmer (New)-Ajmer (RVPN) (km)	65.615	65.615	65.615	65.615	65.615
Chittorgarh (New)- Chittogarh (RVPN) (km)	48.740	48.740	48.740	48.740	48.740
2X400 kV D/C (Quad) Tirunveli PS-Tuticorin (km)	24.06	24.06	24.06	24.06	24.06
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
O&M Expenses (₹ in lakh)	182.98	189.35	196.00	202.92	209.98
Sub-station Bays 765 kV (Conventional)					
Rajpura: Rajpura 400 kV Bay	6	6	6	6	6
Norms (₹ lakh/bay)	45.01	46.6	48.23	49.93	51.68
O&M Expenses (₹ in lakh)	270.06	279.60	289.38	299.58	310.08



Sub-station Bays 400 kV (GIS)					
Rajpura: Rajpura 400 kV Bay	14	14	14	14	14
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses (₹ in lakh)	450.10	465.92	482.30	499.24	516.74
Sub-station Bays 400 kV (GIS)					
Rajpura: Rajpura 400 kV Bay	10	10	10	10	10
Norms (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
O&M Expenses (₹ in lakh)	225.05	232.96	241.15	249.62	258.37
Sub-station ICT 765 kV					
Ajmer: Ajmer ICT-I Ajmer: Ajmer ICT-II Chittorgarh: Chittorgarh ICT-I Chittorgarh: Chittorgarh ICT-II	6000	6000	6000	6000	6000
Norms (₹ lakh/MVA)	0.491	0.508	0.526	0.545	0.564
O&M Expenses (₹ in lakh)	2946.00	3048.00	3156.00	3270.00	3384.00
Total O&M Expenses (₹ in lakh)	4074.19	4215.83	4364.83	4521.36	4679.17

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays 400 kV (GIS)					
Tuticorin GIS:ICT I Bay (400/220 kV)- Tuticorin GIS- Tirunelveli (GIS) Tuticorin GIS:ICT II Bay (400/220 kV)- Tuticorin GIS-Tirunelveli (GIS)	2	2	2	2	2
Norms (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
O&M Expenses (₹ in lakh)	45.01	46.59	48.23	49.92	51.67
Sub-station Bays 220 kV (GIS)					
Tuticorin GIS: ICT I Bay (400/220 kV)- Tuticorin GIS- Tirunelveli (GIS) Tuticorin GIS: ICT II Bay (400/220 kV)- Tuticorin GIS- Tirunelveli (GIS)	2	2	2	2	2
Norms (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
O&M Expenses (₹ in lakh)	31.51	32.62	33.77	34.94	36.18
Sub-station ICT 765 kV					
Tuticorin GIS:Tirunelveli GIS ICT-I and ICT-II	1000	1000	1000	1000	1000
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
O&M Expenses (₹ in lakh)	358.00	371.00	384.00	398.00	411.00
Total O&M Expenses (₹ in lakh)	434.52	450.21	466.00	482.87	498.85

Interest on Working Capital

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

“34. Interest on Working Capital: (1) The working capital shall cover:

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



- i. Receivables equivalent to 45 days of 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;”

105. 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%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points).

106. We have considered the submissions of the Petitioner. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest allowed thereon for Combined Asset and Asset-IV for the 2019-24 tariff period are as follows:



(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	339.52	351.32	363.74	376.78	389.93
Working Capital for Maintenance Spares (15% of O&M Expenses)	611.13	632.37	654.72	678.20	701.87
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2206.82	2259.99	2266.71	2264.61	2257.78
Total Working Capital	3157.47	3243.68	3285.17	3319.59	3349.58
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	380.47	364.91	344.94	348.56	351.71

(₹ in lakh)

Asset-IV					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	36.21	37.52	38.83	40.24	41.57
Working Capital for Maintenance Spares (15% of O&M Expenses)	65.18	67.53	69.90	72.43	74.83
WC for Receivables (Equivalent to 45 days of annual transmission charges)	201.27	206.43	208.46	208.50	207.83
Total Working Capital	302.66	311.48	317.19	321.17	324.23
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	36.47	35.04	33.31	33.72	34.04

Annual Fixed Charges of the 2019-24 Tariff Period

107. The transmission charges of Combined Asset and Asset-IV allowed for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5406.38	5569.42	5610.17	5610.17	5610.17
Interest on Loan	2233.93	2142.33	1984.19	1806.99	1640.79
Return on Equity	5853.84	6038.54	6081.44	6081.44	6081.44
O&M Expenses	4074.19	4215.83	4364.83	4521.36	4679.17
Interest on Working Capital	380.47	364.91	344.94	348.56	351.71
Total	17948.82	18331.04	18385.57	18368.51	18363.27

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	454.15	469.86	477.24	477.24	477.24
Interest on Loan	220.94	211.60	198.71	181.78	164.66
Return on Equity	490.94	507.70	515.57	515.57	515.57
O&M Expenses	434.52	450.21	466.00	482.87	498.85
Interest on Working Capital	36.47	35.04	33.31	33.72	34.04
Total	1637.03	1674.42	1690.83	1691.18	1690.36



Filing Fee and Publication Expenses

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

Licence Fee & RLD Fees and Charges

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

Goods and Services Tax

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

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

Security Expenses

112. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.



113. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 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

114. 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

115. The Petitioner vide affidavit dated 29.7.2021 has submitted that the Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018 regarding Asset-I, Asset-II and Asset-III had included the said assets in the PoC computation with effect from COD of the respective assets. Regarding Asset-IV, LTA grantees were directed to pay the transmission charges from the date of operationalisation of the respective LTAs as per the start date of LTA till the commissioning of their respective generation. After the commissioning of the generation by these LTA grantees, the transmission charges of Asset-IV shall be included in the PoC computation. LTA operationalization details with respect to all generators associated with Asset-IV has been submitted by the Petitioner.



Therefore, the Petitioner has proposed that the transmission charges of Asset-IV should be levied on concerned generators till the commissioning of the respective generation from the date of operationalization of LTA and after commissioning of the generators, the transmission tariff should be the part of PoC pool as per the applicable Sharing Regulations.

116. TANGEDCO has submitted that as per mandate of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (in short, “the 2010 Sharing Regulations”), the Petitioner is duty bound to recover the transmission charges from the generators that have not commissioned their project on COD of the associated transmission system. TANGEDCO, referring to sub clause (y) of clause (1) to Regulation 7 of the 2010 Sharing Regulations, has submitted that waiver of the transmission charges to certain category of RE generators is applicable only from COD of the generation projects. Referring to Regulation 8(6) of the 2010 Sharing Regulations, TANGEDCO has submitted that the generator is liable to pay the transmission charges till COD of the generating station.

117. Referring to the observations of the Commission regarding sharing of transmission charges for Asset-III and Asset-IV in order dated 6.8.2019 in Petition No. 172/TT/2018, TANGEDCO has submitted that 400 kV D/C Tirunelveli PS-Tuticorin PS along with 2X125 MVAR Bus reactors is part of the transmission system associated with RE project. The financial liability due to the mismatch of generation project and the transmission project should be fastened to the RE generators. Instead of recovering the tariff from the delaying entity as mandated in the Regulations, the Petitioner is attempting to relieve the generation projects from financial liability. As per the deliberations of subgroup of SRPC (Southern Regional Power Committee), it was



stated that the 400/230 kV Tirunelveli GIS and 2 Numbers 400 kV D/C lines were planned based on LTA of RE generators and, hence, the assets will be used for RE evacuation as per LTA. However, based on the insistence of the Petitioner, the Subcommittee decided to recommend early commissioning of the assets excluding the ICTs and 230 kV bays. TANGEDCO has further submitted that based on the recommendation of the subgroup of SRPC, the matter was not placed before SRPC forum for approval. The Petitioner had failed to produce the approval of SRPC and in the absence of SRPC approval, the tariff liability should have been fixed on the RE generators for the delayed period. Even though it was stated by the Petitioner that the reactor would be helpful to control the voltage issues, the financial liability on account of delay on the part of the generator cannot be shifted to the Discoms. All the RE generators who were granted LTA based on the ICT capacity should be made liable for payment of transmission charges.

118. In view of the above, TANGEDCO has requested that the Petitioner may be directed to furnish the details of the generators who have not commissioned their generation projects as on COD of the transmission assets, date of LTA operationalisation and statement of their proportionate tariff liability. TANGEDCO has further prayed that the Petitioner may be directed to refund the excess amount (including interest) recovered from DICs along with interest immediately for the period attributable to the generators and the Petitioner may be directed to furnish the bilateral billing made so far to the generators associated with this transmission scheme in case of Asset-III and Asset-IV.

119. In response, the Petitioner has submitted that the reply pertaining to sharing of transmission charges along with generation status with respect to generators associated with Asset-IV etc. has already been submitted vide affidavit dated



29.7.2021. The matter pertaining to utilization of Asset-III was deliberated during 32nd SRPC meeting held on 22.8.2017 and Special meeting in SRPC held on 1.9.2017 wherein it was decided that commissioning of 2X400 kV D/C (Quad) Tirunelveli Pooling Station-Tuticorin Pooling Station line along with 400 kV System of Tirunelveli GIS and 2x125 MVAR bus reactors would help in controlling the over-voltage situations around Tirunelveli and Kudankulam areas. The Petitioner has further submitted that the submissions of TANGEDCO are wrong and misleading and the matter pertaining to approval of recommendation of the sub-group of SRPC was noted in the 33rd SRPC meeting held on 17.2.2018. In the minutes of the said meeting, it is noted that SRPC had agreed that this Report could be approved by the Chairperson, SRPC. Based on this, approval would be communicated to CTU by SRPC Secretariat and Chairperson, SRPC and CMD, TSTRANSCO had approved this Report.

120. The Petitioner has further submitted that vide letter dated 26.9.2017, SRPC Secretariat had forwarded this Report to PGCIL/ CTU/ States. Further, in the 34th SRPC meeting held on 11.8.2018, SRPC also approved for timely completion of Asset-III. Accordingly, Asset-III is getting utilized from its COD i.e. 10.6.2018. In view of approval of SRPC, the contention raised by TANGEDCO is wrong and misleading. Therefore, the Petitioner has prayed that recovery of transmission charges for Asset-III through collective pool in line with prevailing Sharing Regulations may be continued.

121. We have considered the submissions of the Petitioner and TANGEDCO. As regards Asset-III, the Commission in order dated 6.8.2019 in Petition No. 172/TT/2018 has already observed that Asset-III would help in controlling the over-voltage situation in Tirunelveli Pooling Station and it is being utilised from its COD and accordingly, tariff approved for Asset-III shall be included in PoC computation from its COD. In



view of the above, the transmission charges allowed for Asset-I, Asset-II and Asset-III from 30.12.2017, 31.12.2017 and 10.6.2018 respectively shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations as allowed by the Commission vide order dated 6.8.2019 in Petition No. 172/TT/2018.

122. As regards Asset-IV, the Petitioner vide affidavit dated 29.7.2021 has submitted the details of LTA operationalization of generators associated with Asset-IV and they are as follows:

Name of RE Generator	LTA Granted	LTA Operationalization		COD Status	
		Quantum	Date of LTA Operationalisation	Quantum in MW	COD
Mytrah Energy (India) Private Limited (GEC-I Corridor)	75	75	10.6.2018	128.79	31.1.2019
	175	50	30.9.2018	58.32	16.4.2019
		125	1.12.2018	62.89	11.5.2019
Orange Sironj Power Private Limited	200	200	22.2.2019	100	7.3.2019
				100	14.4.2019
Betam Wind Energy Private Limited	250.2	250.2	31.7.2019	50.2	25.11.2019
				46	10.9.2020
				30	25.10.2020
				18	17.11.2020
				12	5.3.2021
				18	17.4.2021
Green Infra Renewable Energy Limited	249.9	249.9	10.10.2018	249.9	8.10.2018

123. From the above, we observe that the start dates for LTAs granted to Mytrah Energy (India) Private Limited, Orange Sironj Power Private Limited, Betam Wind Energy Private Limited and Green Infra Renewable Energy Limited are after COD of Asset-IV i.e. 10.6.2018. Therefore, as decided in order dated 6.8.2019 in Petition No.172/TT/2018, the generators shall pay the transmission charges from the date of operationalization of the respective LTAs till the commissioning of their respective generation. After the commissioning of the generation by these LTA grantees, the



corresponding transmission charges of the Asset-IV shall be included in the PoC computation.

124. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

125. To summarise:

- a) The trued-up AFC approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)	
Asset-I	
2017-18 (92 das)	2018-19
2478.36	10468.93
(₹ in lakh)	
Asset-II	
2017-18 (91 days)	2018-19
446.19	1924.53
(₹ in lakh)	
Asset-III	
2018-19 (295 days)	
2887.00	
(₹ in lakh)	
Asset-IV (295 days)	
2018-19	
1134.18	



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

Combined Asset

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
17948.82	18331.04	18385.57	18368.51	18363.27

Asset-IV

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
1637.03	1674.42	1690.83	1691.18	1690.36

126. Annexure-I to Annexure-VI given hereinafter shall form part of the order.

127. This order disposes of Petition No. 476/TT/2020 in terms of above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Asset-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of depreciation as per the 2014 Tariff Regulations (in %)	Annual Depreciation as per the 2014 Tariff Regulations (₹ in lakh)	
		2017-18	Total			2017-18	2018-19
Land-Freehold	785.30	0.00	0.00	785.30	0.00	0.00	0.00
Building Civil Works & Colony	614.37	2362.20	2692.13	3306.50	3.34	59.97	104.93
Transmission Line	22993.86	644.62	1707.76	24701.62	5.28	1231.09	1276.18
Sub-station	33472.21	835.33	4515.07	37987.28	5.28	1789.39	1908.58
PLCC	240.24	1.82	16.14	256.38	6.33	15.26	15.78
IT Equipment (Incl. Software)	287.45	0.01	10.05	297.50	5.28	15.18	15.44
Total	58393.44	3843.98	8941.15	67334.58		3110.89	3320.91
Average Gross Block (₹ in lakh)						60315.43	64786.00
Weighted Average Rate of Depreciation (in %)						5.16	5.13



Asset-II

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per the 2014 Tariff Regulations (in %)	Annual Depreciation as per the 2014 Tariff Regulations (₹ in lakh)	
		2017-18	Total			2017-18	2018-19
Land - Freehold	50.80	0.00	0.00	50.80	0.00	0.00	0.00
Building Civil Works & Colony	178.54	16.18	16.22	194.76	3.34	6.23	6.50
Sub-station	10540.03	291.74	1843.15	12383.18	5.28	564.22	612.87
IT Equipment (Incl. Software)	74.54	0.00	7.23	81.77	5.28	3.94	4.13
Total	10843.91	307.92	1866.60	12710.51		574.38	623.51
Average Gross Block (₹ in lakh)						10997.87	11931.17
Weighted Average Rate of Depreciation (in %)						5.22	5.23



Asset-III

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per the 2014 Tariff Regulations (in %)	Annual Depreciation as per the 2014 Tariff Regulations (₹ in lakh)
		2018-19	Total			2018-19
Land - Freehold	151.55	0.00	0.00	151.55	0.00	0.00
Building Civil Works & Colony	1710.89	0.00	0.00	1710.89	3.34	57.14
Transmission Line	4863.62	226.07	226.07	5089.69	5.28	262.77
Sub-station	11926.31	1632.41	1632.41	13558.72	5.28	672.80
PLCC	375.99	19.38	19.38	395.36	6.33	24.41
IT Equipment (Incl. Software)	422.80	0.00	0.00	422.80	5.28	22.32
Total	19451.17	1877.85	1877.85	21329.02		1039.45
Average Gross Block (₹ in lakh)						20390.09
Weighted Average Rate of Depreciation (in %)						5.10



Asset-IV

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per the 2014 Tariff Regulations (in %)	Annual Depreciation as per the 2014 Tariff Regulations (₹ in lakh) 2018-19
		2018-19	Total			
Building Civil Works & Colony	303.60	0.00	0.00	303.60	3.34	10.14
Sub-station	7543.58	707.80	707.80	8251.38	5.28	416.99
Total	7847.18	707.80	707.80	8554.98		427.13
Average Gross Block (₹ in lakh)						8201.08
Weighted Average Rate of Depreciation (in %)						5.21



Combined Asset (comprising of Asset-I to Asset-III)

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per the 2019 Tariff Regulations (in %)	Annual Depreciation as per the 2019 Tariff Regulations (₹ in lakh)				
		2019-20	2020-21	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	987.65	0.00	0.00	0.00	987.65	0.00%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	5212.15	1577.38	45.00	1622.38	6834.53	3.34%	200.43	227.52	228.27	228.27	355.11
Transmission Line	29791.31	550.00	175.00	725.00	30516.31	5.28%	1587.50	1606.64	1611.26	1611.26	1585.58
Sub-station	63929.18	2855.35	1278.59	4133.94	68063.12	5.28%	3450.84	3559.98	3593.73	3593.73	3536.44
PLCC	651.74	25.00	4.00	29.00	680.74	6.33%	42.05	42.96	43.09	43.09	35.37
IT Equipment (Incl. Software)	802.07	70.00	20.00	90.00	892.07	15.00%	125.56	132.31	133.81	133.81	133.81
Total	101374.11	5077.73	1522.59	6600.32	107974.43		5406.38	5569.42	5610.17	5610.17	5610.17
Average Gross Block (₹ in lakh)							103890.91	107169.00	107930.30	107930.30	107930.30
Weighted Average Rate of Depreciation (in %)							5.20	5.19	5.20	5.20	5.20



Asset-IV

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per the 2019 Tariff Regulations (in %)	Annual Depreciation as per the 2019 Tariff Regulations (₹ in lakh)				
		2019- 20	2020-21	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Building Civil Works & Colony	303.60	0.00	0.00	0.00	303.60	3.34	10.14	10.14	10.14	10.14	15.83
Sub-station	8251.38	315.82	279.34	595.16	8846.54	5.28	444.01	459.72	467.10	467.10	461.40
Total	8554.98	315.82	279.34	595.16	9150.14		454.15	469.86	477.24	477.24	477.24
Average Gross Block (₹ in lakh)							8712.89	9010.47	9150.14	9150.14	9150.14
Weighted Average Rate of Depreciation (in %)							5.21	5.21	5.22	5.22	5.22

