

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 294/TT/2022**

**Coram:**

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

**Date of Order: 19.01.2024**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Assets under the scheme "Fiber Optic Communication system for central sector Sub-stations & Generating Stations in Southern Region."

**And in the matter of:**

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

**....Petitioner**

**Vs**

**Users under the category of Generating Stations and Sellers**

1. National Thermal Power Corporation Limited,  
NTPC Bhawan, Core-7, Scope Complex,  
7, Institutional Area, Lodhi Road,  
New Delhi-110003.
2. National Thermal Power Corporation Limited,  
Ramagundam STPS, RSTPS, Jyothi Nagar,  
District: Karim Nagar, A.P.-505215.
3. National Thermal Power Corporation Limited,  
Talcher STPS, Kaniha, P.O. Deepshikha,  
District: Angul, Orissa-759147.



4. National Thermal Power Corporation Limited,  
Simhadri Super Thermal Power Project,  
Post: NTPC Simhadri-531020,  
District: Vishakhapatnam, A.P.
5. Neyveli Lignite Corporation Limited,  
P.O. Neyveli-607 801, District: Cuddalore,  
Tamil Nadu.
6. Nuclear Power Corporation of India Limited,  
Nabhkiya Bhawan, Anu-Shakti Nagar,  
Mumbai-400094.
7. Nuclear Power Corporation of India Limited,  
Madras Atomic Power Station (MAPS),  
Kalpakkam-603102, Tamil Nadu.
8. Nuclear Power Corporation of India Limited,  
Kaiga Generating Station,  
P.O. Kaiga, Via Karwar,  
Karnataka-581400.
9. Nuclear Power Corporation of India Limited,  
Kudankulam Nuclear Power Project,  
P.O. Kudankulam, Radhapuram Taluk,  
District: Tirunelveli, Tamil Nadu-627106.
10. Bharatiya Nabhikiya Vidyut Nigam Limited,  
Department of Atomic Energy, Kalpakkam-603102,  
District Kancheepuram, Tamil Nadu.
11. NTPC Tamil Nadu Energy Company Limited,  
(JV of NTPC & TNEB),  
G-Block, 123 & 123A,  
12th Street, Anna Nagar (East), Chennai-600102.
12. Meenakshi Energy Private Limited,  
Meenakshi Plot 119, Road No#10,  
Jubilee Hills, Hyderabad-500033.
13. Simhapuri Energy Limited,  
6-3-866/2, 3rd Floor, Begumpet,  
Madhucon Green Lands,  
Hyderabad-500016.
14. LANCO-Kondapalli Power Pvt. Limited,  
Plot No.4, Software Units Layout,  
Hitech City, Madhapur,



Hyderabad-500081.

**Users under the category of Distribution Licensees and Buyers**

15. Andhra Pradesh Power Co-ordination Committee,  
APTRANSCO, Vidyut Soudha,  
Hyderabad-500082.
16. Power Company of Karnataka Limited,  
Room No: 503, KPTCL Building,  
Kaveri Bhavan, Bangalore-560009, Karnataka.
17. Kerala State Electricity Board,  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695004.
18. Tamil Nadu Generation and Distribution Co. Limited,  
7 th Floor, Eastern Wing, 144, Anna Salai,  
Chennai-600002.
19. Electricity Department,  
Government of Puducherry,  
Puducherry-605001.
20. Electricity Department,  
Division No.3, Government of Goa,  
Curti-Ponda, Goa-403401.

**...Respondents**

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

**For Respondents** : None

**ORDER**

Power Grid Corporation of India Limited has filed the instant petition for trueing up of transmission tariff for the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of



transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets under “Fiber Optic Communication system for central sector Sub-stations & Generating Stations” in Southern Region (hereinafter referred to as the “transmission project”).

**Asset-A1:** 275.93 km OPGW fiber optic cable along with associated equipment's

**Asset-A2:** 291.124 km OPGW fiber optic cable along with associated equipments (includes 88.63 Km under cost apportionment with POWERTEL)

**Asset-B1 (a)\*:** OPGW Communication Link for Nellore Pooling Station-400 kV Nellore PG

**Asset-B1 (b)\*:** OPGW Communication Link for 400 kV Raichur-765 kV Raichur

**Asset-B1 (c)\*:** OPGW Communication Link for Nellore Pooling Station-TPCIL (Thermo Powertech Corporation India Ltd.)

**Asset-B1 (d)\*:** OPGW Communication Link for Kurnool (New)-Kurnool Sub-station

**Asset-B2:** 148 km OPGW fiber optic cable along with associated equipment's for 1) LILO of N'Sagar-Gooty at Kurnool (PG) 2) 765 kV Raichur-Kurnool (PG)

**Asset-B3:** 159 km OPGW fiber optic cable along with associated equipment's for 1) 400 kV Kadapa(PG)-Chittor (APTRANSCO) 2) 400 kV Kadapa(PG)-Chinakampally (APTRANSCO)

**Asset-B4:** 1717.112 km OPGW fiber optic cable along with associated equipments (includes 966.436 km under cost apportionment with POWERTEL) for 400 kV Neyvelli TS-II-400 kV Neyveli TS-1 Expn, Tuticorin Pooling Station-Madurai Sub-station Madurai Sub LDC (TNEB)-Madurai 230 kV (TNEB)-Madurai (PG), 400 kV Pugalur (PG)-Trichy (TNEB)-Trichy (PG), 230 kV Tanjore (TNEB)-400 kV Trichy (TNEB), 230 kV Thiruvaur (TNEB)-230 KV Tanjore (TNEB), 400 KV Hassan (PG)-Neelmangla (KPTCL), 400 kV Narendra-Davengere, Kolar-Thiruvallam, Madurai-Trichy, Madurai-Tirunelveli, Tirunelveli-Trivandrum, Sriperambadurur-Kalivindapattu, Udumalpet-Arasur, Salem-Udumalpet, Nagapattinam-Trichy, Nagapattinam-Neyveli TS-1.



**Asset-B5:** 956.599 km OPGW communication links along with associated Communication Equipment (includes 132.30 km under cost apportionment with POWERTEL) for Kochi-Trichur, Kundakulam-Tirunelveli Link-11, Narendra-Kudgi, Kudgi-Kolhapur, Kolar-Hoody, Tirunelveli-Edamon, Neyveli TS 2-Bahour, Salem-Dharampuri, Kochi-Brahmapuram (KSEB), Tiruvarur-Kadalangudi (TANTRANSCO), Sriperambadur-Pondy OPGW Links & EPABX Systems for SRLDC Bangalore, Main SLDC TANTRANSCO Chennai, Main SLDC KSEB Kalamassery, Backup SLDC KSEB Trivandrum, SCC PED Puduchery, Main SLDC APTRANSCO Vijayawada, Main SLDC TSTRANSCO Hyderabad and EPABX systems (Hot Line Speech Communication Systems for Grid Operation)

**Asset-B6:** OPGW links for Establishment of Fiber optic communications system for central sector stations Project of Southern Region-1) 400 kV Nagarjun Sagar (PG)-400 kV Mehboob Nagar 2) 400 kV Raichur (PG)-400 kV Mehboob Nagar 3) Nellore PS-Gooty crossing point to Kadapa 4) 400 kV Simhadri (PG)-400 kV Vemagiri (PG) 5) 220 kV Tallapally, APTRANSCO-220 kV VTPS APTRANSCO 6) LILO of Simhadri-Vemagiri (PG) to Gajuwaka 7) 220 kV Gooty APTRANSCO-400 kV Gooty (PG) 8) 220 kV Ghanapur TSTRANSCO-400 kV Ghanapur PG 9) 220 kV Khammam APTRANSCO-400 kV Khammam PG 10) 400 kV Vijayawada PG-220 kV Vijayawada Sub-LDC 11) 400 kV N'Sagar PG-220 kV Tallapally, APTRANSCO 12) 400 kV Khammam PG-400 kV Vijayawada PG 13) 220 kV Vishakhapatnam VSS-400 kV Gajuwaka PG 14) Ramagundam NTPC-Repeater-204 -Bhadrawati 15) 400 kV Ghanapur PG-Repeater-346-Ramagundam NTPC

**Asset-B7:** OPGW Communication Link for Kaiga (PG)-Narendra (PG), Kaiga (PG)-Gutur, 230 kV Kalpakkam (PG)-230 kV SP Koil (TNEB), NCTPS (TNEB)-Tondiapet (TNEB), Tuticori pooling station-LILO point AP51, Mysore-Kozikode, Kalpakam-Siruchery, Thiruvarur-Neyveli, Neyveli TS II-Neyveli TS I (Ckt-II), Villianur-Bahour, Basthipura-Hootagally DC Line, LILO of Pomdy-Sriperambadur to SV Chatram

**Asset-B8:** OPGW Communication Link for 1) 400 kV Vijaywada (PG)-Vemagiri (APTRANSCO); 2) 400 kV LILO of Ramagundam-Khammam to Warangal; 3) 400 kV Ghanapur-Kurnool (APTRANSCO); 4) 220 kV KTPS-Khammam TS Transco; 5) 400 kV Munirabad-Raichur; 6) 220 kV Hindupur-Gooty AP Transco and Telecom links under Fibre Sharing: 1) 400 kV Nellore-Sriperambadur 2) 400 kV Ramagundam-Warangal 3) 400 kV Nagarjunsagar-Gooty 4) 400 kV Vijaywada-Gajuwaka

**Asset-C1:** OPGW Fibre Links (98.484 km) Hoody-Yelahanka LILO Point of Nelamangala-Hoody, Hoody-HSR (KPTCL), Peenya-NRS-Hebbal (KPTCL), Hoody-HAL (KPTCL), LILO of Pondy-Sriperambadur to SV Chatram (TANTRANSCO), LILO of Neyveli TS-11-Neyveli TS-1 to NNTPS, Salem(PG)-Salem (TNEB), Sriperambadur (PG)-Sriperambadur (TNEB)



**Asset- C2:** Salem PS (Dharmapuri)-Madhugiri (Tumkur) OPGW Link (246.197 km.

*\*The Petitioner has submitted that the cost of these assets was small and they were commissioned in a scattered period of time, Therefore, they were all combined with **Asset B1(d):** OPGW Communication Link for Kurnool (New)-Kurnool Sub-station (COD: 1.4.2014). The combined asset of Asset B1(a), Asset B1(b), Asset B1(c), and Asset B1(d), has been referred as **Asset-B1** in instant petition and tariff for **Asset-B1** has been allowed by the Commission vide order dated 20.2.2019 in Petition No. 168/TT/2018.*

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

*"1) Approve the actual Additional Capitalization expenditure incurred during 2014-19 tariff block, as claimed at para 11.40 above.*

*2) Approve the Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for all the assets covered under this petition as per para 12.0 and 13.0 respectively.*

*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 Hon'ble Commission as provided in Tariff Regulations, 2014 and Tariff Regulations, 2019.*

*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 beneficiaries 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 beneficiaries.*

*7) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*

*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 beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be*



*recovered from the beneficiaries.*

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

### **Background**

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

(a) The Investment Approval (IA) for implementation of transmission assets under the transmission project was accorded by Board of Directors of the Petitioner in its 272<sup>nd</sup> meeting dated 29.5.2012 vide Memorandum No. C/CP/FO-SR, dated 6.6.2012 with an estimated cost of ₹17416 lakh including IDC of ₹974 lakh based on February, 2012 price level.

(b) The Revised Cost Estimate (RCE) for the transmission project was accorded by Board of Directors of the Petitioner in its 347<sup>th</sup> meeting dated 8.12.2017 vide Memorandum No. C/CP/PA1718-12-0E-RCE005 dated 28.12.2017 with an estimated cost of ₹19474 lakh including IDC of ₹1233 lakh based on June, 2017 price level.

(c) The transmission project was discussed and agreed in 17<sup>th</sup> SRPC meeting held on 12.8.2011. Subsequently, it was also discussed in 24<sup>th</sup> SRPC meeting held on 15.3.2014 and 25<sup>th</sup> SRPC meeting held on 26.7.2014.

(d) The scope of work covered under "Fiber Optic Communication system for central sector Sub-stations & Generating Stations" in Southern region is as follows :

(i) Installation of

a. 5207 km of OPGW fiber optic cable on existing/ new EHV transmission lines of POWERGRID/SEBs





- b. 118 numbers of Terminal equipment for communication based on Synchronous Digital Hierarchy (SDH) technology.
- c. 90 numbers of Multiplexers
- d. 45 numbers of DC Power supply and
- e. 1 number Network Management System (NMS)

(ii) Sharing of 499 km of OPGW Fibre under POWERGRID Telecom network.

(e) The scope of work has been revised in the RCE and the same has been considered for the purpose of grant of tariff and it is as follows :

(i) Installation of

- a. 5256 km of OPGW fiber optic cable on existing/ new EHV transmission lines of POWERGRID/SEBs
- b. 140 numbers of Terminal equipment for communication based on Synchronous Digital Hierarchy (SDH) technology.
- c. 143 numbers of Multiplexers
- d. 22 numbers of DC Power supply
- e. 3 numbers Network Management System (NMS)

(ii) Sharing of 2288 km of OPGW Fibre under POWERGRID Telecom network.

(iii) Hot line speech communication (Computer Dialing) System for Grid Operating under Southern Region.

(f) The details of complete project of “Fiber Optic Communication system for central sector Sub-stations & Generating Stations” in Southern Region is as follows:

Asset nomenclature in Previous Petition	Description	Asset nomenclature in current petition	COD
<b>Commission's order dated 29.7.2016 in Petition No.: 275/TT/2015</b>			
Asset-I	275.93 km OPGW Fibre optic cable along with associated equipments.	Asset-A1	1.4.2014
Asset-II	291.124 km OPGW fiber optic cable along with associated equipments (includes 88.63 km under	Asset-A2	1.7.2014





	cost apportionment with POWERTEL)		
<b>Commission's order dated 20.2.2019 in Petition No.: 168/TT/2018</b>			
Asset-1	(a) OPGW Communication Link for Nellore Pooling Station-400 kV Nellore PG (b) OPGW Communication Link for 400 kV Raichur-765 kV Raichur (c) OPGW Communication Link for Nellore Pooling Station-TPCIL (Thermo Powertech Corporation India Ltd.) (d) OPGW Communication Link for Kurnool (New)-Kurnool Sub-station	Asset-B1	1.4.2014
Asset-2	148 km OPGW fiber optic cable along with associated equipment's for 1) LILO of N'Sagar-Gooty at Kurnool (PG)-30 km. 2) 765 kV RaichurKurnool (PG)-118km.	Asset-B2	27.9.2014
Asset-3	159 km OPGW fiber optic cable along with associated equipment's for 1) 400 kV Kadapa (PG)-Chittor (APTRANSCO)-159 kms 2) 400 kV Kadapa (PG)- Chinakampally (APTRANSCO)-approach Cable).	Asset-B3	1.10.2014
Asset-4	1717.112 km OPGW fiber optic cable along with associated equipment (includes 966.436 km under cost apportionment with POWERTEL) for 400 kV Neyveli TS-II-400 kV Neyveli TS-1 Expn. (13.921 km), Tuticorin Pooling Station-Madurai Sub-station (95.361 km), Madurai Sub LDC (TNEB)-Madurai 230 kV (TNEB)-Madurai (PG)-13.794 km, 400 kV Pugalur (PG)-Trichy (TNEB)-Trichy (PG)-94.150 km., 230 kV Tanjore (TNEB)-400 kV Trichy (TNEB)-58.014 km, 230 kV Thiruvaur (TNEB)-230 kV Tanjore (TNEB)-71.909 km, 400 kV Hassan PG)-Neelmangla (KPTCL) 204.936 km, 400 kV Narendradavengere-153.393 km, LILO of Neyveli TS-II-Trichy to Nagapattinam- 45.198 km, and Telecom links under Fibre Sharing Madurai-Trichy-129.584 km, Madurai-Tirunelveli & Tirunelveli-Trivandrum-267.824 km., Sriperambadurur-Kalivindapattu-30.697 km, Udumalpet-Arasur-65.048 km, Salem-Udumalpet-147.383 km, Neyveli TS-II to -Trichy - 163.70 km., Kolar-Sriperambadur-162.20 km.	Asset-B4	30.3.2015
Asset-5	956.599 km OPGW communication links along with associated Communication Equipment (includes 132.30 km under cost apportionment with POWERTEL) for Kochi-Trichur-78.261 kms, Kundakulam-Tirunelveli Link-11 (79.517 km), Kolar-Hoody (51.024 km), Kudgi-Kolhapur (191.273 km), Narendra-Kudgi (176.13 km), Kochi-Brahmapuram (KSEB)-6.598 km, Tiruvarur-Kadalangudi (TANTRANSCO)-47.954 km, Tirunelveli-Edamon (82.59 km), Neyveli TS 2-Bahour (52.021 km), Salem-Dharampuri (58.931 km), Sriperambadur-Pondy-132.3 kms Telecom sharing, OPGW Links &	Asset-B5	31.3.2016



	EPABX Systems for SRLDC Bangalore, Main SLDC TANTRANSCO Chennai, Main SLDC KSEB Kalamassery, Backup SLDC KSEB Trivandrum, SCC PED Puduchery, Main SLDC APTRANSCO Vijayawada, Main SLDC TSTRANSCO Hyderabad and EPABX systems (Hot Line Speech Communication Systems for Grid Operation).		
Asset-6	OPGW links for Establishment of Fiber optic communications system for central sector stations Project of Southern Region - 1) 400 kV Nagarjun Sagar (PG)-400 kV Mehboob Nagar (185.336 km), 2) 400 kV Raichur (PG)-400 kV Mehboob Nagar-74.051, 3) Nellore PS-Gooty crossing point to Kadapa-(213.383 km) 4) 400 kV Simhadri (PG)-400 kV Vemagiri (PG)-194.958 km, 5) 220 kV Tallapally, APTRANSCO-220 kV VTPS APTRANSCO-132.636 km, 6) LILO of Simhadri-Vemagiri (PG) to Gajuwaka-13.207 km, 7) 220 kV Gooty APTRANSCO-400 kV Gooty (PG)-0419 kms, 8) 220 kV Ghanapur TSTRANSCO-400 kV Ghanapur PG-0.294 kms, 9) 220 kV Khammam APTransco-400 kV Khammam PG-0.332 km, 10) 400 kV Vijayawada PG-220 kV Vijayawada Sub-LDC-0.328 km 11) 400 kV N'Sagar PG-220 kV Tallapally, APTRANSCO-0.233 km, 12) 400 kV Khammam PG-400 kV Vijayawada PG-114.565 km (Telecom Sharing), 13) 220 kV Vishakhapatnam VSS-400 kV Gazuwaka PG-2 km, 14) Ramagundam NTPC-Repeater-204-Bhadravati 15) 400 kV Ghanapur PG-Repeater-346-Ramagundam NTPC.	Asset-B6	1.8.2016
Asset-7	OPGW Communication Link for Bhavani-Sirichery-36.243 km, 220 kV Kalpakkam (PG)-400 kV SP Koil (TNEB)- 30.005 km, 230 kV Kadalangudi-230 kV Neyveli TS-2-73.90 km, Mysore-Hootagalli (KPTCL)-6.384 km, 400 kV Mysore (PG)-400 kV Kozhikode (PG)-215.663 km, Villupuram-Bohour-16.768 km, 230 kV Neyveli TS-II, 230 kV Neyveli TS-1-8.675 km, 400 kV Kaiga (PG)-Davangere/Gutur-167.127 km, Alamathy (TNEB)-Vallur-36.023 km, 400 kV LILO of Sriperumbadur-Nellore to Alamathy-41.253 km, 400 kV Tuticorin PSDharmapuri (Upto crossing of Madurai-Tirunelvely)-78.180 km, Telecom and links under Fibre Sharing Kalivindapattu-Sirichery-23.304 km.	Asset-B7	30.3.2017
Asset-8	OPGW Communication Link for 1) 400 kV Vijaywada (PG)-Vemagiri (APTRANSCO)-195.366 km; 2) 400 kV LILO of RamagundamKhammam to Warangal-14.198 km; 3) 400 kV Ghanapur-Kurnool (APTRANSCO)-226.502 km, 4) 220 kV KTPS-Khammam TS Transco 67.582 km; 5) 400 kV Munirabad-Raichur; 6) 220 kV Hindupur-Gooty AP Transco and Telecom links under Fibre Sharing: 1)	Asset-B8	1.10.2017



	400kV Nellore Sriperambudur-88.996 km, 2) 400 kV Ramagundam-Warangal-99.148 km, 3) 400 kV Nagarjunsagar- Gooty-307.529 km, 4) 400 kV Vijaywada-Gajuwaka-1416.70 km		
<b>Commission's order dated 11.2.2021 in Petition No.: 494/TT/2019</b>			
Asset-1	OPGW Fibre Links (98.484 km) Hoody-Yelahanka LILO Point of Nelamangala-Hoody, Hoody-HSR (KPTCL), Peenya-NRS-Hebbal (KPTCL), Hoody-HAL (KPTCL), LILO of Pondy-Sriperambadur to SV Chatram (TANTRANSCO, LILO of Neyveli TS-II-Neyveli TS-I to NNTPS, Salem (PG)-Salem (TNEB), Sriperambadur (PG)-Sriperambadur (TNEB)	Asset-C1	28.3.2018
Asset-2	Salem PS (Dharmapuri)-Madhugiri (Tumkur) OPGW Link (246.197 km)	Asset-C2	19.3.2019

(g) The transmission tariff in respect of Asset-A1 and Asset-A2 from COD to 31.3.2019 was allowed by the Commission vide order dated 29.7.2016 in Petition No. 275/TT/2015. The transmission tariff in respect of Assets-B1 to B8 from COD to 31.3.2019 was allowed by the Commission vide order dated 20.2.2019 in Petition No. 168/TT/2018 and order dated 6.1.2020 in Review Petition No 10/RP/2019. The transmission tariff in respect of Assets-C1 and C2 was allowed by the Commission from their respective COD to 31.3.2019 vide order dated 11.2.2021 in Petition No. 494/TT/2019.

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Southern 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 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the



Petitioner. None of the Respondent(s) has filed any reply in the matter.

6. The hearing in this matter was held on 12.1.2023 through video conference and the order was reserved.

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

8. This order is issued considering the submissions made by the Petitioner in the petition and affidavit dated 8.8.2022.

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

9. The details of the transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-A1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	36.66	45.17	45.29	46.10	48.28
Interest on Loan	33.79	38.72	34.68	31.11	28.96
Return on Equity	34.08	42.18	42.30	43.05	45.20
Interest on Working Capital	2.72	3.15	2.90	3.27	3.29
O & M Expenses	5.75	4.57	1.62	9.12	8.47
<b>Total</b>	<b>113.00</b>	<b>133.79</b>	<b>126.79</b>	<b>132.65</b>	<b>134.20</b>

(₹ in lakh)

Asset-A2					
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	22.09	32.69	33.05	33.74	35.78
Interest on Loan	23.36	31.35	27.88	24.20	22.56
Return on Equity	20.53	30.53	30.86	31.51	33.51
Interest on Working Capital	1.77	2.44	2.19	2.54	2.56
O & M Expenses	4.46	4.74	1.35	8.60	7.98
<b>Total</b>	<b>72.19</b>	<b>101.75</b>	<b>95.33</b>	<b>100.58</b>	<b>102.39</b>



(₹ in

lakh)

Asset-B1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8.35	11.99	15.49	15.49	15.49
Interest on Loan	7.62	10.44	12.80	11.41	10.06
Return on Equity	7.76	11.19	14.47	14.47	14.50
Interest on Working Capital	0.61	0.85	1.08	1.10	1.06
O & M Expenses	1.11	1.38	1.75	2.66	2.47
<b>Total</b>	<b>25.45</b>	<b>35.85</b>	<b>45.59</b>	<b>45.13</b>	<b>43.58</b>

(₹ in

lakh)

Asset-B2					
Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	10.28	21.93	23.66	25.39	25.39
Interest on Loan	11.15	21.06	19.79	17.75	15.17
Return on Equity	9.56	20.48	22.10	23.71	23.78
Interest on Working Capital	0.77	1.59	1.72	1.84	1.76
O & M Expenses	0.95	2.37	3.75	5.48	5.09
<b>Total</b>	<b>32.71</b>	<b>67.43</b>	<b>71.02</b>	<b>74.17</b>	<b>71.19</b>

(₹ in lakh)

Asset-B3					
Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	10.61	23.04	24.78	26.52	26.52
Interest on Loan	11.53	22.18	20.70	18.55	15.88
Return on Equity	9.86	21.52	23.15	24.77	24.83
Interest on Working Capital	0.80	1.68	1.80	1.93	1.85
O & M Expenses	1.06	2.52	3.94	5.82	5.41
<b>Total</b>	<b>33.86</b>	<b>70.94</b>	<b>74.37</b>	<b>77.59</b>	<b>74.49</b>

(₹ in lakh)

Asset-B4					
Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	1.05	191.96	193.40	191.75	195.81
Interest on Loan	1.11	191.85	173.40	150.67	135.30
Return on Equity	0.97	179.28	180.62	179.08	183.35
Interest on Working Capital	0.07	14.64	14.68	15.22	14.82
O & M Expenses	0.00	30.44	37.59	58.16	54.00
<b>Total</b>	<b>3.20</b>	<b>608.17</b>	<b>599.69</b>	<b>594.88</b>	<b>583.28</b>



(₹ in lakh)

Asset-B5				
Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
Depreciation	0.37	131.74	122.89	121.99
Interest on Loan	0.37	125.72	96.95	83.56
Return on Equity	0.34	123.04	114.78	114.24
Interest on Working Capital	0.03	10.60	9.59	9.11
O & M Expenses	0.07	33.42	34.13	31.69
<b>Total</b>	<b>1.18</b>	<b>424.52</b>	<b>378.34</b>	<b>360.59</b>

(₹ in lakh)

Asset-B6			
Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
Depreciation	69.53	121.94	139.45
Interest on Loan	62.79	99.48	103.36
Return on Equity	64.94	113.88	130.58
Interest on Working Capital	5.13	9.07	9.77
O & M Expenses	15.79	33.62	31.21
<b>Total</b>	<b>218.18</b>	<b>377.99</b>	<b>414.37</b>

(₹ in lakh)

Asset-B7			
Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
Depreciation	0.41	81.67	97.68
Interest on Loan	0.37	69.34	75.56
Return on Equity	0.38	76.27	91.47
Interest on Working Capital	0.17	5.94	6.69
O & M Expenses	2.68	18.87	17.52
<b>Total</b>	<b>4.01</b>	<b>252.09</b>	<b>288.92</b>

(₹ in lakh)

Particulars	Asset-B8		Asset-C1		Asset-C2
	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
Depreciation	45.07	151.20	0.34	36.84	1.49
Interest on Loan	25.77	121.70	0.29	30.29	1.20
Return on Equity	42.09	141.59	0.32	34.50	1.39
Interest on Working Capital	2.67	9.35	0.03	2.69	0.11
O & M Expenses	4.77	8.88	0.12	9.99	0.46
<b>Total</b>	<b>120.37</b>	<b>432.72</b>	<b>1.10</b>	<b>114.31</b>	<b>4.65</b>



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

(₹ in lakh)

Asset-A1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.48	0.38	0.14	0.76	0.71
Maintenance Spares	0.86	0.69	0.24	1.37	1.27
Receivables	18.83	22.30	21.13	22.11	22.37
<b>Total of Working Capital</b>	<b>20.17</b>	<b>23.37</b>	<b>21.51</b>	<b>24.24</b>	<b>24.35</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>2.72</b>	<b>3.15</b>	<b>2.90</b>	<b>3.27</b>	<b>3.29</b>

(₹ in lakh)

Asset-A2					
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.50	0.40	0.11	0.72	0.67
Maintenance Spares	0.89	0.71	0.20	1.29	1.20
Receivables	16.03	16.96	15.89	16.77	17.07
<b>Total of Working Capital</b>	<b>17.42</b>	<b>18.07</b>	<b>16.20</b>	<b>18.78</b>	<b>18.94</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>1.77</b>	<b>2.44</b>	<b>2.19</b>	<b>2.54</b>	<b>2.56</b>

(₹ in lakh)

Asset-B1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.09	0.12	0.15	0.22	0.21
Maintenance Spares	0.17	0.21	0.26	0.40	0.37
Receivables	4.24	5.98	7.60	7.52	7.26
<b>Total of Working Capital</b>	<b>4.50</b>	<b>6.31</b>	<b>8.01</b>	<b>8.14</b>	<b>7.84</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>0.61</b>	<b>0.85</b>	<b>1.08</b>	<b>1.10</b>	<b>1.06</b>

(₹ in

lakh)

Asset-B2					
Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.16	0.20	0.31	0.46	0.42
Maintenance Spares	0.28	0.36	0.56	0.82	0.76
Receivables	10.70	11.24	11.84	12.36	11.87
<b>Total of Working Capital</b>	<b>11.14</b>	<b>11.80</b>	<b>12.71</b>	<b>13.64</b>	<b>13.05</b>
Rate of Interest on working	13.50	13.50	13.50	13.50	13.50





<b>Asset-B2</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 186 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
capital (in %)					
<b>Interest of working Capital</b>	<b>0.77</b>	<b>1.59</b>	<b>1.72</b>	<b>1.84</b>	<b>1.76</b>

(₹ in lakh)

<b>Asset-B3</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 182 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	0.18	0.21	0.33	0.49	0.45
Maintenance Spares	0.32	0.38	0.59	0.87	0.81
Receivables	11.32	11.82	12.40	12.93	12.42
<b>Total of Working Capital</b>	<b>11.82</b>	<b>12.41</b>	<b>13.32</b>	<b>14.29</b>	<b>13.68</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>0.80</b>	<b>1.68</b>	<b>1.80</b>	<b>1.93</b>	<b>1.85</b>

(₹ in lakh)

<b>Asset- B4</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 2 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	0.00	2.54	3.13	4.85	4.50
Maintenance Spares	0.00	4.57	5.64	8.72	8.10
Receivables	97.33	102.09	101.37	100.52	98.56
<b>Total of Working Capital</b>	<b>97.33</b>	<b>109.20</b>	<b>110.14</b>	<b>114.09</b>	<b>111.16</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>0.07</b>	<b>14.74</b>	<b>14.87</b>	<b>15.40</b>	<b>15.01</b>

(₹ in lakh)

<b>Asset-B5</b>				
<b>Particulars</b>	<b>2015-16 (Pro-rata for 1 day)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	2.14	2.79	2.84	2.64
Maintenance Spares	3.84	5.01	5.12	4.75
Receivables	71.90	70.75	63.06	60.10
<b>Total of Working Capital</b>	<b>77.88</b>	<b>78.55</b>	<b>71.02</b>	<b>67.49</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>0.03</b>	<b>10.60</b>	<b>9.59</b>	<b>9.11</b>

(₹ in lakh)

	<b>Asset-B6</b>
--	-----------------



Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
O & M Expenses	1.98	2.80	2.60
Maintenance Spares	3.56	5.04	4.68
Receivables	54.62	63.00	69.06
<b>Total of Working Capital</b>	<b>60.16</b>	<b>70.84</b>	<b>76.34</b>
Rate of Interest on working capital (in %)	12.80	12.80	12.80
<b>Interest of working Capital</b>	<b>5.13</b>	<b>9.07</b>	<b>9.77</b>

(₹ in lakh)

Asset-B7			
Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
O & M Expenses	40.76	1.57	1.46
Maintenance Spares	73.37	2.83	2.63
Receivables	121.97	42.02	48.15
<b>Total of Working Capital</b>	<b>236.10</b>	<b>46.42</b>	<b>52.24</b>
Rate of Interest on working capital (in %)	12.80	12.80	12.80
<b>Interest of working Capital</b>	<b>0.17</b>	<b>5.94</b>	<b>6.69</b>

(₹ in lakh)

Particulars	Asset- B8		Asset- C1		Asset- C2
	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
O & M Expenses	0.80	0.74	0.91	0.83	1.08
Maintenance Spares	1.44	1.33	1.64	1.50	1.94
Receivables	40.23	72.12	16.73	19.05	21.76
<b>Total of Working Capital</b>	<b>42.47</b>	<b>74.19</b>	<b>19.28</b>	<b>21.38</b>	<b>24.78</b>
Rate of Interest on working capital (in %)	12.60	12.60	12.60	12.60	12.60
<b>Interest of working Capital</b>	<b>2.67</b>	<b>9.35</b>	<b>0.03</b>	<b>2.69</b>	<b>0.11</b>

### **Capital Cost as on COD**

11. The Commission vide order dated 29.7.2016 in Petition No. 275/TT/2015 for Asset-A1 and Asset-A2, vide order dated 20.2.2019 in Petition No. 168/TT/2018 for Assets-B1 to Assets-B8 and vide order dated 11.2.2021 in Petition No. 494/TT/2019 for Asset-C1 and Asset-C2 has approved the capital cost as on COD and ACE for 2014-19 tariff Period and the same is as follows:



(₹ in lakh)

Assets	FR Appor- tioned cost	Appor- tioned cost (RCE)	Admitted cost as on COD	Additional Capital Expenditure					Capital cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-A1	1078.00	787.92	445.15	283.58	39.87	0.00	0.00	0.00	768.60
Asset-A2	645.00	592.34	419.44	88.24	49.34	24.67	0.00	0.00	581.69
Asset-B1	401.23	401.23	129.72	4.20	110.67	0.00	0.00	0.00	244.59
Asset-B2	500.00	499.91	267.59	55.05	0.00	54.64	0.00	0.00	377.28
Asset-B3	520.00	520.31	284.17	55.39	0.00	54.91	0.00	0.00	394.47
Asset-B4	2550.00	3320.85	2837.46	0.00	50.29	8.10	208.78	0.00	3104.64
Asset-B5	2435.37	2943.43	1665.17	0.00	0.00	10.30	315.42	0.00	1990.89
Asset-B6	2628.16	2813.07	1640.22	0.00	0.00	0.00	553.09	0.00	2193.31
Asset-B7	2420.57	1942.01	920.90	0.00	0.00	0.00	219.63	286.26	1426.79
Asset-B8	1671.00	3464.26	466.87	0.00	0.00	0.00	1921.79	390.33	2778.99
Asset-C1	1226.73	892.54	472.23	0.00	0.00	0.00	0.00	178.62	650.85
Asset-C2	519.80	703.48	655.19	0.00	0.00	0.00	0.00	0.00	655.19

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

(₹ in lakh)

Assets	Appor- tioned cost (FR)	Appor- tioned cost (RCE)	Capital Cost as on COD	ACE (as per Auditor Certificate)					Capital cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-A1	1078.00	787.92	462.07	252.19	0.00	2.50	23.03	45.73	785.52
Asset-A2	645.00	592.34	425.59	88.24	6.9	2.65	19.38	45.08	587.84
Asset-B1	401.23	401.23	134.04	0.00	110.67	0.00	0.00	0.00	244.71
Asset-B2	500.00	499.91	292.84	53.68	0.00	54.64	0.00	0.00	401.16
Asset-B3	520.00	520.31	308.66	55.39	0.00	54.92	0.00	0.00	418.97
Asset-B4	2550.00	3320.85	3084.15	0.00	37.31	8.10	(60.05)*	188.18	3257.69
Asset-B5	2435.37	2943.43	2284.49	0.00	0.00	(74.79)**	(204.92)**	176.51	2181.29
Asset-B6	2628.16	2813.07	1724.72	0.00	0.00	0.00	553.09	0.00	2277.81
Asset-B7	2420.57	1942.01	1284.66	0.00	0.00	0.00	219.63	286.25	1790.54
Asset-B8	1671.00	3464.26	496.21	0.00	0.00	0.00	1921.79	0.00	2418.00
Asset-C1	1226.73	892.54	524.80	0.00	0.00	0.00	0.00	178.62	703.42
Asset-C2	519.80	703.48	679.60	0.00	0.00	0.00	0.00	0.00	679.60

\*400 kV Narendra-Davangere has been shared by Power Grid telecom w.e.f. 1.4.2017



*\*\*Kochi- Trichur,Kochi-Brahmapuram(KSEB), Narendra-Kudgi and Kudgi-Kolhapur has been shared by Power Grid telecom w.e.f. 1.4.2016, 1.4.2016, 1.4.2017 and 1.4.2017 respectively.*

### **Cost Over-run**

13. The Petitioner has submitted that the estimated completion cost of transmission assets is within the RCE apportioned approved cost.

14. We have considered the submissions of the Petitioner. It is observed that the estimated completed cost including ACE is within the RCE apportioned approved cost.

### **Time Over-run**

15. The time over-run in case of Asset-A1 and Asset-A2 has been dealt in order dated 29.7.2016 in Petition No. 275/TT/2015. The time over-run in case of Assets-B1 to Assets-B8 has been dealt in order dated 20.2.2019 in Petition No. 168/TT/2018. The time over-run in case of Asset-C1 and Asset-C2 has been dealt in order dated 11.2.2021 in Petition No. 494/TT/2019. Further, the Commission in the order has directed to submit the link wise IDC and IEDC details at the time of truing up for Asset- C1. The relevant portion of the order is as follows:

*“42. With respect to Asset-1, the Petitioner has not submitted link wise capital cost details due to which it is not able to deal the IDC/IEDC for the time over run condoned /not condoned. Accordingly the IDC/IEDC claimed by the petitioner in the instant asset has not been considered. The petitioner is directed to submit the link wise IDC/IEDC details at the time of truing up and the same will be reviewed at the time of truing up.”*

16. The Petitioner in the petition has submitted the link wise details of IDC and IEDC. The details are as follows:

Links	Name of links	Total IDC claimed (₹ in lakh)	Time over-run (days)	Time over-run condoned (days)	IDC disallowed due to Time over-run (₹ in lakh)
1	Hoody-Yelahanka LILO Point of Nelamangala-Hoody	14.31	1215	1215	-



2	Hoody-HSR (KPTCL)	6.33	1215	-	6.33	
3	Peenya-NRS-Hebbal (KPTCL)	9.27	1215	-	9.27	
4	Hoody-HAL(KPTCL)	2.26	1215	-	2.26	
5	LILO of Pondy-Sriperambadur to SV Chatram (TANTRANSCO)	3.90	1215	-	3.9	
6	LILO of Neyveli TS-11-Neyveli TS-1 to NNTPS	0.24	1215	-	0.24	
7	Salem (PG)- Salem (TNEB)	0.15	1215	-	0.15	
8	Sriperambadur (PG)- Sriperambadur (TNEB)	0.20	1215	-	0.2	
	<b>Total</b>	<b>36.66</b>			<b>22.35</b>	
Links	Name of links	Total IEDC claimed (₹ in lakh)	Time over-run (days)	Time over-run condoned (days)	IEDC after SCOD (₹ in lakh)	IEDC disallowed due to Time over-run (₹ in lakh)
1	Hoody-Yelahanka LILO Point of Nelamangala-Hoody	10.87	1215	1215	6.21	-
2	Hoody-HSR (KPTCL)	4.81	1215	-	2.75	2.75
3	Peenya-NRS-Hebbal (KPTCL)	7.05	1215	-	4.03	4.03
4	Hoody-HAL (KPTCL)	1.72	1215	-	0.98	0.98
5	LILO of Pondy-Sriperambadur to SV Chatram (TANTRANSCO)	2.96	1215	-	1.69	1.69
6	LILO of Neyveli TS-11-Neyveli TS-1 to NNTPS	0.18	1215	-	0.10	0.10
7	Salem (PG)-Salem (TNEB)	0.11	1215	-	0.06	0.06
8	Sriperambadur (PG)- Sriperambadur (TNEB)	0.16	1215	-	0.09	0.09
	<b>Total</b>	<b>27.86</b>			<b>15.91</b>	<b>9.70</b>

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

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

18. We have considered the submissions of the Petitioner. The allowable IDC has been worked out considering the information submitted by the Petitioner for the transmission assets separately on cash basis. The loan details submitted in Form-



9C for the 2014-19 tariff period and the IDC computation sheets have been considered for the purpose of IDC calculations on cash and accrued basis. The undischarged IDC as on COD of the transmission assets has been considered as ACE during the year in which it has been discharged.

19. Accordingly, based on the information furnished by the Petitioner, the IDC considered for transmission assets are summarized as follows:

Assets	IDC as per Auditor's Certificate	IDC admissible	IDC disallowed due to computational difference/ time over-run not condoned	IDC Discharged as on COD	IDC Undischarged as on COD	(₹ in lakh) IDC Discharge During		
						2014-15	2015-16	2019-20
						F	G	H
	A	B	C=A-B	D	E=B-D			
Asset-A1	27.19	25.73	1.46	10.54	15.19	15.19	0.00	0.00
Asset-A2	19.78	17.61	2.17	11.38	6.23	6.23	0.00	0.00
Asset-B1	4.32	4.18	0.14	0.00	4.18	4.18	0.00	0.00
Asset-B2	40.35	40.12	0.23	38.49	1.63	1.59	0.04	0.00
Asset-B3	42.19	41.98	0.21	41.41	0.57	0.57	0.00	0.00
Asset-B4	189.92	126.23	63.69	113.25	12.98	0.00	12.98	0.00
Asset-B5	230.66	66.97	163.69	66.97	0.00	0.00	0.00	0.00
Asset-B6	45.12	0.00	45.12	0.00	0.00	0.00	0.00	0.00
Asset-B7	86.68	0.00	86.68	0.00	0.00	0.00	0.00	0.00
Asset-B8	18.11	0.00	18.11	0.00	0.00	0.00	0.00	0.00
Asset-C1	36.66	14.31	22.35	14.31	0.00	0.00	0.00	0.00
Asset-C2	60.04	45.93	14.11	38.70	7.22	0.00	0.00	7.22

20. The Petitioner has claimed IEDC and has submitted Form-12A and Auditor's Certificate in support of its claim.

21. We have examined the Form-12A along with the Auditor's Certificate submitted by the Petitioner in support of it claimed. The IEDC allowed for transmission assets are as follows:

Assets	IEDC claimed	IEDC disallowed due to time over-run not condoned	(₹ in lakh) IEDC allowed



Asset-A1	16.93	0.00	16.93
Asset-A2	8.36	0.00	8.36
Asset-B1	3.49	0.00	3.49
Asset-B2	21.93	0.00	21.93
Asset-B3	22.93	0.00	22.93
Asset-B4	59.36	6.59	52.77
Asset-B5	56.43	19.47	36.96
Asset-B6	74.68	29.73	44.95
Asset-B7	36.66	17.62	19.04
Asset-B8	25.82	13.69	12.13
Asset-C1	27.87	9.70	18.17
Asset-C2	55.41	3.08	52.33

### **Initial Spares**

22. The Petitioner has not claimed initial spares for Asset-A1 and Asset-A2, Assets-B1 to Assets-B5 and Asset-B7, and Asset-C1 and Asset-C2. The initial spares claimed by the Petitioner for Asset-B6 and Asset-B8 are as follows:

Assets	Estimated completion cost (A) (₹ in lakh)	Initial spares claimed (B) (₹ in lakh)	Ceiling limit (in %) (C)	Initial spares worked out (₹ in lakh)
				$D = [(A-B)*C / (100-C)]$
Asset-B6	2091.87	66.14	3.5	73.47
Asset-B8	2680.95	93.23	3.5	93.85

23. The Petitioner has further submitted that the expenditure on Initial Spares are included in the Auditor Certificate as per actual cash expenditure incurred (means the initial spares discharged upto COD included in the COD cost of Auditor certificate and discharged after COD has included in the respective year additional capital expenditure in the auditor certificate).

24. We have considered the submissions of the Petitioner. The Petitioner has claimed Initial Spares on the basis of estimated completion cost of the transmission assets. The Plant and Machinery cost as on cut-off date is considered for the purpose of calculation of initial spares.





25. The Initial spares allowed for Asset-B6 and Asset-B8 are as follows:

Assets	Plant & Machinery cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)	Excess initial Spares disallowed (₹ in lakh)
Asset-B6	2091.87	66.14	3.5	73.47	66.14	
Asset-B8	2374.07	93.23	3.5	82.72	82.72	10.51

### **Capital Cost allowed as on COD**

26. The capital cost of the transmission assets allowed as on COD are as follows:

(₹ in lakh)						
Assets	Capital cost as on COD as per Auditor's Certificate	Less: IDC disallowed due to computational difference / time over-run not condoned	Less: Un-discharge d IDC as on COD	Less: IEDC disallowed due to time over-run not condoned	Less: Excess initial spares disallowed	Capital Cost as on COD (on cash basis)
Asset-A1	462.07	1.46	15.19	0.00	0.00	445.42
Asset-A2	425.59	2.17	6.23	0.00	0.00	417.19
Asset-B1	134.04	0.14	4.18	0.00	0.00	129.72
Asset-B2	292.84	0.23	1.63	0.00	0.00	290.98
Asset-B3	308.66	0.21	0.57	0.00	0.00	307.88
Asset-B4	3084.15	63.69	12.98	6.59	0.00	3000.89
Asset-B5	2284.49	163.69	0.00	19.47	0.00	2101.33
Asset-B6	1724.72	45.12	0.00	29.73	0.00	1649.87
Asset-B7	1284.66	86.68	0.00	17.62	0.00	1180.36
Asset-B8	496.21	18.11	0.00	13.69	10.51	453.91
Asset-C1	524.80	22.35	0.00	9.70	0.00	492.75
Asset-C2	679.60	14.11	7.22	3.08	0.00	655.19

### **Additional Capital Expenditure (ACE)**

27. The Petitioner has submitted that ACE claimed till respective cut-off dates for all the transmission assets are claimed under Regulation 14(1)(i), Regulation 14(2)(iv) and Regulation 14(3)(v) of the 2014 Tariff Regulations and the ACE



claimed beyond cut-off date and is claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations.

28. The Petitioner has claimed the following ACE for the transmission assets and has submitted the Auditor's Certificates in support of the same:

Assets	ACE (as per Auditor Certificate)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	252.19	0.00	2.50	23.03	45.73
Asset-A2	88.24	6.9	2.65	19.38	45.08
Asset-B1	0.00	110.67	0.00	0.00	0.00
Asset-B2	53.68	0.00	54.64	0.00	0.00
Asset-B3	55.39	0.00	54.92	0.00	0.00
Asset-B4	0.00	37.31	8.10	(60.05)	188.18
Asset-B5	0.00	0.00	(74.79)	(204.92)	176.51
Asset-B6	0.00	0.00	0.00	553.09	0.00
Asset-B7	0.00	0.00	0.00	219.63	286.25
Asset-B8	0.00	0.00	0.00	1921.79	0.00
Asset-C1	0.00	0.00	0.00	0.00	178.62
Asset-C2	0.00	0.00	0.00	0.00	0.00

29. The transmission assets have been executed during 2014-19 and accordingly, cut-off date for the assets are as follows:

Assets	COD Date	Cut-off date
Asset-A1	1.4.2014	31.3.2017
Asset-A2	1.7.2014	31.3.2017
Asset-B1	1.4.2014	31.3.2017
Asset-B2	27.9.2014	31.3.2017
Asset-B3	1.10.2014	31.3.2017
Asset-B4	30.3.2015	31.3.2018
Asset-B5	31.3.2016	31.3.2019
Asset-B6	1.8.2016	31.3.2019
Asset-B7	30.3.2017	31.3.2020
Asset-B8	1.10.2017	31.3.2020
Asset-C1	28.3.2018	31.3.2021
Asset-C2	19.3.2019	31.3.2022

30. The Commission in order dated 6.1.2020 in Petition No. 10/RP/2019 in Petition No. 168/TT/2018 has held the following:

*"9. It is observed that PGCIL owns some OPGW fiber cable and its associate, PTN also owns some OPGW fiber cable. The fiber cable owned by PGCIL and PTN are*



*shared by the other as per the requirement and the cost of the fiber cable is shared by them from the date of actual sharing of the fiber cable. In the instant case, the IA dated 29.5.2012 provides for PGCIL sharing the OPGW fiber optic owned by it with PTN. Accordingly, Assets-4, 5, 6 and 7 owned by PGCIL and put into commercial operation on 30.3.2015, 31.3.2015, 1.8.2016 and 30.3.2017 were shared by PTN from 1.4.2017 and 1.4.2016, which is after their COD. As Assets-4, 5, 6 and 7, owned by PGCIL, are shared by PTN after 1-2 years of their COD, PTN is liable to share the cost of the said assets from the date of sharing. Accordingly, the cost of Assets-4, 5, 6 and 7 from their date of COD to the date of sharing by PTN, should be borne by PGCIL. However, in the impugned order dated 20.2.2019, the capital cost of the links shared with PTN in Assets-4, 5, 6 and 7 was excluded from the capital cost as on the COD, which is an apparent error. The impugned order is modified to that extent and accordingly, the cost of PTN shared links in Assets-4, 5, 6 and 7 shall be included in the capital cost as on COD of respective Assets and they will decapitalised at 50% of the written down value on the date of their sharing by PTN.*

..

...

...

*11. The order dated 20.2.2019 is modified to the extent allowed above. Accordingly, the tariff allowed for Assets-4, 5, 6 and 7 shall be revised at the time of truing up of the tariff of 2014-19 period. All other terms of the order dated 20.2.2019 shall remain unchanged."*

31. The Petitioner in the petition has submitted that there is telecom link sharing in Assets-B4 and B5. Thus, the de-capitalization against telecom sharing has been accounted for while computing the true-up tariff of these assets. Further, the details of the de-capitalisation against telecom sharing submitted by the Petitioner is as follows:

(₹ in lakh)		
Assets	2016-17	2017-18
Asset-B4	0.00	60.05
Asset-B5	74.79	204.92

32. We have considered the submissions made by the Petitioner. The undischarged IDC as on COD has been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i), Regulation 14(2)(iv) and Regulation 14(3)(v) of the 2014 Tariff Regulations. The actual ACE allowed in respect of the transmission assets is as follows:



(₹ in lakh)

Asset-A1					
Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	252.19	0.00	2.50	23.03	45.73
Add: IDC discharge	15.19	0.00	0.00	0.00	0.00
<b>Total</b>	<b>267.38</b>	<b>0.00</b>	<b>2.50</b>	<b>23.03</b>	<b>45.73</b>

(₹ in lakh)

Asset-A2					
Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	88.24	6.90	2.65	19.38	45.08
Add: IDC discharge	6.23	0.00	0.00	0.00	0.00
<b>Total</b>	<b>94.47</b>	<b>6.90</b>	<b>2.65</b>	<b>19.38</b>	<b>45.08</b>

(₹ in lakh)

Asset-B1					
Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	0.00	110.67	0.00	0.00	0.00
Add: IDC discharge	4.18	0.00	0.00	0.00	0.00
<b>Total</b>	<b>4.18</b>	<b>110.67</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

(₹ in lakh)

Asset-B2					
Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	53.68	0.00	54.64	0.00	0.00
Add: IDC discharge	1.59	0.04	0.00	0.00	0.00
<b>Total</b>	<b>55.27</b>	<b>0.04</b>	<b>54.64</b>	<b>0.00</b>	<b>0.00</b>

(₹ in lakh)

Asset-B3					
Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	55.39	0.00	54.92	0.00	0.00
Add: IDC discharge	0.57	0.00	0.00	0.00	0.00
<b>Total</b>	<b>55.96</b>	<b>0.00</b>	<b>54.92</b>	<b>0.00</b>	<b>0.00</b>

(₹ in lakh)

Asset-B4					
----------	--	--	--	--	--



Particulars	Actual ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	0.00	37.31	8.10	-60.05	188.18
Add: IDC discharge	0.00	12.98	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>50.29</b>	<b>8.10</b>	<b>-60.05</b>	<b>188.18</b>

(₹ in lakh)

Asset-B5				
Particulars	Actual ACE			
	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	0.00	-74.79	-204.92	176.51
Add: IDC discharge	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>-74.79</b>	<b>-204.92</b>	<b>176.51</b>

(₹ in lakh)

Asset-B6			
Particulars	Actual ACE		
	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	0.00	553.09	0.00
Add: IDC discharge	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>553.09</b>	<b>0.00</b>

(₹ in lakh)

Asset-B7			
Particulars	Actual ACE		
	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	0.00	219.63	286.25
Add: IDC discharge	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>219.63</b>	<b>286.25</b>

(₹ in lakh)

Actual ACE					
Particulars	Asset-B8		Asset- C1		Asset- C2
	2017-18	2018-19	2017-18	2018-19	2018-19
ACE allowed under Regulations 14(1)(i), 14(2)(iv) and 14(3)(v) of the 2014 Tariff Regulations	1921.79	0.00	0.00	178.62	0.00
Add: IDC discharge	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1921.79</b>	<b>0.00</b>	<b>0.00</b>	<b>178.62</b>	<b>0.00</b>

33. Accordingly, capital cost allowed as on 31.3.2019 after including ACE for the transmission assets is as follows:

(₹ in lakh)



Assets	Capital cost allowed as on COD	ACE allowed					Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-A1	445.42	267.38	0.00	2.50	23.03	45.73	784.06
Asset-A2	417.19	94.47	6.90	2.65	19.38	45.08	585.67
Asset-B1	129.72	4.18	110.67	0.00	0.00	0.00	244.56
Asset-B2	290.98	55.27	0.04	54.64	0.00	0.00	400.93
Asset-B3	307.88	55.96	0.00	54.92	0.00	0.00	418.76
Asset-B4	3000.89	0.00	50.29	8.10	-60.05	188.18	3187.41
Asset-B5	2101.33	0.00	0.00	-74.79	-204.92	176.51	1998.13
Asset-B6	1649.87	0.00	0.00	0.00	553.09	0.00	2202.96
Asset-B7	1180.36	0.00	0.00	0.00	219.63	286.25	1686.24
Asset-B8	453.91	0.00	0.00	0.00	1921.79	0.00	2375.70
Asset-C1	492.75	0.00	0.00	0.00	0.00	178.62	671.37
Asset-C2	655.19	0.00	0.00	0.00	0.00	0.00	655.19

### **Debt-Equity Ratio**

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

Asset-A1	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	311.79	70.00	548.84	70.00
Equity	133.63	30.00	235.22	30.00
<b>Total</b>	<b>445.42</b>	<b>100.00</b>	<b>784.06</b>	<b>100.00</b>
Asset-A2	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	292.03	70.00	409.97	70.00
Equity	125.16	30.00	175.70	30.00
<b>Total</b>	<b>417.19</b>	<b>100.00</b>	<b>585.67</b>	<b>100.00</b>
Asset-B1	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	90.80	70.00	171.19	70.00
Equity	38.92	30.00	73.37	30.00
<b>Total</b>	<b>129.72</b>	<b>100.00</b>	<b>244.56</b>	<b>100.00</b>



<b>Asset-B2</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	203.69	70.00	280.65	70.00
Equity	87.29	30.00	120.28	30.00
<b>Total</b>	<b>290.98</b>	<b>100.00</b>	<b>400.93</b>	<b>100.00</b>
<b>Asset-B3</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	215.51	70.00	293.13	70.00
Equity	92.36	30.00	125.63	30.00
<b>Total</b>	<b>307.88</b>	<b>100.00</b>	<b>418.76</b>	<b>100.00</b>
<b>Asset-B4</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	2100.62	70.00	2231.19	70.00
Equity	900.27	30.00	956.22	30.00
<b>Total</b>	<b>3000.89</b>	<b>100.00</b>	<b>3187.41</b>	<b>100.00</b>
<b>Asset-B5</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	1470.93	70.00	1398.69	70.00
Equity	630.40	30.00	599.44	30.00
<b>Total</b>	<b>2101.33</b>	<b>100.00</b>	<b>1998.13</b>	<b>100.00</b>
<b>Asset-B6</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	1154.91	70.00	1542.07	70.00
Equity	494.96	30.00	660.89	30.00
<b>Total</b>	<b>1649.87</b>	<b>100.00</b>	<b>2202.96</b>	<b>100.00</b>
<b>Asset-B7</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	826.25	70.00	1180.37	70.00
Equity	354.11	30.00	505.87	30.00
<b>Total</b>	<b>1180.36</b>	<b>100.00</b>	<b>1686.24</b>	<b>100.00</b>
<b>Asset-B8</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(in %)</b>
Debt	317.74	70.00	1662.99	70.00
Equity	136.17	30.00	712.71	30.00
<b>Total</b>	<b>453.91</b>	<b>100.00</b>	<b>2375.70</b>	<b>100.00</b>
<b>Asset-C1</b>	<b>Capital cost as on COD</b>	<b>(in %)</b>	<b>Capital cost as on</b>	<b>(in %)</b>





	(₹ in lakh)		31.3.2019 (₹ in lakh)	
Debt	344.93	70.00	469.96	70.00
Equity	147.83	30.00	201.41	30.00
<b>Total</b>	<b>492.75</b>	<b>100.00</b>	<b>671.37</b>	<b>100.00</b>
<b>Asset-C2</b>	<b>Capital cost as on COD (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 9.3.2017 (₹ in lakh)</b>	<b>(in %)</b>
Debt	458.63	70.00	458.63	70.00
Equity	196.56	30.00	196.56	30.00
<b>Total</b>	<b>655.19</b>	<b>100.00</b>	<b>655.19</b>	<b>100.00</b>

### Depreciation

35. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given at Annexure-I. WAROD has been worked out after taking into account the depreciation rates of asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as follows:

(₹ in lakh)

	<b>Asset-A1</b>					
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Gross Block	445.42	712.80	712.80	715.30	738.33
B	Additional Capitalisation	267.38	0.00	2.50	23.03	45.73
C	Closing Gross Block (A+B)	712.80	712.80	715.30	738.33	784.06
D	Average Gross Block (A+C)/2	579.11	712.80	714.05	726.82	761.20
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	521.20	641.52	642.65	654.14	685.08
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>36.66</b>	<b>45.12</b>	<b>45.20</b>	<b>46.01</b>	<b>48.18</b>
H	Cumulative Depreciation at the end of the year	36.66	81.78	126.98	172.99	221.17
I	Remaining Aggregated Depreciable Value	484.54	559.75	515.67	481.15	463.91

(₹ in lakh)



Asset-A2						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	417.19	511.66	518.56	521.21	540.59
B	Additional Capitalisation	94.47	6.90	2.65	19.38	45.08
C	Closing Gross Block (A+B)	511.66	518.56	521.21	540.59	585.67
D	Average Gross Block (A+C)/2	464.42	515.11	519.88	530.90	563.13
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	417.98	463.60	467.89	477.81	506.81
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>22.07</b>	<b>32.61</b>	<b>32.91</b>	<b>33.61</b>	<b>35.65</b>
H	Cumulative Depreciation at the end of the year	22.07	54.67	87.58	121.19	156.83
I	Remaining Aggregated Depreciable Value	395.91	408.92	380.31	356.62	349.98

(₹ in

lakh)

Asset-B1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	129.72	133.89	244.56	244.56	244.56
B	Additional Capitalisation	4.18	110.67	0.00	0.00	0.00
C	Closing Gross Block (A+B)	133.89	244.56	244.56	244.56	244.56
D	Average Gross Block (A+C)/2	131.81	189.23	244.56	244.56	244.56
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	118.62	170.18	219.86	219.86	219.86
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>8.34</b>	<b>11.98</b>	<b>15.48</b>	<b>15.48</b>	<b>15.48</b>
H	Cumulative Depreciation at the end of the year	8.34	20.32	35.80	51.28	66.76
I	Remaining Aggregated Depreciable Value	110.28	149.98	184.31	168.82	153.34

(₹ in lakh)

Asset-B2						
	Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	290.98	346.25	346.29	400.93	400.93
B	Additional Capitalisation	55.27	0.04	54.64	0.00	0.00
C	Closing Gross Block (A+B)	346.25	346.29	400.93	400.93	400.93
D	Average Gross Block (A+C)/2	318.61	346.27	373.61	400.93	400.93
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	286.75	311.64	336.25	360.84	360.84
<b>G</b>	<b>Combined Depreciation during the</b>	<b>10.28</b>	<b>21.92</b>	<b>23.65</b>	<b>25.38</b>	<b>25.38</b>



Asset-B2						
	Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
	<b>year (D*E)</b>					
H	Cumulative Depreciation at the end of the year	10.28	32.20	55.85	81.22	106.60
I	Remaining Aggregated Depreciable Value	276.48	279.45	280.40	279.61	254.23

(₹ in lakh)

Asset-B3						
	Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	307.88	363.84	363.84	418.76	418.76
B	Additional Capitalisation	55.96	0.00	54.92	0.00	0.00
C	Closing Gross Block (A+B)	363.84	363.84	418.76	418.76	418.76
D	Average Gross Block (A+C)/2	335.86	363.84	391.30	418.76	418.76
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	302.27	327.45	352.17	376.88	376.88
G	<b>Combined Depreciation during the year (D*E)</b>	<b>10.60</b>	<b>23.03</b>	<b>24.77</b>	<b>26.51</b>	<b>26.51</b>
H	Cumulative Depreciation at the end of the year	10.60	33.63	58.40	84.91	111.42
I	Remaining Aggregated Depreciable Value	291.67	293.82	293.77	291.97	265.47

(₹ in lakh)

Asset-B4						
	Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	3000.89	3000.89	3051.18	3059.28	2999.23
B	Additional Capitalisation	0.00	50.29	8.10	-60.05	188.18
C	Closing Gross Block (A+B)	3000.89	3051.18	3059.28	2999.23	3187.41
D	Average Gross Block (A+C)/2	3000.89	3026.04	3055.23	3029.26	3093.32
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	2700.80	2723.43	2749.71	2726.33	2783.99
G	<b>Combined Depreciation during the year (D*E)</b>	<b>1.04</b>	<b>191.55</b>	<b>193.40</b>	<b>191.75</b>	<b>195.81</b>
H	Cumulative Depreciation at the end of the year	1.04	192.59	385.99	577.74	773.54
I	Remaining Aggregated Depreciable Value	2699.76	2530.84	2363.72	2148.60	2010.45

(₹ in lakh)

Asset-B5						
----------	--	--	--	--	--	--



	Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
A	Opening Gross Block	2101.33	2101.33	2026.54	1821.62
B	Additional Capitalisation	0.00	-74.79	-204.92	176.51
C	Closing Gross Block (A+B)	2101.33	2026.54	1821.62	1998.13
D	Average Gross Block (A+C)/2	2101.33	2063.93	1924.08	1909.87
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	1891.19	1857.54	1731.67	1718.88
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>0.36</b>	<b>130.65</b>	<b>121.79</b>	<b>120.89</b>
H	Cumulative Depreciation at the end of the year	0.36	131.01	252.80	373.70
I	Remaining Aggregated Depreciable Value	1890.83	1726.53	1478.86	1345.19

(₹ in lakh)

	Particulars	Asset-B6		
		2016-17 (Pro-rata for 243 days)	2017-18	2018-19
A	Opening Gross Block	1649.87	1649.87	2202.96
B	Additional Capitalisation	0.00	553.09	0.00
C	Closing Gross Block (A+B)	1649.87	2202.96	2202.96
D	Average Gross Block (A+C)/2	1649.87	1926.41	2202.96
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	1484.88	1733.77	1982.66
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>69.53</b>	<b>121.94</b>	<b>139.45</b>
H	Cumulative Depreciation at the end of the year	69.53	191.47	330.92
I	Remaining Aggregated Depreciable Value	1415.35	1542.30	1651.74

(₹ in lakh)

	Particulars	Asset-B7		
		2016-17 (Pro-rata for 2 days)	2017-18	2018-19
A	Opening Gross Block	1180.36	1180.36	1399.99
B	Additional Capitalisation	0.00	219.63	286.25
C	Closing Gross Block (A+B)	1180.36	1399.99	1686.24
D	Average Gross Block (A+C)/2	1180.36	1290.17	1543.11
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	1062.32	1161.16	1388.80
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>0.41</b>	<b>81.67</b>	<b>97.68</b>
H	Cumulative Depreciation at the end of the year	0.41	82.08	179.76
I	Remaining Aggregated Depreciable Value	1061.91	1079.08	1209.05

(₹ in lakh)

	Particulars	Asset-B8		Asset-C1		Asset-C2
		2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)



	Particulars	Asset-B8		Asset-C1		Asset-C2
		2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
A	Opening Gross Block	453.91	2375.70	492.75	492.75	655.19
B	Additional Capitalisation	1921.79	0.00	0.00	178.62	0.00
C	Closing Gross Block (A+B)	2375.70	2375.70	492.75	671.37	655.19
D	Average Gross Block (A+C)/2	1414.80	2375.70	492.75	582.06	655.19
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Aggregated Depreciable Value (D*90%)	1273.32	2138.13	443.48	523.85	589.67
<b>G</b>	<b>Combined Depreciation during the year (D*E)</b>	<b>44.66</b>	<b>150.38</b>	<b>0.34</b>	<b>36.84</b>	<b>1.48</b>
H	Cumulative Depreciation at the end of the year	44.66	195.04	0.34	37.19	1.48
I	Remaining Aggregated Depreciable Value	1228.67	1943.09	443.13	486.67	588.19

36. The details of depreciation allowed for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	37.15	47.39	48.65	48.65	48.65
	Claimed by the Petitioner in the instant petition	36.66	45.17	45.29	46.10	48.28
	Approved after true-up in this order	36.66	45.12	45.20	46.01	48.18
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	22.03	33.70	36.04	36.82	36.82
	Claimed by the Petitioner in the instant petition	22.09	32.69	33.05	33.74	35.78
	Approved after true-up in this order	22.07	32.61	32.91	33.61	35.65
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	8.34	11.98	15.48	15.48	15.48
	Claimed by the Petitioner in the instant petition	8.35	11.99	15.49	15.49	15.49
	Approved after true-up in this order	8.34	11.98	15.48	15.48	15.48
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	9.52	20.42	22.15	23.88	23.88
	Claimed by the Petitioner in the instant petition	10.28	21.93	23.66	25.39	25.39
	Approved after true-up in this order	10.28	21.92	23.65	25.38	25.38



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	9.84	21.49	23.23	24.97	24.97
	Claimed by the Petitioner in the instant petition	10.61	23.04	24.78	26.52	26.52
	Approved after true-up in this order	10.60	23.03	24.77	26.51	26.51
Asset-B4	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.98	181.20	183.05	189.92	196.52
	Claimed by the Petitioner in the instant petition	1.05	191.96	193.40	191.75	195.81
	Approved after true-up in this order	1.04	191.55	193.40	191.75	195.81
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.29	105.73	116.04	126.02
	Claimed by the Petitioner in the instant petition	0.00	0.37	131.74	122.89	121.99
	Approved after true-up in this order	0.00	0.36	130.65	121.79	120.89
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	69.12	121.33	138.84
	Claimed by the Petitioner in the instant petition	0.00	0.00	69.53	121.94	139.45
	Approved after true-up in this order	0.00	0.00	69.53	121.94	139.45
Asset-B7	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.32	65.24	81.26
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.41	81.67	97.68
	Approved after true-up in this order	0.00	0.00	0.41	81.67	97.68
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	45.06	163.56
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	45.07	151.20
	Approved after true-up in this order	0.00	0.00	0.00	44.66	150.38
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.33	35.55
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.34	36.84
	Approved after true-up in this order	0.00	0.00	0.00	0.34	36.84
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	1.48
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	1.49
	Approved after true-up in this order	0.00	0.00	0.00	0.00	1.48

### **Interest on Loan (IoL)**



37. The Petitioner has claimed the weighted average interest rate IoL, based on its actual loan portfolio and actual rate of interest on loan. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed for 2014-19 tariff period is as follows:

(₹ in lakh)

Asset-A1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	311.79	498.96	498.96	500.71	516.83
B	Cumulative Repayments upto Previous Year	0.00	36.66	81.78	126.98	172.99
C	Net Loan-Opening (A-B)	311.79	462.30	417.18	373.73	343.85
D	Addition due to Additional Capitalization	187.17	0.00	1.75	16.12	32.01
E	Repayment during the year	36.66	45.12	45.20	46.01	48.18
F	Net Loan-Closing (C+D-E)	462.30	417.18	373.73	343.85	327.68
G	Average Loan (C+F)/2	387.05	439.74	395.46	358.79	335.76
H	Weighted Average Rate of Interest on Loan (in %)	8.73	8.80	8.75	8.65	8.61
I	<b>Interest on Loan (G*H)</b>	<b>33.78</b>	<b>38.68</b>	<b>34.59</b>	<b>31.04</b>	<b>28.89</b>

(₹ in lakh)

Asset-A2						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	292.03	358.16	362.99	364.84	378.41
B	Cumulative Repayments upto Previous Year	0.00	22.07	54.67	87.58	121.19
C	Net Loan-Opening (A-B)	292.03	336.09	308.31	277.26	257.22
D	Addition due to Additional Capitalization	66.13	4.83	1.86	13.57	31.56
E	Repayment during the year	22.07	32.61	32.91	33.61	35.65
F	Net Loan-Closing (C+D-E)	336.09	308.31	277.26	257.22	253.13
G	Average Loan (C+F)/2	314.06	322.20	292.79	267.24	255.18
H	Weighted Average Rate of Interest on Loan (in %)	9.90	9.70	9.48	9.02	8.80
I	<b>Interest on Loan (G*H)</b>	<b>23.33</b>	<b>31.26</b>	<b>27.75</b>	<b>24.09</b>	<b>22.47</b>

(₹ in lakh)

Asset-B1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	90.80	93.73	171.19	171.19	171.19
B	Cumulative Repayments upto Previous Year	0.00	8.34	20.32	35.80	51.28
C	Net Loan-Opening (A-B)	90.80	85.38	150.87	135.39	119.91
D	Addition due to Additional Capitalization	2.92	77.47	0.00	0.00	0.00





	<b>Asset-B1</b>					
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
E	Repayment during the year	8.34	11.98	15.48	15.48	15.48
F	Net Loan-Closing (C+D-E)	85.38	150.87	135.39	119.91	104.43
G	Average Loan (C+F)/2	88.09	118.13	143.13	127.65	112.17
H	Weighted Average Rate of Interest on Loan (in %)	8.64	8.83	8.94	8.94	8.96
I	<b>Interest on Loan (G*H)</b>	<b>7.61</b>	<b>10.43</b>	<b>12.79</b>	<b>11.41</b>	<b>10.05</b>

(₹ in lakh)

	<b>Asset-B2</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 186 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	203.69	242.37	242.40	280.65	280.65
B	Cumulative Repayments upto Previous Year	0.00	10.28	32.20	55.85	81.22
C	Net Loan-Opening (A-B)	203.69	232.10	210.21	224.80	199.43
D	Addition due to Additional Capitalization	38.69	0.03	38.25	0.00	0.00
E	Repayment during the year	10.28	21.92	23.65	25.38	25.38
F	Net Loan-Closing (C+D-E)	232.10	210.21	224.80	199.43	174.05
G	Average Loan (C+F)/2	217.89	221.15	217.51	212.12	186.74
H	Weighted Average Rate of Interest on Loan (in %)	10.04	9.52	9.09	8.36	8.12
I	<b>Interest on Loan (G*H)</b>	<b>11.15</b>	<b>21.05</b>	<b>19.78</b>	<b>17.74</b>	<b>15.16</b>

(₹ in lakh)

	<b>Asset-B3</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 182 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	215.51	254.69	254.69	293.13	293.13
B	Cumulative Repayments upto Previous Year	0.00	10.60	33.63	58.40	84.91
C	Net Loan-Opening (A-B)	215.51	244.08	221.05	234.73	208.22
D	Addition due to Additional Capitalization	39.17	0.00	38.44	0.00	0.00
E	Repayment during the year	10.60	23.03	24.77	26.51	26.51
F	Net Loan-Closing (C+D-E)	244.08	221.05	234.73	208.22	181.71
G	Average Loan (C+F)/2	229.80	232.57	227.89	221.48	194.97
H	Weighted Average Rate of Interest on Loan (in %)	10.05	9.53	9.08	8.37	8.14
I	<b>Interest on Loan (G*H)</b>	<b>11.52</b>	<b>22.17</b>	<b>20.69</b>	<b>18.54</b>	<b>15.87</b>

(₹ in

lakh)

	<b>Asset-B4</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 2 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	2100.62	2100.62	2135.83	2141.50	2099.46
B	Cumulative Repayments upto Previous	0.00	1.04	192.59	385.99	577.74



Asset-B4						
	Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
	Year					
C	Net Loan-Opening (A-B)	2100.62	2099.58	1943.24	1755.51	1521.73
D	Addition due to Additional Capitalization	0.00	35.21	5.67	-42.04	131.73
E	Repayment during the year	1.04	191.55	193.40	191.75	195.81
F	Net Loan-Closing (C+D-E)	2099.58	1943.24	1755.51	1521.73	1457.64
G	Average Loan (C+F)/2	2100.10	2021.41	1849.38	1638.62	1489.69
H	Weighted Average Rate of Interest on Loan (in %)	9.56	9.47	9.38	9.20	9.09
I	Interest on Loan (G*H)	1.10	191.44	173.44	150.71	135.44

(₹ in lakh)

Asset- B5					
	Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
A	Gross Normative Loan	1470.93	1470.93	1418.58	1275.13
B	Cumulative Repayments upto Previous Year	0.00	0.36	131.01	252.80
C	Net Loan-Opening (A-B)	1470.93	1470.57	1287.57	1022.33
D	Addition due to Additional Capitalization	0.00	-52.35	-143.44	123.56
E	Repayment during the year	0.36	130.65	121.79	120.89
F	Net Loan-Closing (C+D-E)	1470.57	1287.57	1022.33	1024.99
G	Average Loan (C+F)/2	1470.75	1379.07	1154.95	1023.66
H	Weighted Average Rate of Interest on Loan (in %)	9.21	9.04	8.32	8.09
I	Interest on Loan (G*H)	0.37	124.67	96.08	82.80

(₹ in lakh)

Asset-B6				
	Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
A	Gross Normative Loan	1154.91	1154.91	1542.07
B	Cumulative Repayments upto Previous Year	0.00	69.53	191.47
C	Net Loan-Opening (A-B)	1154.91	1085.38	1350.60
D	Addition due to Additional Capitalization	0.00	387.16	0.00
E	Repayment during the year	69.53	121.94	139.45
F	Net Loan-Closing (C+D-E)	1085.38	1350.60	1211.15
G	Average Loan (C+F)/2	1120.14	1217.99	1280.87
H	Weighted Average Rate of Interest on Loan (in %)	8.42	8.17	8.07
I	Interest on Loan (G*H)	62.79	99.48	103.36

(₹ in lakh)

Asset-B7		
----------	--	--



	Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
A	Gross Normative Loan	826.25	826.25	979.99
B	Cumulative Repayments upto Previous Year	0.00	0.41	82.08
C	Net Loan-Opening (A-B)	826.25	825.84	897.91
D	Addition due to Additional Capitalization	0.00	153.74	200.38
E	Repayment during the year	0.41	81.67	97.68
F	Net Loan-Closing (C+D-E)	825.84	897.91	1000.61
G	Average Loan (C+F)/2	826.05	861.88	949.26
H	Weighted Average Rate of Interest on Loan (in %)	8.16	8.05	7.96
I	<b>Interest on Loan (G*H)</b>	<b>0.37</b>	<b>69.34</b>	<b>75.56</b>

(₹ in lakh)

		Asset-B8		Asset-C1		Asset-C2
	Particulars	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
A	Gross Normative Loan	317.74	1662.99	344.93	344.93	458.63
B	Cumulative Repayments upto Previous Year	0.00	44.66	0.00	0.34	0.00
C	Net Loan-Opening (A-B)	317.74	1618.33	344.93	344.58	458.63
D	Addition due to Additional Capitalization	1345.25	0.00	0.00	125.03	0.00
E	Repayment during the year	44.66	150.38	0.34	36.84	1.48
F	Net Loan-Closing (C+D-E)	1618.33	1467.95	344.58	432.77	457.15
G	Average Loan (C+F)/2	968.03	1543.14	344.75	388.68	457.89
H	Weighted Average Rate of Interest on Loan (in %)	5.29	7.84	7.66	7.79	7.33
I	<b>Interest on Loan (G*H)</b>	<b>25.54</b>	<b>121.06</b>	<b>0.29</b>	<b>30.29</b>	<b>1.20</b>

38. The details of IoL allowed for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	33.55	39.62	36.66	32.45	28.29
	Claimed by the Petitioner in the instant petition	33.79	38.72	34.68	31.11	28.96
	Approved after true-up in this order	33.78	38.68	34.59	31.04	28.89
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	23.09	32.60	31.70	28.96	25.34
	Claimed by the Petitioner in the instant petition	23.36	31.35	27.88	24.20	22.56
	Approved after true-up in this order	23.33	31.26	27.75	24.09	22.47



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	7.65	10.47	12.82	11.44	10.09
	Claimed by the Petitioner in the instant petition	7.62	10.44	12.80	11.41	10.06
	Approved after true-up in this order	7.61	10.43	12.79	11.41	10.05
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	10.35	20.38	19.82	19.10	16.73
	Claimed by the Petitioner in the instant petition	11.15	21.06	19.79	17.75	15.17
	Approved after true-up in this order	11.15	21.05	19.78	17.74	15.16
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	10.71	21.49	20.81	19.97	17.49
	Claimed by the Petitioner in the instant petition	11.53	22.18	20.70	18.55	15.88
	Approved after true-up in this order	11.52	22.17	20.69	18.54	15.87
Asset-B4	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	1.04	182.32	166.61	155.34	143.27
	Claimed by the Petitioner in the instant petition	1.11	191.85	173.40	150.67	135.30
	Approved after true-up in this order	1.10	191.44	173.44	150.71	135.44
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.30	103.18	102.86	101.30
	Claimed by the Petitioner in the instant petition	0.00	0.37	125.72	96.95	83.56
	Approved after true-up in this order	0.00	0.37	124.67	96.08	82.80
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	62.85	102.56	107.74
	Claimed by the Petitioner in the instant petition	0.00	0.00	62.79	99.48	103.36
	Approved after true-up in this order	0.00	0.00	62.79	99.48	103.36
Asset-B7	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.29	55.81	63.89
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.37	69.34	75.56
	Approved after true-up in this order	0.00	0.00	0.37	69.34	75.56
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	36.89	127.30
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	25.77	121.70
	Approved after true-up in this order	0.00	0.00	0.00	25.54	121.06
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No.	0.00	0.00	0.00	0.28	28.90



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	494/TT/2019					
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.29	30.29
	Approved after true-up in this order	0.00	0.00	0.00	0.29	30.29
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	1.20
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	1.20
	Approved after true-up in this order	0.00	0.00	0.00	0.00	1.20

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

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

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

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

Year	Notified MAT rates (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

41. The MAT rates as considered vide order dated 27.4.2020 in Petition No.



274/TT/2019 are considered for the purpose of grossing up of the 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, which is 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	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

42. Accordingly, the RoE allowed for the transmission assets is as follows:

(₹ in lakh)

Asset-A1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	133.63	213.84	213.84	214.59	221.50
B	Addition due to Additional Capitalization	80.22	0.00	0.75	6.91	13.72
C	Closing Equity (A+B)	213.84	213.84	214.59	221.50	235.22
D	Average Equity (A+C)/2	173.73	213.84	214.22	218.05	228.36
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>34.07</b>	<b>42.14</b>	<b>42.21</b>	<b>42.97</b>	<b>45.12</b>

(₹ in lakh)

Asset-A2						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	125.16	153.50	155.57	156.36	162.18
B	Addition due to Additional Capitalization	28.34	2.07	0.80	5.81	13.52
C	Closing Equity (A+B)	153.50	155.57	156.36	162.18	175.70
D	Average Equity (A+C)/2	139.33	154.53	155.96	159.27	168.94
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>20.51</b>	<b>30.45</b>	<b>30.73</b>	<b>31.38</b>	<b>33.38</b>

(₹ in lakh)

Asset-B1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	38.92	40.17	73.37	73.37	73.37
B	Addition due to Additional Capitalization	1.25	33.20	0.00	0.00	0.00
C	Closing Equity (A+B)	40.17	73.37	73.37	73.37	73.37
D	Average Equity (A+C)/2	39.54	56.77	73.37	73.37	73.37



	<b>Asset-B1</b>					
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>7.75</b>	<b>11.19</b>	<b>14.46</b>	<b>14.46</b>	<b>14.50</b>

(₹ in lakh)

	<b>Asset-B2</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 186 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	87.29	103.87	103.89	120.28	120.28
B	Addition due to Additional Capitalization	16.58	0.01	16.39	0.00	0.00
C	Closing Equity (A+B)	103.87	103.89	120.28	120.28	120.28
D	Average Equity (A+C)/2	95.58	103.88	112.08	120.28	120.28
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>9.55</b>	<b>20.47</b>	<b>22.09</b>	<b>23.70</b>	<b>23.76</b>

(₹ in lakh)

	<b>Asset-B3</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 182 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	92.36	109.15	109.15	125.63	125.63
B	Addition due to Additional Capitalization	16.79	0.00	16.48	0.00	0.00
C	Closing Equity (A+B)	109.15	109.15	125.63	125.63	125.63
D	Average Equity (A+C)/2	100.76	109.15	117.39	125.63	125.63
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>9.85</b>	<b>21.51</b>	<b>23.13</b>	<b>24.75</b>	<b>24.82</b>

(₹ in lakh)

	<b>Asset-B4</b>					
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 2 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	900.27	900.27	915.36	917.79	899.77
B	Addition due to Additional Capitalization	0.00	15.09	2.43	-18.02	56.45
C	Closing Equity (A+B)	900.27	915.36	917.79	899.77	956.22
D	Average Equity (A+C)/2	900.27	907.81	916.57	908.78	928.00
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>0.97</b>	<b>178.88</b>	<b>180.61</b>	<b>179.07</b>	<b>183.35</b>

(₹ in lakh)





Asset-B5					
	Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
A	Opening Equity	630.40	630.40	607.96	546.48
B	Addition due to Additional Capitalization	0.00	-22.44	-61.48	52.95
C	Closing Equity (A+B)	630.40	607.96	546.48	599.44
D	Average Equity (A+C)/2	630.40	619.18	577.22	572.96
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>0.34</b>	<b>122.01</b>	<b>113.74</b>	<b>113.21</b>

(₹ in lakh)

Asset-B6				
	Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
A	Opening Equity	494.96	494.96	660.89
B	Addition due to Additional Capitalization	0.00	165.93	0.00
C	Closing Equity (A+B)	494.96	660.89	660.89
D	Average Equity (A+C)/2	494.96	577.92	660.89
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>64.93</b>	<b>113.88</b>	<b>130.58</b>

(₹ in lakh)

Asset-B7				
	Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
A	Opening Equity	354.11	354.11	420.00
B	Addition due to Additional Capitalization	0.00	65.89	85.88
C	Closing Equity (A+B)	354.11	420.00	505.87
D	Average Equity (A+C)/2	354.11	387.05	462.93
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>0.38</b>	<b>76.27</b>	<b>91.47</b>

(₹ in

lakh)

		Asset-B8		Asset-C1		Asset-C2
	Particulars	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
A	Opening Equity	136.17	712.71	147.83	147.83	196.56
B	Addition due to Additional Capitalization	576.54	0.00	0.00	53.59	0.00





	Particulars	Asset-B8		Asset-C1		Asset-C2
		2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
C	Closing Equity (A+B)	712.71	712.71	147.83	201.41	196.56
D	Average Equity (A+C)/2	424.44	712.71	147.83	174.62	196.56
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.549	21.342	21.549	21.549
G	Rate of Return on Equity (Pre-tax)	19.705	19.758	19.705	19.758	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>41.70</b>	<b>140.82</b>	<b>0.32</b>	<b>34.50</b>	<b>1.38</b>

43. The details of RoE approved for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	34.53	44.04	45.22	45.22	45.22
	Claimed by the Petitioner in the instant petition	34.08	42.18	42.30	43.05	45.20
	Approved after true-up in this order	34.07	42.14	42.21	42.97	45.12
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	20.47	31.32	33.50	34.22	34.22
	Claimed by the Petitioner in the instant petition	20.53	30.53	30.86	31.51	33.51
	Approved after true-up in this order	20.51	30.45	30.73	31.38	33.38
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	7.68	11.06	14.31	14.31	14.31
	Claimed by the Petitioner in the instant petition	7.76	11.19	14.47	14.47	14.50
	Approved after true-up in this order	7.75	11.19	14.46	14.46	14.50
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	8.85	18.98	20.59	22.20	22.20
	Claimed by the Petitioner in the instant petition	9.56	20.48	22.10	23.71	23.78
	Approved after true-up in this order	9.55	20.47	22.09	23.70	23.76
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	9.15	19.98	21.59	23.21	23.21
	Claimed by the Petitioner in the instant petition	9.86	21.52	23.15	24.77	24.83
	Approved after true-up in this order	9.85	21.51	23.13	24.75	24.82
Asset-B4	Allowed vide order dated	0.91	168.41	170.13	176.50	182.65



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	20.2.2019 in Petition No. 168/TT/2018					
	Claimed by the Petitioner in the instant petition	0.97	179.28	180.62	179.08	183.35
	Approved after true-up in this order	0.97	178.88	180.61	179.07	183.35
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.27	98.26	107.85	117.12
	Claimed by the Petitioner in the instant petition	0.00	0.34	123.04	114.78	114.24
	Approved after true-up in this order	0.00	0.34	122.01	113.74	113.21
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	64.24	112.76	129.03
	Claimed by the Petitioner in the instant petition	0.00	0.00	64.94	113.88	130.58
	Approved after true-up in this order	0.00	0.00	64.93	113.88	130.58
Asset-B7	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.30	60.64	75.52
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.38	76.27	91.47
	Approved after true-up in this order	0.00	0.00	0.38	76.27	91.47
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	41.88	152.01
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	42.09	141.59
	Approved after true-up in this order	0.00	0.00	0.00	41.70	140.82
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.31	33.29
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.32	34.50
	Approved after true-up in this order	0.00	0.00	0.00	0.32	34.50
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	1.38
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	1.39
	Approved after true-up in this order	0.00	0.00	0.00	0.00	1.38

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

44. The Petitioner has submitted Auditor's certificate and has claimed the actual O&M Expenses wherein the Petitioner has claimed self-insurance, petition filing charges, advertisement and publicity charges as part of the O&M Expenses.



45. As regards self-insurance, the Commission vide order dated 29.7.2016 in Petition No. 275/TT/2015, considered the Petitioner's claim towards self-insurance and disallowed the same. The relevant portion of the said order is as follows:

*"45. The Petitioner was directed vide RoP dated 22.3.2016, to submit the actual O&M Expenses year wise along with details. In response, the Petitioner vide affidavit dated 29.6.2016 has submitted that actual O&M Expenses for 2014-15 towards Asset-I and II are ₹5.75 lakh and ₹4.46 lakh, respectively. Break up of O&M Expenses has also been provided vide Auditor's Certificate dated 15.6.2016. The Petitioner has claimed self-insurance reserved as expenses under O&M Expenses which is not allowable as expenses....."*

Therefore, the Petitioner's claim towards self-insurance is disallowed.

46. Further, the Petitioner has also claimed the petition filing charges as part of O&M Expenses. We have considered the submission of the Petitioner and the petition filing charges are to be claimed directly by the Petitioner from the beneficiaries and as such the same are not allowable under O&M Expenses. We, therefore, disallow the petition filing charges as part of O&M Expenses.

47. The Petitioner has also claimed Advertisement and Publicity charges as part of the O&M Expenses which is not allowable as O&M Expenses and, therefore, the same is disallowed.

48. Accordingly, the following O&M Expenses are allowed for 2014-19 tariff period after deducting self-insurance portion, petition filing fees, advertisement and publicity expenses and fibre leasing charges (pro-rata reduction) from the total cost:

(₹ in lakh)					
<b>Assets</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-A1	4.92	4.21	1.50	8.38	7.57
Asset-A2	3.82	4.36	1.25	7.90	7.13
Asset-B1	0.95	1.27	1.62	2.44	2.21
Asset-B2	0.81	2.18	3.48	5.04	4.55
Asset-B3	0.91	2.32	3.66	5.35	4.84
Asset-B4	0.00	28.01	34.88	53.45	48.26
Asset-B5	0.00	0.06	31.01	31.36	28.32



Asset-B6	0.00	0.00	14.65	30.90	27.89
Asset-B7	0.00	0.00	2.49	17.34	15.66
Asset-B8	0.00	0.00	0.00	4.38	7.94
Asset-C1	0.00	0.00	0.00	0.11	8.93
Asset-C2	0.00	0.00	0.00	0.00	0.41

49. The details of O&M Expenses approved for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	4.60	4.75	4.91	5.07	5.24
	Claimed by the Petitioner in the instant petition	5.75	4.57	1.62	9.12	8.47
	Approved after true-up in this order	4.92	4.21	1.50	8.38	7.57
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	3.57	4.92	5.08	5.25	5.42
	Claimed by the Petitioner in the instant petition	4.46	4.74	1.35	8.60	7.98
	Approved after true-up in this order	3.82	4.36	1.25	7.90	7.13
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.88	1.02	1.41	1.45	1.49
	Claimed by the Petitioner in the instant petition	1.11	1.38	1.75	2.66	2.47
	Approved after true-up in this order	0.95	1.27	1.62	2.44	2.21
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.76	1.94	3.30	3.40	3.51
	Claimed by the Petitioner in the instant petition	0.95	2.37	3.75	5.48	5.09
	Approved after true-up in this order	0.81	2.18	3.48	5.04	4.55
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.85	2.06	3.47	3.58	3.69
	Claimed by the Petitioner in the instant petition	1.06	2.52	3.94	5.82	5.41
	Approved after true-up in this order	0.91	2.32	3.66	5.35	4.84
Asset-B4	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	24.93	34.78	35.93	37.12
	Claimed by the Petitioner in the instant petition	0.00	30.44	37.59	58.16	54.00
	Approved after true-up in this order	0.00	28.01	34.88	53.45	48.26
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.06	30.47	31.48	32.52
	Claimed by the Petitioner in the instant petition	0.00	0.07	33.42	34.13	31.69



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Approved after true-up in this order	0.00	0.06	31.01	31.36	28.32
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	13.35	13.79	14.24
	Claimed by the Petitioner in the instant petition	0.00	0.00	15.79	33.62	31.21
	Approved after true-up in this order	0.00	0.00	14.65	30.90	27.89
Asset-B7	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.07	0.07	0.07
	Claimed by the Petitioner in the instant petition	0.00	0.00	2.68	18.87	17.52
	Approved after true-up in this order	0.00	0.00	2.49	17.34	15.66
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	0.00	0.00
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	4.77	8.88
	Approved after true-up in this order	0.00	0.00	0.00	4.38	7.94
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	0.00
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.12	9.99
	Approved after true-up in this order	0.00	0.00	0.00	0.11	8.93
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	0.00
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	0.46
	Approved after true-up in this order	0.00	0.00	0.00	0.00	0.41

### **Interest on Working Capital (IWC)**

50. The Interest on Working Capital (IWC) has been allowed as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:

#### **i. Working capital for Maintenance Spares :**

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

#### **ii. Working capital for O & M Expenses :**

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

#### **iii. Working capital for Receivables:**

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



iv. **Rate of interest on working capital :**

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

51. The trued-up IWC allowed for the transmission assets are as follows:

(₹ in lakh)						
<b>Asset-A1</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.41	0.35	0.13	0.70	0.63
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.74	0.63	0.23	1.26	1.14
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	18.68	22.21	21.07	21.94	22.17
D	<b>Total of Working Capital (A+B+C)</b>	<b>19.83</b>	<b>23.19</b>	<b>21.42</b>	<b>23.89</b>	<b>23.93</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>2.68</b>	<b>3.13</b>	<b>2.89</b>	<b>3.23</b>	<b>3.23</b>

  

(₹ in lakh)						
<b>Asset-A2</b>						
	<b>Particulars</b>	<b>2014-15 (Pro-rata for 274 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.42	0.36	0.10	0.66	0.59
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.76	0.65	0.19	1.19	1.07
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	15.86	16.85	15.80	16.58	16.85
D	<b>Total of Working Capital (A+B+C)</b>	<b>17.05</b>	<b>17.87</b>	<b>16.09</b>	<b>18.42</b>	<b>18.52</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>1.73</b>	<b>2.41</b>	<b>2.17</b>	<b>2.49</b>	<b>2.50</b>

  

(₹ in lakh)						
<b>Asset-B1</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.08	0.11	0.14	0.20	0.18
B	Working Capital for Maintenance	0.14	0.19	0.24	0.37	0.33



Asset-B1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Spares (15% of O&M Expenses)					
C	Working Capital for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	4.21	5.95	7.57	7.48	7.21
D	<b>Total of Working Capital (A+B+C)</b>	<b>4.43</b>	<b>6.25</b>	<b>7.95</b>	<b>8.05</b>	<b>7.73</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>0.60</b>	<b>0.84</b>	<b>1.07</b>	<b>1.09</b>	<b>1.04</b>

(₹ in lakh)

Asset-B2						
	Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.13	0.18	0.29	0.42	0.38
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.24	0.33	0.52	0.76	0.68
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	10.64	11.20	11.78	12.28	11.76
D	<b>Total of Working Capital (A+B+C)</b>	<b>11.02</b>	<b>11.71</b>	<b>12.59</b>	<b>13.45</b>	<b>12.83</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>0.76</b>	<b>1.58</b>	<b>1.70</b>	<b>1.82</b>	<b>1.73</b>

(₹ in lakh)

Asset-B3						
	Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.15	0.19	0.30	0.45	0.40
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.27	0.35	0.55	0.80	0.73
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	11.25	11.78	12.34	12.84	12.31
D	<b>Total of Working Capital (A+B+C)</b>	<b>11.68</b>	<b>12.32</b>	<b>13.19</b>	<b>14.09</b>	<b>13.44</b>





Asset-B3						
	Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>0.79</b>	<b>1.66</b>	<b>1.78</b>	<b>1.90</b>	<b>1.81</b>

(₹ in lakh)

Asset-B4						
	Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.00	2.33	2.91	4.45	4.02
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	4.20	5.23	8.02	7.24
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	96.73	100.73	99.48	98.32	96.23
D	<b>Total of Working Capital (A+B+C)</b>	<b>96.73</b>	<b>107.26</b>	<b>107.61</b>	<b>110.79</b>	<b>107.49</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>0.07</b>	<b>14.48</b>	<b>14.53</b>	<b>14.96</b>	<b>14.51</b>

(₹ in

lakh)

Asset-B5					
	Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	1.96	2.58	2.61	2.36
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	3.54	4.65	4.70	4.25
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	71.11	69.79	62.06	59.01
D	<b>Total of Working Capital (A+B+C)</b>	<b>76.61</b>	<b>77.03</b>	<b>69.38</b>	<b>65.62</b>
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50
F	<b>Interest of working Capital (D*E)</b>	<b>0.03</b>	<b>10.40</b>	<b>9.37</b>	<b>8.86</b>

(₹ in lakh)

Asset-B6				
	Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	1.83	2.57	2.32
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	3.30	4.63	4.18
C	Working Capital for Receivables	54.32	62.52	68.48





		Asset-B6		
	Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
	(Equivalent to two months of annual fixed cost / annual transmission charges)			
D	<b>Total of Working Capital (A+B+C)</b>	<b>59.45</b>	<b>69.73</b>	<b>74.99</b>
E	Rate of Interest on working capital (in %)	12.80	12.80	12.80
F	<b>Interest of working Capital (D*E)</b>	<b>5.07</b>	<b>8.93</b>	<b>9.60</b>

(₹ in lakh)

		Asset-B7		
	Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M expenses for one month)	37.82	1.45	1.30
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	68.07	2.60	2.35
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	115.68	41.75	47.83
D	<b>Total of Working Capital (A+B+C)</b>	<b>221.57</b>	<b>45.79</b>	<b>51.48</b>
E	Rate of Interest on working capital (in %)	12.80	12.80	12.80
F	<b>Interest of working Capital (D*E)</b>	<b>0.16</b>	<b>5.86</b>	<b>6.59</b>

(₹ in lakh)

		Asset-B8		Asset-C1		Asset-C2
	Particulars	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
A	Working Capital for O&M Expenses (O&M expenses for one month)	0.73	0.66	0.84	0.74	0.96
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	1.32	1.19	1.51	1.34	1.73
C	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	39.74	71.57	16.53	18.87	21.40
D	<b>Total of Working Capital (A+B+C)</b>	<b>41.80</b>	<b>73.43</b>	<b>18.88</b>	<b>20.95</b>	<b>24.09</b>
E	Rate of Interest on working capital (in %)	12.60	12.60	12.60	12.60	12.20
F	<b>Interest of working Capital (D*E)</b>	<b>2.63</b>	<b>9.25</b>	<b>0.03</b>	<b>2.64</b>	<b>0.10</b>

52. The details of IWC allowed for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	2.68	3.28	3.28	3.19	3.10
	Claimed by the Petitioner in the instant petition	2.72	3.15	2.90	3.27	3.29
	Approved after true-up in this order	2.68	3.13	2.89	3.23	3.23
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	1.71	2.52	2.61	2.59	2.52
	Claimed by the Petitioner in the instant petition	1.77	2.44	2.19	2.54	2.56
	Approved after true-up in this order	1.73	2.41	2.17	2.49	2.50
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.59	0.83	1.06	1.03	1.00
	Claimed by the Petitioner in the instant petition	0.61	0.85	1.08	1.10	1.06
	Approved after true-up in this order	0.60	0.84	1.07	1.09	1.04
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.70	1.48	1.62	1.69	1.64
	Claimed by the Petitioner in the instant petition	0.77	1.59	1.72	1.84	1.76
	Approved after true-up in this order	0.76	1.58	1.70	1.82	1.73
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.73	1.56	1.70	1.77	1.72
	Claimed by the Petitioner in the instant petition	0.80	1.68	1.80	1.93	1.85
	Approved after true-up in this order	0.79	1.66	1.78	1.90	1.81
Asset-B4	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.07	13.62	13.89	13.99	14.08
	Claimed by the Petitioner in the instant petition	0.07	14.64	14.68	15.22	14.82
	Approved after true-up in this order	0.07	14.48	14.53	14.96	14.51
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.02	8.75	9.26	9.73
	Claimed by the Petitioner in the instant petition	0.00	0.03	10.60	9.59	9.11
	Approved after true-up in this order	0.00	0.03	10.40	9.37	8.86
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	4.98	8.06	8.93
	Claimed by the Petitioner in the instant petition	0.00	0.00	5.13	9.07	9.77
	Approved after true-up in this order	0.00	0.00	5.07	8.93	9.60
Asset-B7	Allowed vide order dated	0.00	0.00	0.02	3.96	4.81



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	20.2.2019 in Petition No. 168/TT/2018					
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.17	5.94	6.69
	Approved after true-up in this order	0.00	0.00	0.16	5.86	6.59
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	2.66	9.50
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	2.67	9.35
	Approved after true-up in this order	0.00	0.00	0.00	2.63	9.25
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.02	2.10
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.03	2.69
	Approved after true-up in this order	0.00	0.00	0.00	0.03	2.64
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	0.08
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	0.11
	Approved after true-up in this order	0.00	0.00	0.00	0.00	0.10

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

53. The trued-up annual fixed charges has been allowed for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-A1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	36.66	45.12	45.20	46.01	48.18
Interest on Loan	33.78	38.68	34.59	31.04	28.89
Return on Equity	34.07	42.14	42.21	42.97	45.12
O&M Expenses	4.92	4.21	1.50	8.38	7.57
Interest on Working Capital	2.68	3.13	2.89	3.23	3.23
<b>Total</b>	<b>112.11</b>	<b>133.28</b>	<b>126.39</b>	<b>131.63</b>	<b>132.99</b>

(₹ in lakh)

Asset-A2					
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	22.07	32.61	32.91	33.61	35.65
Interest on Loan	23.33	31.26	27.75	24.09	22.47
Return on Equity	20.51	30.45	30.73	31.38	33.38



<b>Asset-A2</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 274 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O&M Expenses	3.82	4.36	1.25	7.90	7.13
Interest on Working Capital	1.73	2.41	2.17	2.49	2.50
<b>Total</b>	<b>71.46</b>	<b>101.09</b>	<b>94.81</b>	<b>99.47</b>	<b>101.13</b>

(₹ in lakh)

<b>Asset-B1</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	8.34	11.98	15.48	15.48	15.48
Interest on Loan	7.61	10.43	12.79	11.41	10.05
Return on Equity	7.75	11.19	14.46	14.46	14.50
O&M Expenses	0.95	1.27	1.62	2.44	2.21
Interest on Working Capital	0.60	0.84	1.07	1.09	1.04
<b>Total</b>	<b>25.25</b>	<b>35.71</b>	<b>45.42</b>	<b>44.88</b>	<b>43.28</b>

(₹ in lakh)

<b>Asset-B2</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 186 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	10.28	21.92	23.65	25.38	25.38
Interest on Loan	11.15	21.05	19.78	17.74	15.16
Return on Equity	9.55	20.47	22.09	23.70	23.76
O&M Expenses	0.81	2.18	3.48	5.04	4.55
Interest on Working Capital	0.76	1.58	1.70	1.82	1.73
<b>Total</b>	<b>32.55</b>	<b>67.20</b>	<b>70.70</b>	<b>73.68</b>	<b>70.58</b>

(₹ in lakh)

<b>Asset-B3</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 182 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	10.60	23.03	24.77	26.51	26.51
Interest on Loan	11.52	22.17	20.69	18.54	15.87
Return on Equity	9.85	21.51	23.13	24.75	24.82
O&M Expenses	0.91	2.32	3.66	5.35	4.84
Interest on Working Capital	0.79	1.66	1.78	1.90	1.81
<b>Total</b>	<b>33.67</b>	<b>70.69</b>	<b>74.03</b>	<b>77.05</b>	<b>73.85</b>

(₹ in lakh)

<b>Asset-B4</b>					
-----------------	--	--	--	--	--



Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	1.04	191.55	193.40	191.75	195.81
Interest on Loan	1.10	191.44	173.44	150.71	135.44
Return on Equity	0.97	178.88	180.61	179.07	183.35
O&M Expenses	0.00	28.01	34.88	53.45	48.26
Interest on Working Capital	0.07	14.48	14.53	14.96	14.51
<b>Total</b>	<b>3.18</b>	<b>604.36</b>	<b>596.86</b>	<b>589.94</b>	<b>577.37</b>

(₹ in lakh)

Asset-B5				
Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
Depreciation	0.36	130.65	121.79	120.89
Interest on Loan	0.37	124.67	96.08	82.80
Return on Equity	0.34	122.01	113.74	113.21
O&M Expenses	0.06	31.01	31.36	28.32
Interest on Working Capital	0.03	10.40	9.37	8.86
<b>Total</b>	<b>1.16</b>	<b>418.74</b>	<b>372.34</b>	<b>354.08</b>

(₹ in lakh)

Asset-B6			
Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
Depreciation	69.53	121.94	139.45
Interest on Loan	62.79	99.48	103.36
Return on Equity	64.93	113.88	130.58
O&M Expenses	14.65	30.90	27.89
Interest on Working Capital	5.07	8.93	9.60
<b>Total</b>	<b>216.97</b>	<b>375.13</b>	<b>410.88</b>

(₹ in lakh)

Asset-B7			
Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
Depreciation	0.41	81.67	97.68
Interest on Loan	0.37	69.34	75.56
Return on Equity	0.38	76.27	91.47
O&M Expenses	2.49	17.34	15.66
Interest on Working Capital	0.16	5.86	6.59
<b>Total</b>	<b>3.81</b>	<b>250.48</b>	<b>286.96</b>

(₹ in lakh)

	Asset-B8	Asset-C1	Asset-C2
--	----------	----------	----------



Particulars	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19	2018-19 (Pro-rata for 13 days)
Depreciation	44.66	150.38	0.34	36.84	1.48
Interest on Loan	25.54	121.06	0.29	30.29	1.20
Return on Equity	41.70	140.82	0.32	34.50	1.38
O&M Expenses	4.38	7.94	0.11	8.93	0.41
Interest on Working Capital	2.63	9.25	0.03	2.64	0.10
<b>Total</b>	<b>118.91</b>	<b>429.45</b>	<b>1.09</b>	<b>113.20</b>	<b>4.57</b>

54. The details of transmission charges approved for the transmission assets in previous order, claimed by the Petitioner in the instant petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	112.51	139.09	138.71	134.58	130.50
	Claimed by the Petitioner in the instant petition	113.00	133.79	126.79	132.65	134.20
	Approved after true-up in this order	112.11	133.28	126.39	131.63	132.99
Asset-A2	Allowed vide order dated 29.7.2016 in Petition No. 275/TT/2015	70.87	105.06	108.93	107.84	104.32
	Claimed by the Petitioner in the instant petition	72.19	101.75	95.33	100.58	102.39
	Approved after true-up in this order	71.46	101.09	94.81	99.47	101.13
Asset-B1	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	25.14	35.35	45.09	43.72	42.37
	Claimed by the Petitioner in the instant petition	25.45	35.85	45.59	45.13	43.58
	Approved after true-up in this order	25.25	35.71	45.42	44.88	43.28
Asset-B2	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	30.18	63.20	67.48	70.27	67.96
	Claimed by the Petitioner in the instant petition	32.71	67.43	71.02	74.17	71.19
	Approved after true-up in this order	32.55	67.20	70.70	73.68	70.58
Asset-B3	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	31.28	66.58	70.81	73.50	71.07
	Claimed by the Petitioner in the instant petition	33.86	70.94	74.37	77.59	74.49
	Approved after true-up in this order	33.67	70.69	74.03	77.05	73.85
Asset-B4	Allowed vide order dated	3.01	570.48	568.45	571.69	573.64



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	20.2.2019 in Petition No. 168/TT/2018					
	Claimed by the Petitioner in the instant petition	3.20	608.17	599.69	594.88	583.28
	Approved after true-up in this order	3.18	604.36	596.86	589.94	577.37
Asset-B5	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.94	346.40	367.49	386.70
	Claimed by the Petitioner in the instant petition	0.00	1.18	424.52	378.34	360.59
	Approved after true-up in this order	0.00	1.16	418.74	372.34	354.08
Asset-B6	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	214.54	358.50	398.78
	Claimed by the Petitioner in the instant petition	0.00	0.00	218.18	377.99	414.37
	Approved after true-up in this order	0.00	0.00	216.97	375.13	410.88
Asset-B7	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	1.00	185.73	225.54
	Claimed by the Petitioner in the instant petition	0.00	0.00	4.01	252.09	288.92
	Approved after true-up in this order	0.00	0.00	3.81	250.48	286.96
Asset-B8	Allowed vide order dated 20.2.2019 in Petition No. 168/TT/2018	0.00	0.00	0.00	126.49	452.36
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	120.37	432.72
	Approved after true-up in this order	0.00	0.00	0.00	118.91	429.45
Asset-C1	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.93	99.83
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	1.10	114.31
	Approved after true-up in this order	0.00	0.00	0.00	1.09	113.20
Asset-C2	Allowed vide order dated 11.2.2021 in Petition No. 494/TT/2019	0.00	0.00	0.00	0.00	4.14
	Claimed by the Petitioner in the instant petition	0.00	0.00	0.00	0.00	4.65
	Approved after true-up in this order	0.00	0.00	0.00	0.00	4.57

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

55. The Petitioner has combined all the transmission assets and has claimed combined tariff. The Petitioner has also submitted the tariff forms for the Combined



Asset as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

56. The Petitioner has claimed the following transmission charges for the combined transmission asset for the 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	969.34	983.06	992.77	992.77	992.77
Interest on Loan	616.83	545.02	470.31	388.30	306.13
Return on Equity	862.85	875.06	883.71	883.71	883.71
Interest on Working Capital	50.50	49.92	49.07	47.84	46.49
Operation and Maintenance Expenses	313.67	313.67	313.67	313.67	313.67
<b>Total</b>	<b>2813.19</b>	<b>2766.73</b>	<b>2709.53</b>	<b>2626.29</b>	<b>2542.77</b>

57. The Petitioner has claimed the following Interest on Working Capital for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	26.14	26.14	26.14	26.14	26.14
Maintenance Spares	47.05	47.05	47.05	47.05	47.05
Receivables	345.88	341.10	334.05	323.79	312.64
<b>Total</b>	<b>419.07</b>	<b>414.29</b>	<b>407.24</b>	<b>396.98</b>	<b>385.83</b>
Rate of Interest	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>50.50</b>	<b>49.92</b>	<b>49.07</b>	<b>47.84</b>	<b>46.49</b>

### **Effective Date of Commercial Operation (E-COD)**

58. The Petitioner has claimed E-COD of the Combined Asset as 13.5.2016. Based on the trued-up admitted capital cost and actual COD of all the transmission assets, the E-COD has been worked out as follows:

Computation of Effective COD					
Assets	Actual COD	Admitted capital cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (in %)	No. of days from last COD	Weighted days
Asset-A1	1.4.2014	784.06	5.15	1813	93.45





Asset-A2	1.7.2014	585.67	3.85	1722	66.30
Asset-B1	1.4.2014	244.56	1.61	1813	29.12
Asset-B2	27.9.2014	400.93	2.64	1634	43.07
Asset-B3	1.10.2014	418.76	2.75	1630	44.87
Asset-B4	30.3.2015	3187.41	20.96	1450	303.85
Asset-B5	31.3.2016	1998.13	13.14	1083	142.27
Asset-B6	1.8.2016	2202.96	14.48	960	139.04
Asset-B7	30.3.2017	1686.24	11.09	719	79.71
Asset-B8	1.10.2017	2375.70	15.62	534	83.40
Asset-C1	28.3.2018	671.37	4.41	356	15.71
Asset-C2	19.3.2019	655.19	4.31	0	0
<b>Total</b>	<b>19.3.2019*</b>	<b>15210.97</b>	<b>100.00</b>		<b>1040.00</b>
<b>Effective COD (Latest COD-Total weighted Days) 13.5.2016</b>					

*\*Latest COD*

59. The E-COD is used to determine the lapsed life of the project as a whole, which works out as two (2) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

#### **Weighted Average Life (WAL)**

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

61. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and irrespective of life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 15 years as follows:



Admitted Capital Cost as on 31.3.2019				
Particulars	Combined asset cost (₹ in lakh) (1)	Life in years (2)	Weighted cost (3)=(1) x(2) (in lakh) (3)	Weighted Avg. life of Asset (in years) (4)=(3)/(1)
PLCC	15210.97	15	228164.60	
<b>Total</b>	<b>15210.97</b>		<b>228164.60</b>	<b>15 years</b>

62. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, the E-COD of the Combined Asset is 13.5.2016 and the lapsed life of the project as a whole, works out as two (2) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 13 years.

### **Capital Cost**

63. 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 Asset-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 Asset-forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-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 asset.

(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."

64. The tried-up capital cost as on 31.3.2019 for Asset-A1 to Asset-C2 has been considered as capital cost as on 31.3.2019 for the Combined Asset. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the transmission assets are clubbed together and the capital cost has been considered as capital cost for Combined Asset as on 31.3.2019 as per following details:

(₹ in lakh)						
Particulars	Asset-A1	Asset-A2	Asset-B1	Asset-B2	Asset-B3	Asset-B4
Free hold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Station Equipment	0.00	0.00	0.00	0.00	0.00	0.00
PLCC	784.06	585.67	244.56	400.93	418.76	3187.41



Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>784.06</b>	<b>585.67</b>	<b>244.56</b>	<b>400.93</b>	<b>418.76</b>	<b>3187.41</b>

(₹ in lakh)

Particulars	Asset-B5	Asset-B6	Asset-B7	Asset-B8	Asset-C1	Asset-C2	Total Capital Cost as on 31.3.2019
Free hold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Station Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLCC	1998.13	2202.96	1686.24	2375.70	671.37	655.19	15210.97
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1998.13</b>	<b>2202.96</b>	<b>1686.24</b>	<b>2375.70</b>	<b>671.37</b>	<b>655.19</b>	<b>15210.97</b>

65. The trued-up capital cost of ₹15210.97 lakh for Combined Asset has been considered as admitted capital cost as on 31.3.2019 for working out tariff for 2019-24 tariff period.

#### **Additional Capital Expenditure (ACE)**

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

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

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

*(b) Works deferred for execution;*

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

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

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

*(f) Force Majeure events:*

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

*(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of*



work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”

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

(1) The ACE 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 cutoff date may be admitted by the Commission, subject to prudence check:

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
- b) Change in law or compliance of any existing law;
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;
- d) Liability for works executed prior to the cut-off date;
- e) Force Majeure events;
- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- g) Raising of ash dyke as a part of ash disposal system.”

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

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

67. The Petitioner has claimed projected ACE for 2019-24 period on account of balance and retention payments due to undischarged liability projected for works executed within the cut-off date, work deferred for execution and undischarged liabilities recognized to payable at a future date. The details of the projected ACE in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	ACE (as per Auditor's Certificate)	
	2019-20	2020-21
Asset-A1	0.00	0.00
Asset-A2	0.00	0.00
Asset-B1	0.00	0.00
Asset-B2	0.00	0.00



Asset-B3	0.00	0.00
Asset-B4	0.00	0.00
Asset-B5	0.00	0.00
Asset-B6	0.00	0.00
Asset-B7	0.00	0.00
Asset-B8	0.00	306.88
Asset-C1	105.06	0.00
Asset-C2	17.93	0.00
<b>Total</b>	<b>122.99</b>	<b>306.88</b>

68. We have considered the submissions of the Petitioner. ACE claimed towards balance and retention payments and undischarged liability is allowed under Regulation 24(1)(a) and Regulation 25(1)(d) of the 2019 Tariff Regulations. The ACE allowed is summarized below, which is subject to true-up:

(₹ in lakh)

Assets	Regulations	ACE (as per Auditor's Certificate)	
		2019-20	2020-21
Combined Asset	Regulation 24(1)(a) and Regulation 25(1)(d) of the Tariff Regulations, 2019	122.99	306.88
	Discharged of IDC	7.22	0.00
	<b>Total</b>	<b>130.21</b>	<b>306.88</b>

#### **Capital Cost considered for the 2019-24 tariff period**

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

(₹ in lakh)

Assets	Capital cost as on 1.4.2019	Admitted ACE		Capital cost as on 31.3.2024
		2019-20	2020-21	
Combined Asset	15210.97	130.21	306.88	15648.06

#### **Debt-Equity Ratio**

70. 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.”

71. The details of the debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is as follows:

<b>Combined Asset</b>	<b>Capital cost as on 1.4.2019 (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2024 (₹ in lakh)</b>	<b>(in %)</b>
Debt	10647.68	70.00	10953.64	70.00
Equity	4563.29	30.00	4694.42	30.00
<b>Total</b>	<b>15210.97</b>	<b>100.00</b>	<b>15648.06</b>	<b>100.00</b>

### **Depreciation**

72. Regulation 33 of the 2019 Tariff Regulations provide as follows:-

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

*(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission*



control system based on straight line method, with salvage value of 10%, over a period of –

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

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

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

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

(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	15210.97	15341.18	15648.06	15648.06	15648.06
B	Addition during the year 2019-24 due to projected Additional Capitalisation	130.21	306.88	0.00	0.00	0.00
C	Closing Gross Block (A+B)	15341.18	15648.06	15648.06	15648.06	15648.06
D	Average Gross Block (A+C)/2	15276.08	15494.62	15648.06	15648.06	15648.06
E	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Lapsed useful life at the beginning of the year (Year)	2.00	3.00	4.00	5.00	6.00
G	Balance useful life at the beginning of the year (Year)	13.00	12.00	11.00	10.00	9.00
H	Depreciable value (D*90%)	13748.47	13945.16	14083.26	14083.26	14083.26
I	<b>Combined Depreciation during the year (D*E)</b>	<b>966.98</b>	<b>980.81</b>	<b>990.52</b>	<b>990.52</b>	<b>990.52</b>
J	Cumulative Depreciation at the end of the year	3521.38	4502.19	5492.71	6483.23	7473.76
K	Remaining Aggregate Depreciable Value at the end of the year	10227.09	9442.97	8590.55	7600.02	6609.50



### **Interest on Loan (IoL)**

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

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

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

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

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

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

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

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

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

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

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

75. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the



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

76. We have considered the submission of the Petitioner and the IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed is follows:

(₹ in lakh)						
	Combined Asset					
	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	10647.68	10738.83	10953.64	10953.64	10953.64
B	Cumulative Repayments upto Previous Year	2554.40	3521.38	4502.19	5492.71	6483.23
C	Net Loan-Opening (A-B)	8093.28	7217.45	6451.46	5460.93	4470.41
D	Addition due to Additional Capitalization	91.15	214.82	0.00	0.00	0.00
E	Repayment during the year	966.98	980.81	990.52	990.52	990.52
F	Net Loan-Closing (C+D-E)	7217.45	6451.46	5460.93	4470.41	3479.89
G	Average Loan (C+F)/2	7655.36	6834.45	5956.20	4965.67	3975.15
H	Weighted Average Rate of Interest on Loan (in %)	8.28	8.23	8.19	8.17	8.14
I	<b>Interest on Loan (G*H)</b>	<b>633.85</b>	<b>562.22</b>	<b>487.61</b>	<b>405.75</b>	<b>323.70</b>

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

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

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

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

*Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the*





generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%;

*Provided further that:*

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

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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





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

### **Illustration-**

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

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

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

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

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

78. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. We have considered the submissions of the Petitioner. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed under Regulation 30 of the 2019 Tariff Regulations



is as follows:

(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	4563.29	4602.36	4694.42	4694.42	4694.42
B	Addition due to Additional Capitalization	39.06	92.06	0.00	0.00	0.00
C	Closing Equity (A+B)	4602.36	4694.42	4694.42	4694.42	4694.42
D	Average Equity (A+C)/2	4582.82	4648.39	4694.42	4694.42	4694.42
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>860.75</b>	<b>873.06</b>	<b>881.71</b>	<b>881.71</b>	<b>881.71</b>

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

79. Regulation 35(4) of the 2019 Tariff Regulations provides as follows:

*“35 (3) Transmission system:*

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

80. The Petitioner has claimed O&M Expenses for Central Portion @ 2% of the capital cost subject to actual expenditure at the time of truing-up.

81. We have considered the submissions of the Petitioner. The capital cost allowed for Combined Asset is ₹15210.97 lakh as on 31.3.2019. Accordingly, O&M Expenses are allowed in this order @ 2% of the capital cost as provided in Regulation 35(3)(4) of the 2019 Tariff Regulations, which shall be subject to review at the time of truing-up is as follows:

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Capital cost allowed as on 31.3.2019 (₹ in lakh)	15210.97	15210.97	15210.97	15210.97	15210.97
B	% of Capital cost	2	2	2	2	2
C	<b>Allowed O&amp;M Expenses (₹ in lakh)</b>	<b>304.22</b>	<b>304.22</b>	<b>304.22</b>	<b>304.22</b>	<b>304.22</b>



### **Interest on Working Capital (IWC)**

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

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

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

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

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

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

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

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

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

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

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

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



applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24 onwards.

The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)						
	Combined Asset					
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O & M Expenses (O&M expenses for 1 month)	25.35	25.35	25.35	25.35	25.35
B	Working Capital for Maintenance Spares (15% of O&M expenses)	45.63	45.63	45.63	45.63	45.63
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	346.24	341.10	333.68	323.46	312.34
D	<b>Total of Working Capital</b>	<b>417.22</b>	<b>412.08</b>	<b>404.67</b>	<b>394.44</b>	<b>383.33</b>
E	Rate of Interest for Working Capital (%)	12.05	11.25	10.50	10.50	10.50
F	<b>Interest of working capital</b>	<b>50.28</b>	<b>46.36</b>	<b>42.49</b>	<b>41.42</b>	<b>40.25</b>

#### **Annual Fixed Charges for the 2019-24 Tariff Period**

84. The transmission charges 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	966.98	980.81	990.52	990.52	990.52
Interest on Loan	633.85	562.22	487.61	405.75	323.70
Return on Equity	860.75	873.06	881.71	881.71	881.71
Operation and Maintenance Expenses	304.22	304.22	304.22	304.22	304.22
Interest on Working Capital	50.28	46.36	42.49	41.42	40.25
<b>Total</b>	<b>2816.08</b>	<b>2766.67</b>	<b>2706.55</b>	<b>2623.62</b>	<b>2540.40</b>

#### **Filing Fee and Publication Expenses**

85. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the



present petition, directly from the beneficiaries on pro rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

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

### **Security Expenses**

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

88. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission asset 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 said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

### **Goods and Services Tax (GST)**

89. The Petitioner has submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Government of India has exempted the charges of transmission of electricity. Hence, the transmission charges as indicated in the instant petition are



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

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

#### **Capital Spares**

91. The Petitioner has sought reimbursement of capital spares at the end of tariff period. We have considered the submissions of the Petitioner. The Petitioner's claim of capital spares, if any, shall be dealt with in accordance with the applicable regulations.

#### **Sharing of Transmission Charges**

92. 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. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the transmission charges approved for the transmission assets in the instant order for 2014-19 tariff period and 2019-24 tariff period shall be governed by the applicable Sharing Regulations as provided under Regulation 43 of the 2014 Tariff Regulations and 57 of the 2019 Tariff Regulations, respectively.



93. To summarise,

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

(₹ in lakh)

Asset-A1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total	112.11	133.28	126.39	131.63	132.99

(₹ in lakh)

Asset-A2					
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Total	71.46	101.09	94.81	99.47	101.13

(₹ in lakh)

Asset-B1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total	25.25	35.71	45.42	44.88	43.28

(₹ in lakh)

Asset-B2					
Particulars	2014-15 (Pro-rata for 186 days)	2015-16	2016-17	2017-18	2018-19
Total	32.55	67.20	70.70	73.68	70.58

(₹ in lakh)

Asset-B3					
Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Total	33.67	70.69	74.03	77.05	73.85

(₹ in lakh)

Asset-B4					
Particulars	2014-15 (Pro-rata for 2 days)	2015-16	2016-17	2017-18	2018-19
Total	3.18	604.36	596.86	589.94	577.37





(₹ in lakh)

Asset-B5				
Particulars	2015-16 (Pro-rata for 1 day)	2016-17	2017-18	2018-19
Total	1.16	418.74	372.34	354.08

(₹ in lakh)

Asset-B6			
Particulars	2016-17 (Pro-rata for 243 days)	2017-18	2018-19
Total	216.97	375.13	410.88

(₹ in lakh)

Asset-B7			
Particulars	2016-17 (Pro-rata for 2 days)	2017-18	2018-19
Total	3.81	250.48	286.96

(₹ in lakh)

Asset-B8		Asset-C1		Asset-C2
Particulars	2017-18 (Pro-rata for 182 days)	2018-19	2017-18 (Pro-rata for 4 days)	2018-19 (Pro-rata for 13 days)
Total	118.91	429.45	1.09	113.20
				4.57

- b. The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	2816.08	2766.67	2706.55	2623.62	2540.40

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

95. This order disposes of Petition No. 294/TT/2022 in terms of the above discussions and findings.

sd/-  
(P. K. Singh)  
Member

sd/-  
(Arun Goyal)  
Member

sd/-  
(I. S. Jha)  
Member



Asset-A1									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	445.42	338.64	784.06	6.33	36.66	45.12	45.20	46.01	48.18
<b>Total</b>	<b>445.42</b>	<b>338.64</b>	<b>784.06</b>		36.66	45.12	45.20	46.01	48.18
Average Gross Block (₹ in lakh)					579.11	712.80	714.05	726.82	761.20
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33



Asset-A2									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	417.19	168.48	585.67	6.33	29.40	32.61	32.91	33.61	35.65
<b>Total</b>	<b>417.19</b>	<b>168.48</b>	<b>585.67</b>		<b>29.40</b>	<b>32.61</b>	<b>32.91</b>	<b>33.61</b>	<b>35.65</b>
Average Gross Block (₹ in lakh)					464.42	515.11	519.88	530.90	563.13
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33



Asset-B1									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	129.72	114.85	244.56	6.33	8.34	11.98	15.48	15.48	15.48
<b>Total</b>	<b>129.72</b>	<b>114.85</b>	<b>244.56</b>		<b>8.34</b>	<b>11.98</b>	<b>15.48</b>	<b>15.48</b>	<b>15.48</b>
Average Gross Block (₹ in lakh)					131.81	189.23	244.56	244.56	244.56
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33



Asset-B2									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	290.98	109.95	400.93	6.33	20.17	21.92	23.65	25.38	25.38
<b>Total</b>	<b>290.98</b>	<b>109.95</b>	<b>400.93</b>		<b>20.17</b>	<b>21.92</b>	<b>23.65</b>	<b>25.38</b>	<b>25.38</b>
Average Gross Block (₹ in lakh)					318.61	346.27	373.61	400.93	400.93
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33



Asset-B3									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	307.88	110.88	418.76	6.33	21.26	23.03	24.77	26.51	26.51
<b>Total</b>	<b>307.88</b>	<b>110.88</b>	<b>418.76</b>		<b>21.26</b>	<b>23.03</b>	<b>24.77</b>	<b>26.51</b>	<b>26.51</b>
Average Gross Block (₹ in lakh)					335.86	363.84	391.30	418.76	418.76
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33



Asset-B4									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	3000.89	186.52	3187.41	6.33	189.96	191.55	193.40	191.75	195.81
<b>Total</b>	<b>3000.89</b>	<b>186.52</b>	<b>3187.41</b>		<b>189.96</b>	<b>191.55</b>	<b>193.40</b>	<b>191.75</b>	<b>195.81</b>
Average Gross Block (₹ in lakh)					3000.89	3026.04	3055.23	3029.26	3093.32
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33

Asset-B5								
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations			
Capital Expenditure as on COD		2014-19			2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	2101.33	-103.20	1998.13	6.33	133.01	130.65	121.79	120.89
<b>Total</b>	<b>2101.33</b>	<b>-103.20</b>	<b>1998.13</b>		<b>133.01</b>	<b>130.65</b>	<b>121.79</b>	<b>120.89</b>
Average Gross Block (₹ in lakh)					2101.33	2063.93	1924.08	1909.87
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33





Asset-B6							
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations		
Capital Expenditure as on COD		2014-19			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	1649.87	553.09	2202.96	6.33	104.44	121.94	139.45
<b>Total</b>	<b>1649.87</b>	<b>553.09</b>	<b>2202.96</b>		<b>104.44</b>	<b>121.94</b>	<b>139.45</b>
Average Gross Block (₹ in lakh)					1649.87	1926.41	2202.96
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33



Asset-B7							
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations		
Capital Expenditure as on COD		2014-19			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	1180.36	505.88	1686.24	6.33	74.72	81.67	97.68
<b>Total</b>	<b>1180.36</b>	<b>505.88</b>	<b>1686.24</b>		<b>74.72</b>	<b>81.67</b>	<b>97.68</b>
Average Gross Block (₹ in lakh)					1180.36	1290.17	1543.11
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33



Asset-B8						
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations	
Capital Expenditure as on COD		2014-19			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	453.91	1921.79	2375.70	6.33	89.56	150.38
<b>Total</b>	<b>453.91</b>	<b>1921.79</b>	<b>2375.70</b>		<b>89.56</b>	<b>150.38</b>
Average Gross Block (₹ in lakh)					1414.80	2375.70
Weighted Average Rate of Depreciation (in %)					6.33	6.33



Asset-C1						
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations	
Capital Expenditure as on COD		2014-19			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	492.75	178.62	671.37	6.33	31.19	36.84
<b>Total</b>	<b>492.75</b>	<b>178.62</b>	<b>671.37</b>		<b>31.19</b>	<b>36.84</b>
Average Gross Block (₹ in lakh)					492.75	582.06
Weighted Average Rate of Depreciation (in %)					6.33	6.33



Asset-C2					
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
Capital Expenditure as on COD		2014-19			2018-19 (₹ in lakh)
PLCC	655.19	0.00	655.19	6.33	41.47
<b>Total</b>	<b>655.19</b>	<b>0.00</b>	<b>655.19</b>		<b>41.47</b>
Average Gross Block (₹ in lakh)					655.19
Weighted Average Rate of Depreciation (in %)					6.33



Combined Asset									
2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019		2019-24			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
PLCC	15210.97	437.09	15648.06	6.33	966.98	980.81	990.52	990.52	990.52
<b>Total</b>	<b>15210.97</b>	<b>437.09</b>	<b>15648.06</b>		<b>966.98</b>	<b>980.81</b>	<b>990.52</b>	<b>990.52</b>	<b>990.52</b>
Average Gross Block (₹ in lakh)					15276.08	15494.62	15648.06	15648.06	15648.06
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33

