CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 116/TT/2023

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 08.05.2024

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 in respect of Asset-1: OPGW link for 765 kV Sasan-Satna Ckt-1 under Central Sector, Asset-2: OPGW link for 220 kV Indore-Pithampura (MPPTCL) under State Sector & Asset-3: OPGW link for Satna Gwalior Ckt-1 under Central Sector under "Establishment of Fibre Optic Communication System under Master Communication Plan in Western Region".

And in the matter of:

Power Grid Corporation of India Limited, SAUDAMINI, Plot No-2, Sector-29, Gurgaon-122001 (Harvana).

...Petitioner

Versus

- Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur-482008.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Bombay Road, Indore-452008.
- Maharashtra State Electricity Distribution Company Limited, Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001.



- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
- Electricity Department,
 Government of Goa, Vidyut Bhawan,
 Panaji, Near Mandvi Hotel,
 Goa-403001.
- Electricity Department,
 Administration of Daman & Diu,
 Daman-396210.
- 7. DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
- Chhattisgarh State Power Distribution Company Limited,
 P.O. Sunder Nagar, Dangania,
 Raipur, Chhatisgarh-492013.

...Respondent(s)

For Petitioner : Shri Zafrul Hasan, PGCIL

Shri Mohd. Mohsin, PGCIL

For Respondents: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited for truing up of transmission tariff of the 2014-19 tariff 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 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for the 2019-24 tariff period in respect of the following assets under Establishment of Fibre Optic

Communication System under Master Communication Plan (hereinafter referred to as "the transmission project") in the Western Region:

Asset-1: OPGW link (242 km) for 765 kV Sasan-Satna Ckt-1 under Central Sector:

Asset-2: OPGW link (36 km) for 220 kV Indore-Pithampura (MPPTCL) under State Sector and:

Asset-3: OPGW link (336 km) for Satna Gwalior Ckt-1 under Central Sector (hereinafter referred to as "communication assets")

(Asset-1 and Asset-3 have been combined as they pertain to the Central Sector as on 1.4.2019 and have been collectively referred to as "Combined Asset (Asset-1 and Asset-3)" for the 2019-24 tariff period. Asset-2 pertains to the State Sector and the tariff for the same has been determined separately in the 2019-24 tariff period.)

- 2. The Petitioner has made the following prayers in the petition:
 - "1) Condone the delay in filing of instant petition.
 - 2) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above.
 - Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6 and 7 above.
 - 4) 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 Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 above for respective block.
 - 5) 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.
 - 6) 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.
 - 7) 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.

- 8) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is levied 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 the transmission project was accorded by the Board of Directors of the Petitioner's Company in its 267th meeting held on 8.2.2012 and communicated vide Memorandum Ref. No. C/CP/Master Comm. in WR dated 9.2.2012, at an estimated cost of ₹21807 lakh, including Interest During Construction (IDC) of ₹1305 lakh based on the 4th quarter, 2011 price level.
 - b. Further, considering the various aspects like an increase in IDC attributable to variation in the rate of interest considered in FR, increase in overall capital cost, variation due to higher awarded/executed rates, change in scope of work, etc., OPGW links under the transmission project was revised. Accordingly, the Revised Cost Estimate (RCE) for the transmission project has been accorded by the Board of Directors of the Petitioner's company in its 378th meeting held on 10.8.2020 and communicated vide Ref No. PA2021-06-0K-RCE005 dated 21.9.2020, at an estimated cost of ₹24061 lakh, including IDC of ₹2710 lakh based on the December 2019 price level.

- c. Initially, the scope of the work covered under the transmission project as per IA was as follows:
 - Installation of OPGW fibre optic cable on the existing EHV transmission line of the Petitioner and constituents, the estimated length of such cable is approximately 5536 km.
 - ii. Installation of OPGW fibre optic cable on the new EHV transmission line of the Petitioner, the estimated length of such cable is approximately 1355 km.
 - iii. Utilization of six (6) fibres from existing OPGW cable of the Petitioner

 Telecom network (535 km) for two links on a cost sharing basis.
 - iv. 72 terminal equipment for communication based upon Synchronous Digital Hierarchy (SDH) technology will be installed in the Sub-stations of numbers and few on the constituents. The transmission project also involves the installation of 117 Multiplexer (Mux.) / Drop & Insert (D&I) / Digital Access Cross Connect Switch (DACS) at wideband nodes. To monitor the network, a Network Management System (NMS) is also envisaged.
 - v. For MPPTCL, 15 terminal equipment for communication based upon SDH technology, 14 Mux/ D&I at and one set of NMS system is also envisaged.
 - vi. Presently, DC power supply has been envisaged at all the wideband locations. However, the requirement will be optimized during detailed engineering.

d. The item-wise breakup of the scope of work for Central Sector and MPPTCL is as follows:

SI. No	Description	Central Sector	MPPTCL
1	OPGW cable on existing lines (in km)	5297	239
2	OPGW cable on new lines (in km)	1355	NIL
3	SDH Equipment (in numbers)	72	15
4	Mux/ D&I/ DACS (in numbers)	117	14
5	DC Power Supply (in numbers)	72	NIL

- e. Further, in the 25th WRPC meeting held on 4.2.2014, Asset-1 and Asset-3 OPGW links under the transmission project were added. In the 26th WRPC meeting held on 21.6.2014, the requirement of OPGW on the LILO portion of Asset-2 under the transmission petition was added.
- f. The revised scope of work covered under the transmission project is as follows:
 - Installation of OPGW fibre optic cable on the EHV transmission line of the Petitioner and constituents. The estimated length of such cable is approximately 7109 km.
 - ii. Utilization of six (6) fibres from existing OPGW cable of the Petitioner's Telecom network (approximately 1465 km) for six (6) numbers of links on a cost sharing basis.
 - iii. 103 terminal equipment for communication based upon SDH technology shall be installed in the sub-stations of the Petitioner mostly and few on the constituents. Installation of 155 Mux. / (D&I) / DACS at wideband nodes. To monitor the network, NMS is also being installed.
 - iv. For MPPTCL, 16 terminal equipment for communication based upon SDH technology, 39 Mux/ D&I are being implemented.
 - v. Installation of 41 DC Power Supply systems.

- vi. Installation of 7 Repeater Shelters and Hot-line speech communication system.
- g. The revised item-wise break up of the scope of work for the Central sector and MPPTCL is as follows:

SI. No.	Description of Element	Central Sector	MPPTCL
1	OPGW cable on EHV lines (in km)	6912	197
2	SDH Equipment (in numbers)	103	16
3	Mux/D&I/DACS (in numbers)	155	39
4	DC Power Supply (in numbers)	37	4

4. The details of the communication assets covered in other petitions are as follows:

Name	COD	Petition No.	Order date		
14 numbers OPGW links (1513.36 km) under Central Sector	22.9.2015				
27 numbers OPGW links (1892.58 km) under Central Sector	21.10.2016				
14 numbers OPGW links (1423.69 km) under Central Sector	30.11.2017				
3 numbers OPGW links (123.33 km) under Central Sector	1.7.2018	37/TT/2020	Order		
2 numbers OPGW links (9.22 km) under State Sector (MPPTCL)	30.11.2017	res			
6 numbers OPGW links (191.42 km) under State Sector (MPPTCL)	1.7.2018				
3 numbers OPGW links (392.63 km) under Central Sector	1.5.2017				
2 numbers OPGW links (546 km) under Central Sector	1.9.2017				
2 numbers OPGW links (274 km) under Central Sector	1.3.2018				
OPGW link for LILO of Lonikhand-Kalwa at Navi	13.5.2019				
Mumbai Transmission Line	(Proposed)				
OPGW link for Vapi-Kudus (upto LILO of Kala from Vapi)	26.5.2019	242/TT/2022	20.1.2024		
OPGW link for 220 kV Kawas-Vav and 220 kV Kawas-Navsari	21.6.2019				
OPGW link for 220 kV Bhopal-Govindpur SLDC (MPPTCL)	24.1.2020				
Covered under instant petition					
OPGW link (242 km) for 765 kV Sasan-Satna Ckt-1 under Central Sector	16.1.2019	645/TT/2020	10.6.2022		
OPGW link (36 km) for 220 kV Indore-Pithampura (MPPTCL) under State Sector	1.3.2019	045/11/2020	10.0.2022		

Name	COD	Petition No.	Order date
OPGW link (336 km) for Satna Gwalior Ckt-1 under Central Sector	30.3.2019		

- 5. The Respondents are distribution licensees, transmission licensees, and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region.
- 6. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. No reply was filed by any of the Respondents in the instant petition.
- 7. The matter was heard on 27.9.2023, and the order was reserved.
- 8. This order is issued considering the submissions made by the Petitioner in the main petition and subsequent affidavit dated 20.9.2023.
- 9. The Petitioner has submitted that there is a delay in filing the instant petition and has prayed to condone it.
- 10. As per Regulation 9(2) of the 2019 Tariff Regulations, the Petitioner is required to file the tariff petitions for truing up the tariff of the existing assets by 31.10.2019. The Commission, in an order dated 28.10.2019 in Petition No. 331/MP/2019, relaxed the provisions of Regulation 9(2) of the 2019 Tariff Regulations and permitted the Petitioner to file the tariff petitions for truing up of the tariff of the existing assets for the 2014-19 period and determination of tariff for the 2019-24 period by 31.1.2020, where the final

orders for the 2014-19 period had already been issued. In matters where the tariff for the 2014-19 tariff period was not issued, the Commission observed that the petitions for truing up of the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period shall be filed by the Petitioner within three months from the date of issue of the final order for the 2014-19 tariff period.

11. In the instant case, the tariff order for the communication assets for the 2014-19 tariff period was approved vide order dated 10.6.2022 in Petition No. 645/TT/2020. As per the order dated 28.10.2019 in Petition No. 331/MP/2019, the Petitioner was required to file the truing up petition by 9.9.2022. However, the Petitioner has filed the instant petition on 3.1.2023. There is a delay of 104 days in filing the petition, and we condone the same. However, the Petitioner is directed to file the truing up petitions in the future within the time specified in the Tariff Regulations.

Truing up of Annual Fixed Charges for 2014-19 tariff period

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

(₹ in lakh)

			(
	Asset-1	Asset-2	Asset-3
Particulars	2018-19	2018-19	2018-19
i di ficulai 3	(pro-rata for	(pro-rata for	(pro-rata for
	75 days)	31 days)	2 days)
Depreciation	6.94	0.68	0.23
Interest on Loan	6.47	0.65	0.21
Return on Equity	6.50	0.64	0.21
Interest on Working Capital	0.92	0.04	0.59
O&M Expenses	10.14	0.00	11.55
Total	30.97	2.01	12.79

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

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3
	2018-19	2018-19	2018-19
	(pro-rata for	(pro-rata for 31	(pro-rata for 2
	75 days)	days)	days)
O&M Expenses	4.11	0.00	175.66
Maintenance Spares	7.40	0.00	316.18
Receivables	25.12	3.95	389.00
Total Working Capital	36.63	3.95	880.84
Rate of Interest (in %)	12.20	12.20	12.20
Interest on Working Capital	0.92	0.04	0.59

Capital Cost

- 14. The capital cost of the communication assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.
- 15. The Commission, vide order dated 10.6.2022 in Petition No. 645/TT/2020, allowed the capital cost as on COD for Asset-1, Asset-2, and Asset-3 and allowed the ACE for the 2014-19 period. The details of the capital cost allowed are as follows:

(₹ in lakh)

	FR	RCE	Capital cost	ACE allowed	Capital cost
Assets	Apportioned approved cost	Apportioned approved cost	allowed as on COD	2018-19	allowed as on 31.3.2019
Asset-1	305.73	1055.31	528.64	(260.10)	268.54
Asset-2	78.84	193.17	95.78	6.86	102.64
Asset-3	305.73	1055.31	674.31	(254.61)	419.70
Total	690.30	2303.79	1298.73	(507.85)	790.88

16. The Petitioner in the instant true-up petition, has submitted the following capital cost for truing-up in the 2014-19 tariff period:

Assets	FR Apportioned approved cost	RCE Apportioned approved capital cost	Capital cost as on COD	ACE Claimed 2018-19	Total capital cost as on 31.3.2019
Asset-1	305.73	1055.31	680.28	(260.10)	420.18
Asset-2	78.84	193.17	127.53	6.86	134.39
Asset-3	305.73	1055.31	794.35	(254.61)	539.74
Total	690.30	2303.79	1602.16	(507.85)	1094.31

Telecom sharing/ decapitalisation

17. The Petitioner has submitted that there is telecom link sharing on some of the links pertaining to Asset-1, and Asset-2. Therefore, it is submitted that the decapitalization against telecom sharing has been accounted for while computing the true-up tariff for the concerned assets as follows:

 (₹ in lakh)

 Asset 1:
 Amount

 765 kV Sasan - Satna Ckt 1
 -348.92

 Transfer to Telecom. 2018-19
 -348.92

 Add cap 2018-19
 88.82

 Total Add Cap 2018-19
 -260.40

(₹ in lakh)

Asset 3: 765 kV Satna - Gwalior Ckt 1	Amount
Transfer to Telecom. 2018-19	-422.96
Add cap 2018-19	168.35
Total Add Cap 2018-19	-254.61

18. The Petitioner has submitted the total cost of ₹1094.31 lakh as on 31.3.2019 against the approved cost of ₹2303.79 lakh with respect to RCE. Therefore, the total cost as on 31.3.2019 is within the RCE approved cost. However, there is a variation in the cost of the communication assets, and the Petitioner has submitted the reasons for the cost variation as follows:

Reasons for variation in cost

19. The major variation in cost is due to the following reasons:

Asset-1	As per FR estimate	As per actual	Cost over-run	Reasons
Communication Cost	261.6	628.5	366.9	Variation is due to higher awarded/ executed rates w.r.t. unit rates considered in FR
IEDC	27.9	35.48	7.58	While estimation, 10.75% of equipment cost has been considered as IEDC. However,

				the actual amount of IEDC is higher.
IDC	16.23	135.41	119.18	Increase in IDC is attributable to a variation in the rate of interest considered in FR v/s Actuals, increase in overall capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated considering the rate of interest for domestic loans @10.5%. The actual IDC accrued up to the COD has been claimed.
Total	305.73	799.39	493.66	

(₹ in lakh)

Asset-2	As per FR estimate	As per Actual	Cost over- run	Reasons
Communication Cost	65.2	108.65	43.45	Variation is due to higher awarded/ executed rates w.r.t. unit rates considered in FR
IEDC	8.93	6.67	(2.26)	While estimation, 10.75% of equipment cost has been considered as IEDC. However, the actual amount of IEDC, which is higher is claimed.
IDC	4.72	29.3	24.58	Increase in IDC is attributable to a variation in the rate of interest considered in FR v/s Actuals, increase in overall capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated considering the rate of interest for domestic loans @10.5%. The actual IDC accrued upto the COD has been claimed.
Total	78.85	144.62	65.77	

Asset-3	As per FR estimate	As per Actual	Cost over- run	Reasons
Communication Cost	261.6	784.84	523.24	Variation is due to higher awarded/ executed rates w.r.t. unit rates considered in FR
IEDC	27.9	43.03	15.13	While estimation 10.75% of equipment cost has been considered as IEDC. However, the actual amount of IEDC, which is higher is claimed.
IDC	16.23	103.4	87.17	Increase in IDC is attributable to a variation in the rate of interest considered in FR v/s Actuals,



				increase in overall capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated considering the rate of interest for domestic loans @10.5%. The actual IDC accrued upto the COD has been claimed.
Total	305.73	931.27	625.54	

- 20. The Petitioner has submitted that there is no cost over-run w.r.t. RCE.
- 21. We have considered the Petitioner's submission. The Commission has already taken cognizance of RCE in the cases of Asset-1, Asset-2, and Asset-3 in the previous order. The estimated completion cost is within RCE approved cost and the same is allowed.

Time Over-run

22. As per the IA dated 8.2.2012, the communication assets were scheduled to be put under commercial operation within 30 months from the date of IA, i.e., by 8.8.2014. However, Asset-1, Asset-2, and Asset-3 were put into commercial operation on 16.1.2019, 1.3.2019, and 30.3.2019, respectively. The details of the scheduled date of commercial operation (SCOD), date of commercial operation (COD) along with details of time over-run in respect of the communication assets are as follows:

Assets	SCOD	COD	Time over-run
Asset-1	0.0.004.4	16.1.2019	1622 days
Asset-2	8.8.2014	1.3.2019	1666 days
Asset-3		30.3.2019	1695 days

23. The Petitioner has claimed that as per the revised scope, SCOD for the new links is considered within 30 months from the date of WRPC approval. Therefore, the revised SCOD is 28.8.2016 for Asset-1 and Asset-3 and 25.1.2017 for Asset-2. The Commission, in an order dated 10.6.2022 in Petition No. 645/TT/2020, has already

approved the SCOD of the communication assets as 8.8.2014. However, the communication assets were put into commercial operation on 16.1.2019 (Asset-1), 1.3.2019 (Asset-2), and 30.3.2019 (Asset-3) with a time over-run of 1622 days, 1666 days, and 1695 days respectively.

- 24. The Commission, in an order dated 10.6.2022 in Petition No. 645/TT/2020 did not condone the time over-run in the case of Asset-1, Asset-2, and Asset-3 and gave liberty to the Petitioner to approach the Commission at the time of truing-up. The relevant portion of the order dated 10.6.2022 is as follows:
 - "22. We have considered the submissions of the Petitioner, MPPMCL and MPPTCL. As stated above, the SCOD of the transmission assets was 8.8.2014 and considering the actual COD, the delay in declaring the COD of Asset-1, Asset-2 and Asset-3 ranges from 1622 days, 1666 days and 1695 days respectively. The Petitioner vide affidavit dated 16.3.2020 and 21.9.2021 has submitted the asset-wise details of reasons for time over-run. However, it does not contain the details of the period affected by each activity, without which it is difficult to analyse the admissibility of time over-run. Therefore, we are not inclined to condone the time over-run in case of the transmission assets. However, the Petitioner is at liberty to approach the Commission, at the time of truing up, with proper details of the time period affected by each events.
- 25. The Petitioner, in the instant petition, has submitted the following reasons for time over-run:
 - (a) According to the IA dated 8.2.2012, the timeline for completing the communication assets was 30 months from the date of the IA.
 - (b) However, Asset-1 and Asset-3 were added during 25th WRPC meeting held on 4.2.2014 (MoM issued on 28.2.2014) and Asset-2 was added during 26th WRPC held on 21.6.2014 (MoM issued on 25.7.2014). Accordingly, the revised SCOD for the new links was considered within 30 months from the date of WRPC approval. Therefore, the revised SCOD of Asset-1 and Asset-

3 is 28.8.2016 and Asset-2 is 25.1.2017. The details of the time over-run as per the revised SCOD are as follows:

Assets	SCOD	Revised SCOD as per 25 th WRPC and 26 th WRPC approval date	Actual COD	Time over- run as per SCOD	Time over- run as per Revised SCOD
Asset-1	8.8.2014	28.8.2016	16.1.2019	1622 days	871 days
Asset-2		25.1.2017	1.3.2019	1666 days	765 days
Asset-3		28.8.2016	30.3.2019	1695 days	944 days

26. The reasons given by the Petitioner for time over-run in the case of the communication assets are as follows:

Asset-1: OPGW link (242 km) for 765 kV Sasan-Satna Ckt-1 under Central Sector

Sr.	Reason for delay	Period	affected	Duration	Remarks
No.		From	То		
1	Link was added to the scope after IA	8.2.2012	28.2.2014	751 days	Addition of this link in project scope at a later date. Original scope of the transmission project was discussed and approved in the 14 th WRPC held on 19.8.2010, However in 25 th WRPC meeting held on 4.2.2014, 765 kV Sasan-Satna was added. Minutes of 25 th WRPC meeting were issued on 28.2.2014. So, the period from IA date up to the issue of minutes of 25 th WRPC meeting may be condoned.
2	Severe RoW issues	23.5.2016	28.10.2017	523 days	Progress around 25 km radius of Satna was affected due to very severe RoW issues. By September, 2016, all installation work on this link was completed except for 30 km part near Satna. No progress could be achieved from May, 2016 to October 2017, which is evident from various letters written by the Petitioner to the local administration and Police.

27. List of correspondence made with the police and local administration to solve the RoW issues is as follows:

Sr.	Date	Letter
No.		
1	23.5.2016	Letter from Chief Manager (Transmission Line-Satna) to Police station incharge, Unchehra for support required in clearing RoW on Sasan-Satna link.
2	26.5.2016	Letter from Chief Manager (Transmission Line -Satna) to Collector, Satna, for support required in clearing RoW on Sasan-Satna
3	26.5.2016	Letter from SDM, Unchehra to SHO for extending support to clear RoW issues around Satna.
4	5.9.2016	Letter from Project Manager, LS Cables & System informing completion of all OPGW work on Sasan-Satna & Satna-Gwalior except for 30 km portion around Satna
5	10.3.2017	Letter from Manager (Transmission Line -Satna) to SHO, Unchehra for support to clear RoW issues on Sasan-Satna & Satna-Gwalior links
6	25.3.2017	Letter from SDM, Unchehra to SHO for extending support in clearing RoW issues around Satna.
7	28.10.2017	Letter from Chief Manager (Transmission Line -Satna) to SHO, Unchehra for support to clear RoW on Sasan-Satna link

28. The Sasan-Satna link was completed with great difficulty due to extremely severe RoW issues around Satna. The link was finally completed in January 2019 because of the consistent efforts from the site team and support from the local police and administration.

Asset-2: OPGW link (36 km) for 220 kV Indore-Pithampura (MPPTCL) under State Sector

Sr.	Reasons for delay	Reasons for delay Period affected Duration		Duration	Remarks
No		From	То		
1	Link was added to the scope after IA	9.2.2012	25.7.2014	897 days	Requirement of OPGW on the LILO portion was approved in the 26th WRPC on 21.6.2014 (MoM issued on 25.7.2014). So, the period from the IA date up to the issuance of minutes of 26 th WRPC meeting may be condoned.
2	Delay in receiving earth wire engineering data from MPPTCL for finalizing cable design	25.7.2014	8.2.2017	929 days	As the requirement of OPGW for LILO portion of Pithampur-Pithampur was now covered in another project of MCP-Additional, (the IA of which was accorded vide memorandum

					dated 24.4.2015), some clarification from MPPTCL was required regarding 48F requirement on multi circuit portion of this line. This clarification was received only vide MPPTCL letter ref: 1500/17/626 dtd.8.2.2017.
3	Delay in receipt of WRLDC certificate	8.6.2018	28.2.2019	266 days	Indore 400-Pithampur 400 link was ready on 8.6.2018 but there was a delay from WRLDC in the issue of certificate for this link and same was issued on 29.3.2019 with date of charging as 28.2.2019.

Correspondence made regarding issuance of WRLDC certificate:

Sr. No.	Date	Letter
1	8.6.2018	Mail from the Petitioner informing execution of Indore-Pithampur link.
2	8.6.2018	Mail from Tejas networks informing proper working of telemetry from Pithampur.
3	6.8.2018	Petitioner's request letter to WRLDC for issue of trial run certificate for 10 links including Indore-Pithampur.
4	6.10.2018	Mail confirmation from MPPTCL confirming proper working of both Pithampur links.
5	29.3.2019	WRLDC certificate confirming trial run for Indore-Pithampur and other links from 28.2.2019.

Asset-3: OPGW link (336 km) for Satna Gwalior Ckt-1 under Central Sector

Sr.	Reasons for delay	Period	Period affected		Remarks
No.		From	То		
1	Link was added to the scope after IA	8.2.2012	28.2.2014	751 days	Addition of this link in the transmission project scope at a later date. The original scope of this transmission project was discussed and approved in the 14 th WRPC held on 19.8.2010. However, in 25 th WRPC meeting held on 4.2.2014, 765 kV Satna-Gwalior was added. Minutes of 25 th WRPC meeting were issued on 28.2.2014. So, the period from IA date up to the issue of minutes of 25 th WRPC meeting may be condoned.

2	Delay in associated transmission line due to delay in land acquisition	28.2.2014	22.7.2014	144 days	Award letter for the land for Gwalior bay at Satna Substation was passed by District Collector Satna on 19.6.2012. However, the following litigations were filed by landowners:
					 Shravan Kumar Tripathi Vs. State of MP, Power Grid Corp of India & Others. Bhai Lal Charmakar Vs. State of MP, Power Grid Corp of India & Others.
					The above-mentioned cases were resolved in July, 2014
3	Severe RoW issues	23.5.2016	28.10.2017	523 days	Progress around 25 km radius of Satna was affected due to very severe RoW issues. By September, 2016, all installation work on this link was completed except for 30 km part near Satna. No progress could be achieved from May, 2016 to October, 2017, which is evident from various letters written by the Petitioner from Satna to the local administration and police.

Time over-run due to delay in associated transmission line because of delay in land acquisition:

29. The Petitioner had applied for the acquisition of a total of 12.485 Ha (10.269 Ha private land and 2.216 Ha government land) on 24.2.2010, and gazette Notifications were issued in the following orders (i) Sec 4-23.7.2010 and 14.9.2010 (ii) Sec 6-27.8.2010 and 19.11.2010. The amount as per the demand note raised by the revenue authorities, was deposited on 15.11.2010. The award letter for the land was passed by the District Collector, Satna, on 19.6.2012. However, the above-mentioned two petitions were filed by landowners before the Hon'ble High Court of MP, Jabalpur. As a result,

the Petitioner could obtain the physical possession of the land after evacuation by the landowners in the last week of July 2014 in both cases.

30. The Satna-Gwalior link was executed with great difficulty due to severe RoW issues around Satna. The link was finally completed in March, 2019 after consistent efforts from the site team, and support from local police and administration.

Chronology for RoW issues:

Sr. No.	Date	Letter
1	23.5.2016	Letter from Chief Manager (Transmission Line-Satna) to Police station incharge, Unchehra for support required in clearing RoW on Sasan-Satna link.
2	26.5.2016	Letter from Chief Manager (Transmission Line -Satna) to Collector, Satna, for support required in clearing RoW on Sasan-Satna
3	26.5.2016	Letter from SDM, Unchehra to SHO for extending support to clear RoW issues around Satna.
4	5.9.2016	Letter from Project Manager, LS Cables & System informing completion of all OPGW work on Sasan-Satna & Satna-Gwalior except for 30 km portion around Satna
5	10.3.2017	Letter from Manager (Transmission Line -Satna) to SHO, Unchehra for support to clear RoW issues on Sasan-Satna & Satna-Gwalior links
6	25.3.2017	Letter from SDM, Unchehra to SHO for extending support in clearing RoW issues around Satna.
7	28.10.2017	Letter from Chief Manager (Transmission Line -Satna) to SHO, Unchehra for support to clear RoW on Sasan-Satna link

31. The Petitioner has requested to take into consideration the reasons and the documents submitted and condone the time over-run in case of the transmission assets as it was beyond the Petitioner's control.

Analysis and decision

32. We have considered the Petitioner's submissions and have gone through the information furnished justifying the time over-run. As per IA dated 8.2.2012, the communication assets were scheduled to be put into commercial operation within 30 months from the date of IA, i.e. by 8.8.2014. The OPGW links under the instant petition were revised and approved by 25th WRPC Meeting held on 4.2.2014 in the case of Asset-1 and Asset-3 and in the 26th WRPC Meeting held on 21.6.2014 in the case of

Page 19 of 64

Asset-2. The relevant extracts of the minutes of the 25th WRPC and 26th WRPC is as follows:

"ITEM No 21: MODIFICATION IN MASTER COMMUNICATION NETWORK.

Background: Implementation of Master Communication plan to connect Central sector Substations & Power Plants and some of STU substations was approved in the 14th WRPC meeting. Additional requirement to be implemented under the Master Communication plan was also approved in the 21st WRPC meeting. The project is under implementation as per approval of WRPC.

WRPC approval is based upon the network details finalized in the SCADA O&M committee meeting. As per approval of SCADA O&M committee, the connectivity to Kolhapur and Solapur substations of POWERGRID is to be provided by installing OPGW on Parli-Solapur and Solapur-Kolhapur lines owned by "Reliance Power Transmission Limited", as there is no other suitable route available. The order for installation of OPGW has already been placed and the work is under implementation. POWERGRID has taken up with "Reliance Power Transmission Limited" for their permission to install OPGW on their lines vide letter dated 17.01.2013, 31.01.2013, 11.03. 2013 and 28.05.2013. Reliance in their response has raised the issues such as payment of tariff on removal of earth wire, insurance, mortgage of assets and maintenance etc. and has requested WRLDC to discuss this issue in the SCADA committee.

As the installation of OPGW has the approval of SCADA committee and WRPC, WRLDC has accordingly informed to Reliance. The points raised by Reliance being commercial and contractual, it may take long time for resolving the same. In view of above issues involved in installation of OPGW on Parli-Sholapur and Sholapur-Kolhapur lines of Reliance, following changes in the communication network to provide fiber connectivity to Kolhapur and Sholapur substations of POWERGRID were made and approved in the SCADA Committee meeting held on 08.11.13.

- (i) In place of Kolhapur-Sholapur line the fiber connectivity to Kolhapur s/s is proposed to be provided through Kolhapur-Kudgi(Narendra) Inter-regional line and data is proposed to be routed through Southern region to WRLDC.
- (ii) In place of Parli-Sholapur line the fiber connectivity to Parli 400 and Sholapur 765 is proposed to be provided through 400 kV Parli- Wardha and 765 kV Aurangabad- Sholapur line. TCC: PGCIL representative informed that many issues have been raised by Reliance. which will take some time. In view of importance of data of Kolhapur & Sholapur, SCADA committee was approached and SCADA committee recommended revised proposal..

TCC agreed for the same.

WRPC agreed on the same.

Background: Further following proposals were made and approved in the SCADA Committee meeting held on 08.11.13.

A) To provide connectivity to 765 kV Orai S/s in Northern Region, OPGW is proposed to be laid on ckt-I of 765 kV Satna-Gwalior line.

- B) To provide OPGW on 765 kV Satna- Sasan UMPP (248 Km) in place of 765 kV Satna Vindhyachal pooling (as approved in 14th WRPC) line which shall provide backup link to Sasan UMPP. The changes mentioned above and other changes required due to changes in routing of lines under construction are indicated in the enclosed table (as Annexure-21) along with the communication network.
- C) To provide fibre connectivity to Lara and Solapur power plants of NTPC, the OPGW on (i) Lara STPP Raigarh (Kotra) (ii) Lara STPP Champa Pooling station and (iii) Solapur STPP Solapur (PG) lines has been proposed. TCC agreed.

WRPC agreed on the same."

33. We have gone through the minutes of the 25th WRPC held on 4.2.2014, wherein it has been mentioned that 765 kV Satna-Sasan UMPP (248 km) in place of 765 kV Satna-Vindhyachal pooling and 765 kV Satna-Gwalior line has been approved in the SCADA Committee meeting held on 8.11.2013. The Petitioner has claimed that this led to the time over-run in the case of the OPGW links. Taking into consideration the approval of the 25th WRPC dated 28.2.2014, the revised SCOD of Asset-1 and Asset-3 is approved may be taken as 28.8.2016. Accordingly, the time over-run in the case of Asset-1 and Asset-3 as per revised SCOD is 871 days and 944 days respectively.

Asset-1

34. As per the IA dated 8.2.2012, the scheduled COD of Asset-1 is 8.8.2014, and it was put into commercial operation on 16.1.2019. Thus, there is a time over-run of 1622 days, and the Petitioner has attributed the time over-run to the addition of the OPGW link to the scope of the transmission project after more than two years of IA, i.e. on 28.2.2014 and RoW issues from 23.5.2016 to 28.10.2017. As stated above, we have already revised the SCOD of Asset-1 as 28.8.2016 and it has been put into commercial operation on 16.1.2019. Thus, the time over-run in the case of Asset-1 as per the

revised SCOD is 871 days. Therefore, we proceed to examine the reasons given by the Petitioner for the time over-run beyond the revised SCOD of 28.8.2016.

- 35. The Petitioner has submitted that the Asset-1 was affected by severe RoW issues from 23.5.2016 to 28.10.2017 (523 days) in and around Satna and has submitted copies of the correspondence made with the local administration and police department and, from this, we are unable to conclude which are the locations are affected by RoW problems and when the Petitioner had resolved the RoW problems. Further, there is nothing on record to show any special efforts made at the Senior level to resolve RoW issues. Therefore, we are not inclined to condone the time over-run from the revised SCOD of 28.8.2016 to 28.10.2017, attributed to RoW issues.
- 36. Moreover, the Petitioner has not explained the reasons for the time overrun from 28.10.2017 to the COD of Asset-1 on 16.1.2019. As the Petitioner has not submitted any reason for time overrun beyond 28.10.2017, we do not condone the time overrun from 28.10.2017 to 16.1.2019. Accordingly, the time over-run of 871 days from the revised SCOD on 28.8.2016 to the COD of the Asset-1 on 16.1.2019 is not condoned.

Asset-3

As in the case of Asset-1, the SCOD of Asset-3 was 8.8.2014 and it was put into commercial operation on 30.3.2019. Thus, there is a time over-run of 1695 days. The Petitioner has attributed the time overrun to (a) the addition of the OPGW link to the scope of the transmission project after more than two years of IA, i.e., on 28.2.2014, (b) delay in execution of the associated transmission line due to delay in land acquisition from 28.2.2014 to 22.7.2014 and (c) RoW issues from 23.5.2016 to 28.10.2017. As we have already revised the SCOD of Asset-3 to 28.8.2016, we consider the time over-run in the case of Asset-3 from 28.8.2016 to the COD of Asset-3 on 30.3.2019. The Petitioner has submitted that the time over-run in the case of Asset-3 is due to severe Page 22 of 64

RoW problems in and around Satna from 23.5.2016 to 28.10.2017 and has submitted the copies of the correspondence made with the local administration and police department. We have perused them, and from this, we are unable to conclude which locations are affected due to RoW issues and when the Petitioner had resolved the RoW problems at a particular location. Further, there is nothing on record to show any special efforts made at the Senior level to resolve ROW issues. Therefore, we are not inclined to condone the time over-run from the revised SCOD of 28.8.2016 to 28.10.2017. Further, the Petitioner has not explained the reasons for the time over-run beyond 28.10.2017. Accordingly, the time over-run of 944 days beyond the revised SCOD on 28.8.2016 to the COD of Asset-3 on 30.3.2019 is not condoned.

Asset-2

38. The Petitioner has submitted that Asset-2 was later included in the transmission project and the same was discussed and agreed in the 26th WRPC meeting. The relevant extracts of the minutes of the 26th WRPC meeting is as follows:

"ITEM NO. 24. MODIFICATION IN MASTER COMMUNICATION NETWORK.

The Master communication plan of MP is being implemented by PGCIL, LD&C along with Master communication plan of WR. The Master Communication plan was approved in 14th WRPC accordingly 239 KM of OPGW for MPPTCL network along with associated communication was considered for implementation.

Further during 23rd WRPC meeting held 12th June 2013 at Silvasa, the additional requirement of 723 KM of OPGW and associated equipment for MPPTCL network has been approved by WRPC. However, in regard to changes in the transmission system, the following modifications are required in the approved Master Communication plan of MP: The following links of the approved plan are to be deleted:

S. No.	Name of lines / link OPGW	Route Length in Kms
1	Rewa 220 KV S/s - Satna 220	67
	KV S/s	
2	Itarsi 220 KV S/s – Sarni	72
	220KV S/s	
3	Ratlam 220 KV S/s -	150
	Pithampur 400 KV S/s	

The following new links are to be added in plan:

S. No.	Name of lines / link OPGW	Route Length in Kms
1	Itarsi 220 KV S/s - Itarsi	3
	(PGCIL)	
2	Rajgarh 220 KV S/s –	13
	Rajgarh (PGCIL)	
3	Malanpur 220 KV S/s -	40
	Gwalior (PG)	
4	Pithampur 220 KV S/s –	23
	Pithampur 400 KV S/s	
5	Neemuch 220 KV S/s -	78
	Gandhisagar HPS	
6	Seoni 220 KV S/s – Pech	90
	HPS	

The above modification has already been discussed and recommended by SCADA(O&M) committee meeting held at WRLDC Mumbai on 08-03-2014.

TCC

MS WRPC stated that since the modifications have been recommended by the SCADA Committee therefore modification in MP portion of Master Telecom project may please be approved by WRPC. TCC recommended the same.

WRPC agreed to TCC recommendation."

- 39. We have gone through the minutes of the 26th WRPC held on 25.7.2014. The Petitioner has submitted that Asset-2 was included in the transmission project leading to the time over-run in the case of the OPGW links. Taking into consideration the approval of the 26th WRPC dated 25.7.2014, the revised SCOD of Asset-2 is approved and considered as 25.1.2017. Accordingly, the time over-run of 765 days in the execution of Asset-2 is condoned.
- 40. The Petitioner has further submitted that the time over-run in the case of Asset-2 is due to a delay in receiving earth wire engineering data from MPPTCL for finalizing cable design and a delay in receipt of the WRLDC certificate. The Petitioner has submitted that the time period from 25.7.2014 to 8.2.2017 (929 days) is on account of the delay in receiving earth wire data from MPPTCL. We have perused the documents

submitted by the Petitioner. As per information submitted by the Petitioner, certain information was sought from MPPTCL vide letter dated 8.2.2017. MPPTCL has given clarification for the laying of OPGW on MPPTCL lines. The Petitioner has not submitted any documentary proof of the communication from 25.7.2014 to 8.2.2017 and also not provided any letter addressed to MPPTCL for clarification required for laying OPGW on MPPTCL lines. The Petitioner has submitted selective information due to which it is not possible to analyze how much time was affected on account of delay on the part of the MPPTCL. Accordingly, we are not inclined to condone the time over-run in receiving earth wire data from MPPTCL.

41. The Petitioner has submitted that the time period from 8.6.2018 to 28.2.2019 was due to a delay in receiving the charging certificate from WRLDC. We have gone through the documents submitted by the Petitioner in this regard. The Petitioner has submitted that the OPGW link has been executed on 8.6.2018. However, WRLDC issued the certification on 29.3.2019 regarding the successful trial operation of the communication asset as 29.2.2019. In this regard, the Petitioner has submitted some communication made with WRLDC from 8.6.2018 to 6.10.2018, wherein it has been noted that the Petitioner, vide email dated 8.8.2018 and 3.10.2018 to WRLDC requested for COD of the communication asset. WRLDC, vide email dated 4.10.2018, sought confirmation of the communication assets from MPPTCL regarding the working of telemetry and voice. In response, MPPTCL vide email dated 6.10.2018 communicated that few assets, including the subject asset, are working and few assets are not working. Thus, the Petitioner has neither provided any information regarding the action taken, including communication exchanged with WRLDC, nor were supporting documents provided for the period from 8.6.2018 to 2.10.2018 and from 7.10.2018 to 27.2.2019. Accordingly,

considering the documents submitted, we condone the time over-run from 3.10.2018 to 6.10.2018 (4 days), However, we are unable to accept the Petitioner's contention that the delay from 8.6.2018 to 2.10.2018 and from 7.10.2018 to 27.2.2019 was attributable to WRLDC. Therefore, the time over-run is not condoned.

42. The summary of the time over-run condoned/ not condoned is as follows:

Assets	Approved Revised SCOD	Actual COD	Time over-	Time over- run Condoned	Time over-run not condoned
Asset-1	28.8.2016	16.1.2019	871 days	-	871 days
Asset-2	25.1.2017	1.3.2019	765 days	4 days	761 days
Asset-3	28.8.2016	30.3.2019	944 days	-	944 days

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

43. The Petitioner has claimed the following IDC for the communication assets and has submitted the statement showing the IDC claim. The discharge of IDC liability as on COD and thereafter is as follows:

(₹ in lakh)

	IDC as per	· IIII discharded lin -		IDC discharged during the year		
Assets	Auditor's Certificate	to COD	2018-19	2019-20		
Asset-1	135.41	118.55	0.32	16.56		
Asset-2	29.30	25.33	0.00	3.96		
Asset-3	103.40	94.65	0.00	8.74		

44. The Petitioner has submitted the IDC computation statement, which contains the name of the loan, drawl date, loan amount, interest rate, and interest claimed. The IDC is worked out based on the details given in the IDC statement. Further, the loan amount as on COD has been mentioned in Form-6 and Form-9C. On scrutiny of these documents, certain discrepancies have been noted, such as a mismatch in the loan amount between the IDC statement and Form-6 and Form-9C. The allowable IDC has been worked out based on the information available on record and relying on the loan Page 26 of 64

amount as per Form-9C. The IDC is considered as on COD, and the summary of discharge of IDC liability up to COD and, thereafter, for the purpose of tariff determination is as follows:

Acceta	IDC as per Auditor's	IDC disallowed due to time	IDC	IDC		rged during year
Assets	certificate	overrun not condoned	allowed	discharged up to COD	2018-19	2019-20
Asset-1	135.41	82.04	53.38	53.38	0.00	0.00
Asset-2	29.30	14.48	14.81	14.81	0.00	0.00
Asset-3	103.40	62.97	40.42	40.42	0.00	0.00

45. The Petitioner has claimed IEDC for all the communication assets covered in the instant petition. A part of IEDC has been disallowed due to time over-runs not condoned. Accordingly, IEDC considered and allowed as on COD for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IEDC as per Auditor's Certificate	IEDC disallowed due to time overrun not condoned	IEDC allowed
Asset-1	35.49	12.20	23.29
Asset-2	6.67	1.97	4.70
Asset-3	43.03	15.58	27.45

Earth Wire Treatment

- 46. The Commission, vide order dated 10.6.2022 in Petition No. 645/TT/2020, is held as under:
 - "35. We have considered the submissions of the Petitioner and the MPPMCL. We tend to agree with MPPMCL that the Petitioner should have disposed the EW and submitted the details of the amount realised for adjustment in the capital cost of the transmission assets. The Petitioner has submitted that its attempts to dispose of EW did not succeed. The Petitioner is directed to take action to dispose of the EW and submit the details of the amount realised at the time of truing up for adjustment in the capital cost."
- 47. The Petitioner in the instant true-up Petition has submitted that an amount of ₹34.71 lakh and ₹48.19 lakh realised on the sale of earth wire scrap has been adjusted Page 27 of 64

in the capital cost of Asset-1 and Asset-3, respectively, in 2021-22 in accordance with the directions of the Commission, an order dated 10.6.2022 in Petition No. 645/TT/2020.

48. We have considered the submissions of the Petitioner. The amounts of ₹34.71 lakh and ₹48.19 lakh towards the sale of earth wire scrap has been adjusted in the capital cost of Asset-1 and Asset-3 in FY 2021-22

Initial Spares

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

"(d) Transmission System

- (i) Transmission line: 1.00%
- (ii) Transmission Sub-station (Green Field): 4.00%
- (iii) Transmission Sub-station (Brown Field): 6.00%
- (iv) Series Compensation devices and HVDC Station: 4.00%
- (v) Gas Insulated sub-station :5.00%
- (vi) Communication System: 3.5%"
- 50. The Initial Spares claimed by the Petitioner are as follows:

Assets	Particulars	Plant and machinery cost (excluding IDC and IEDC, land cost, and cost of civil works)	Initial Spares claimed	Ceiling limit as per Regulations (in %)	Initial Spares worked out	Excess Initial Spares	Balance available within the criteria
Asset-1	Communication System	628.49	12.42	3.50	22.34	0.00	9.92
Asset-2	Communication System	108.66	3.81	3.50	3.80	0.00	0.00
Asset-3	Communication System	784.84	15.92	3.50	27.89	0.00	11.97

51. The Initial Spares allowed in respect of the communication assets are as follows:

(₹ in lakh)

Assets	Plant and Machinery cost (excluding IDC and IEDC, land cost & cost of civil works) upto cut-off date	Initial Spares claimed	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable	Excess Initial Spares	Initial Spares allowed
	А	В	С	D= (A- B) * C/(100-	E-B	
Asset-1	628.49	12.42	3.50	22.34	0.00	12.42
Asset-2	108.66	3.81	3.50	3.80	0.01	3.80
Asset-3	784.84	15.92	3.50	27.89	0.00	15.92

Capital Cost as on COD

52. The details of capital cost approved as on COD in respect of the communication assets are as follows:

(₹ in lakh)

Assets	Capital cost claimed as on	Disallowed as on COD (B)		Items corresponding to admitted capital cost as on COD (C)	Capital cost allowed as on COD (D = A-B- C)	
	COD (A)	IDC due to time overrun not condoned	IEDC	Initial Spares	Undischarged IDC	-
Asset-1	680.29	82.04	12.20	0.00	0.00	586.06
Asset-2	127.53	14.48	1.97	0.01	0.00	111.08
Asset-3	794.35	62.97	15.58	0.00	0.00	715.80

Additional Capital Expenditure ("ACE")

53. The Commission had allowed ACE for the communication assets for the 2014-19 period vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3 and projected ACE for the 2014-19 period under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations, which is as follows:

Assets	RCE Apportioned approved cost	Capital cost allowed as on COD	ACE (including IDC discharge) 2018-19	Capital cost as on 31.3.2019
Asset-1	1055.31	528.64	(260.10)	268.54
Asset-2	193.17	95.78	6.86	102.64
Asset-3	1055.31	674.31	(254.61)	419.70

54. The cut-off dates of the communication assets are as follows:

Assets	COD	Cut-off date
Asset-1	16.1.2019	31.1.2022
Asset-2	1.3.2019	31.3.2022
Asset-3	30.3.2019	31.3.2022

55. The asset-wise details of the ACE claimed by the Petitioner are as follows:

(₹ in lakh)

Asset	Year	ACE	Regulations
Asset-1	2018-19	(260.10)	-
Asset-2	2018-19	6.86	Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations
Asset-3	2018-19	(254.61)	-

56. We have considered the Petitioner's submissions. The ACE claimed by the Petitioner is towards balance and retention payments and works deferred for execution, and the same is allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations. The capital cost allowed for the 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	RCE Apportioned approved cost	Capital cost	ACE (incl. IDC discharge)	Capital cost as on 31.3.2019
	approved cost	allowed as off COD	2018-19	
Asset-1	1055.31	586.06	(260.10)	325.96
Asset-2	193.17	111.08	6.86	117.94
Asset-3	1055.31	715.80	(254.61)	461.19

Debt-Equity ratio

57. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the Tariff Regulations, the debt-equity ratio applicable as on COD is considered. The details of the debt-equity ratio as on COD and 31.3.2019 are as follows:

Asset-1

710001						
Funding	Capital cost as on COD (₹ in lakh)	(in %)	ACE in 2014- 19 (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	410.24	70.00	(182.07)	70.00	228.17	70.00

Funding	Capital cost as on COD (₹ in lakh)	(in %)	ACE in 2014- 19 (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Equity	175.82	30.00	(78.03)	30.00	97.79	30.00
Total	586.06	100.00	(260.10)	100.00	325.96	100.00

Asset-2

Funding	Capital cost as on COD (₹ in lakh)	(in %)	ACE in 2014- 19 (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	77.75	70.00	4.80	70.00	82.56	70.00
Equity	33.32	30.00	2.06	30.00	35.38	30.00
Total	111.08	100.00	6.86	100.00	117.94	100.00

Asset-3

Funding	Capital cost as on COD (₹ in lakh)	(in %)	ACE in 2014- 19 (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	501.06	70.00	(178.23)	70.00	322.83	70.00
Equity	214.74	30.00	(76.38)	30.00	138.36	30.00
Total	715.80	100.00	(254.61)	100.00	461.19	100.00

Depreciation

58. The Gross Block during the 2014-19 tariff period has been depreciated at the weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out considering the depreciation rates of the communication assets as specified in the 2014 Tariff Regulations. Accordingly, the depreciation allowed during the 2014-19 tariff period is as follows:

		Asset-1	Asset-2	Asset-3
	Particulars	2018-19 (pro-rata for 75 days)	2018-19 (pro-rata for 31 days)	2018-19 (pro-rata for 2 days)
	Depreciation			
Α	Opening Gross Block	586.06	111.08	715.80
В	ACE	-260.10	6.86	-254.61
С	Closing Gross Block (A+B)	325.96	117.94	461.19
D	Average Gross Block (A+C)/2	456.01	114.51	588.49
Е	Weighted Average Rate of Depreciation (in %)	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	15	15



		Asset-1	Asset-2	Asset-3
	Particulars	2018-19 (pro-rata for 75 days)	2018-19 (pro-rata for 31 days)	2018-19 (pro-rata for 2 days)
G	Lapsed life at the beginning of the year (Year)	0	0	0
Н	Aggregate Depreciable Value	410.40	103.06	529.64
I	Depreciation during the year	5.93	0.62	0.20
J	Aggregate Cumulative Depreciation	5.93	0.62	0.20
K	Remaining Depreciable Value (H-J)	404.47	102.44	529.44

59. The details of depreciation allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

	, ,
Particulars	2018-19
Asset-1	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	5.18
Claimed by the Petitioner in the instant petition	6.94
Approved after true-up in this order	5.93
Asset-2	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.53
Claimed by the Petitioner in the instant petition	0.68
Approved after true-up in this order	0.62
Asset-3	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.19
Claimed by the Petitioner in the instant petition	0.23
Approved after true-up in this order	0.20

Interest on Loan ("IoL")

60. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. IoL has been calculated based on the actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the communication assets are as follows:

(₹ in lakh)

		Asset-1	Asset-2	Asset-3
		2018-19	2018-19	2018-19
	Particulars	(pro-rata for	(pro-rata for	(pro-rata for
		75 days)	31 days)	2 days)
	Interest on Loan			
Α	Gross Normative Loan	410.24	77.75	501.06
В	Cumulative Repayments up to	0.00	0.00	0.00
Ь	Previous Year	0.00	0.00	0.00
С	Net Loan-Opening (A-B)	410.24	77.75	501.06
D	Additions	-182.07	4.80	-178.23
Е	Repayment during the year	5.93	0.62	0.20
F	Net Loan-Closing (C+D-E)	222.24	81.94	322.63
G	Average Loan (C+F)/2	316.24	79.85	411.84
Н	Weighted Average Rate of Interest	0.5400	0.0007	0.2200
"	on Loan (in %)	8.5133	8.6087	8.3309
I	Interest on Loan (G*H)	5.53	0.58	0.19

61. The details of IoL allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2018-19
Asset-1	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	4.76
Claimed by the Petitioner in the instant petition	6.47
Approved after true-up in this order	5.53
Asset-2	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.51
Claimed by the Petitioner in the instant petition	0.65
Approved after true-up in this order	0.58
Asset-3	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.17
Claimed by the Petitioner in the instant petition	0.21
Approved after true-up in this order	0.19

Return on Equity ("RoE")

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

Year	Claimed effective tax rate (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

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

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

64. The MAT rates considered in an order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up 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 and the same is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

65. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE @15.50% with effective tax rates (based on MAT rates) each year as per the above-

mentioned regulation. The trued-up RoE is allowed on the basis of the MAT rate applicable in the respective years for the 2014-19 tariff period as follows:

(₹ in lakh)

		Asset-1	Asset-2	Asset-3
		2018-19	2018-19	2018-19
	Particulars	(pro-rata for	(pro-rata for	(pro-rata
		75 days)	31 days)	for 2 days)
	Return on Equity			
Α	Opening Equity	175.82	33.32	214.74
В	Additions	(-)78.03	2.06	(-)76.38
С	Closing Equity (A+B)	97.79	35.38	138.36
D	Average Equity (A+C)/2	136.80	34.35	176.55
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.549	21.549	21.549
G	Rate of Return on Equity (in %)	19.758	19.758	19.758
Н	Return on Equity (D*G)	5.55	0.58	0.19

66. The details of RoE approved vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars Particulars					
Asset-1					
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020					
Claimed by the Petitioner in the instant petition					
Approved after true-up in this order	5.55				
Asset-2					
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020					
Claimed by the Petitioner in the instant petition					
Approved after true-up in this order					
Asset-3					
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020					
Claimed by the Petitioner in the instant petition					
Approved after true-up in this order					

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

67. The O&M Expenses claimed by the Petitioner in respect of the communication assets for the period from their COD to 31.3.2019 are as follows:

	(₹ in lakh)		
Particulars	2018-19		
Asset-1	10.14		
Asset-3	11.55		

- 68. The Petitioner has claimed the O&M Expenses for the communication assets, which are under the Central Portion, and has submitted the Auditor's Certificate in support of the same.
- 69. The O&M Expenses norms applicable for the communication assets as per the 2014 Tariff Regulations are as follows:

"29. Operation and Maintenance Expenses:

(4) Transmission System

- (c) The operation and maintenance expenses of communication system forming part of inter-state transmission system shall be derived on the basis of the actual O&M expenses for the period of 2008-09 to 2012-13 based on audited accounts excluding abnormal variations if any after prudence check by the Commission. The normalized O&M expenses after prudence check, for the years 2008-09 to 2012-13 shall be escalated at the rate of 3.02% for computing base year expenses for FY 2012-13, 2013- 14 and at the rate of 3.32% for escalation from 2014-15 onwards."
- 70. We have considered the Petitioner's submissions. The Petitioner has claimed expenditure towards self-insurance, petition filing charges, and advertisement and publicity charges as expenses under O&M Expenses.
- 71. The Commission, in an order dated 29.7.2016 in Petition No. 275/TT/2015, disallowed the Petitioner's claim towards self-insurance. The relevant portion of the said order is extracted below 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, petitioner vide affidavit Order in Petition No. 275/TT/2015 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 reserve as expenses under O&M Expenses which is not allowable as expenses."

Page 36 of 64

72. Therefore, the Petitioner's claim towards self-insurance is not allowed.

Order in Petition No. 116/TT/2023

- 73. As regards the petition filing charges and advertisement and publicity charges, the Commission, in an order dated 26.4.2022 in Petition No. 272/TT/2020, considered the Petitioner's claim towards petition filing charges and advertisement and publicity charges and disallowed the same. The relevant portion of the said order is as follows:
 - "31. Further, the Petitioner has also claimed the petition filing charges as part of the O&M Expenses, which has to be claimed directly from the beneficiaries, therefore, the same is not allowable under O&M Expenses and accordingly has been disallowed.
 - 32. The Petitioner has also claimed the Advertisement & Publicity charges as part of the O&M Expenses, which is not allowable as O&M Expenses and therefore has been disallowed."
- 74. In line with the above orders, the expenditure is not allowable for self-insurance, petition filing charges, and advertisement and publicity charges as expenses under O&M Expenses. Therefore, the proportionate share self-insurance reserve, entertainment, advertisement and publicity, brokerage and commission, and out-of-pocket expenses pertaining to communication assets covered in the instant petition are disallowed, which is as follows:

 Assets
 2018-19

 Asset-1
 0.56

 Asset-3
 0.63

75. Accordingly, the O&M Expenses allowed in respect of the communication assets as per norms specified in the 2014 Tariff Regulations are as follows:

	(₹ in lakh
Assets	2018-19
Asset-1	9.58
Asset-3	10.92

76. The details of O&M Expenses approved vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asset-3	
Particulars	2018-19 (Pro-rata for 75 days)	2018-19 (Pro-rata for 31 days)	2018-19 (Pro-rata for 2 days)	
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	9.58	0.00	10.92	
Claimed by the Petitioner in the instant petition	10.14	0.00	11.55	
Allowed in the instant order	9.58	0.00	10.92	

Interest on Working Capital ("IWC")

77. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The IWC allowed for the communication assets for the period from their COD to 31.3.2019 are as follows:

(₹ in lakh)

		Asset-1	Asset-1 Asset-2			
		2018-19	2018-19	2018-19		
	Particulars	(Pro-rata for	(Pro-rata for	(Pro-rata		
		75 days)	31 days)	for 2 days)		
	Interest on Working Capital					
Α	O&M Expenses	3.89	0.00	166.01		
В	Maintenance Spares	7.00	0.00	298.81		
С	Receivables	22.45	3.56	366.66		
D	Total Working Capital (A+B+C)	33.13	3.56	831.48		
Ε	Rate of Interest (in %)	12.20	12.20	12.20		
F	Interest of working capital (D*E)	0.83	0.04	0.56		

78. The details of IWC allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	2018-19			
Asset-1				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.78			
Claimed by the Petitioner in the instant petition	0.92			
Approved after true-up in this order	0.83			
Asset-2				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.03			
Claimed by the Petitioner in the instant petition	0.04			
Approved after true-up in this order	0.04			
Asset-3				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	0.55			

Particulars	2018-19
Claimed by the Petitioner in the instant petition	0.59
Approved after true-up in this order	0.56

Approved Annual Fixed Charges for 2014-19 Tariff Period

79. The trued-up AFC approved for the communication assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

		Asset-1	Asset-2	Asset-3
	Particulars	2018-19 (pro-rata for 75 days)	2018-19 (pro-rata for 31 days)	2018-19 (pro-rata for 2 days)
	Annual Transmission Charges			
Α	Depreciation	5.93	0.62	0.20
В	Interest on Loan	5.53	0.58	0.19
С	Return on Equity	5.55	0.58	0.19
D	O&M Expenses	9.58	0.00	10.92
Е	Interest on Working Capital	0.83	0.04	0.56
F	Total (A+B+C+D+E)	27.43	1.82	12.05

80. The details of AFC allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020 for Asset-1, Asset-2, and Asset-3, AFC claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

	2010.10			
Particulars Particulars	2018-19			
Asset-1				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	25.17			
Claimed by the Petitioner in the instant petition	30.97			
Approved after true-up in this order	27.43			
Asset-2				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	1.57			
Claimed by the Petitioner in the instant petition	2.01			
Approved after true-up in this order	1.82			
Asset-3				
Allowed vide order dated 10.6.2022 in Petition No. 645/TT/2020	12.01			
Claimed by the Petitioner in the instant petition	12.79			
Approved after true-up in this order	12.05			

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

81. The Petitioner has claimed the following transmission charges for the Combined Asset (Asset-1 and Asset-3) and Asset-2 for the 2019-24 tariff period:

(₹ in lakh)

	Combined Asset (Asset-1 and Asset-3)						
Particulars	2019-20 2020-21 2021-22 2022-23 2023-24						
Depreciation	62.87	68.96	90.45	109.55	109.55		
Interest on Loan	55.15	55.18	63.83	69.15	60.57		
Return on Equity	55.97	61.39	80.51	97.52	97.52		
Interest on Working Capital	4.12	4.31	5.05	5.67	5.53		
O&M Expenses	34.61	34.61	34.61	34.61	34.61		
Total	212.72	224.45	274.45	316.50	307.78		

(₹ in lakh)

	Asset-2				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8.60	9.05	9.15	9.15	9.15
Interest on Loan	7.70	7.30	6.61	5.84	5.07
Return on Equity	7.66	8.06	8.15	8.15	8.15
Interest on Working Capital	0.36	0.37	0.36	0.35	0.34
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	24.32	24.78	24.27	23.49	22.71

82. The details of IWC claimed by the Petitioner for the 2019-24 tariff period in respect of the Combined Asset (Asset-1 and Asset-3) and Asset-2 are as follows:

(₹ in lakh)

	Combined Asset (Asset-1 and Asset-3)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2.88	2.88	2.88	2.88	2.88
Maintenance Spares	5.19	5.19	5.19	5.19	5.19
Receivables	26.15	27.67	33.84	39.02	37.84
Total Working Capital	34.22	35.74	41.91	47.09	45.91
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	4.12	4.31	5.05	5.67	5.53

		Asset-2				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O&M Expenses	0.00	0.00	0.00	0.00	0.00	
Maintenance Spares	0.00	0.00	0.00	0.00	0.00	
Receivables	2.99	3.06	2.99	2.90	2.79	
Total Working Capital	2.99	3.06	2.99	2.90	2.79	

	Asset-2				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	0.36	0.37	0.36	0.35	0.34

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

83. The Petitioner has claimed that the E-COD of the Combined Asset (Asset 1 and Asset 3) as 26.2.2019. Based on the trued-up admitted capital cost as on 31.3.2019 and their actual COD of the E-COD worked out is as follows:

Assets	Capital cost as on 31.3.2019 (₹ in lakh)	COD	Number of days from last COD	Weightage of cost (in %)	Weighted days	E-COD (Latest COD weighted days)
Asset-1	325.96	16.1.2019	73.00	41.41	30.23	
Asset-3	461.19	30.3.2019	0.00	58.59	0.00	27.2.2019
Total	787.14			1.00	30.23	

84. E-COD is used to determine the lapsed life of the project as a whole which works out as 0 (zero) years as on 1.4.2019 (i.e., the number of years completed as on 1.4.2019 from E-COD).

Capital Cost

- 85. Regulation 19 of the 2019 Tariff Regulations provides as follows:
 - "19 Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed:
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;



- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.



- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The assets forming part of the project, but not in use, as declared in the tariff petition:
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 86. The Petitioner has claimed the capital cost of ₹934.63 lakh as on 31.3.2019 for the Combined Asset (Asset-1 and Asset-3) and capital cost of ₹130.43 lakh as on 31.3.2019 for Asset-2. Trued up capital cost of ₹787.14 lakh as on 31.3.2019 for the Combined Asset (Asset-1 and Asset-3) and admitted capital cost of ₹117.94 lakh as on 31.3.2019 for Asset-2 have been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure ("ACE")

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

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

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

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

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

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

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

- (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - (b) Change in law or compliance of any existing law;
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
 - (d) Liability for works executed prior to the cut-off date;
 - (e) Force Majeure events;
 - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
 - (g) Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
 - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
 - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
 - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."



88. The Petitioner has claimed ACE of ₹770.74 lakh for the 2019-24 period for the Combined Asset (Asset-1 and Asset-3) and ACE of ₹10.22 lakh for Asset-2 under Regulation 24(1)(a) and Regulation 24 (1)(b) of the 2019 Tariff Regulations. Accordingly, the ACE claim has been allowed subject to truing up, and it is as follows:

(₹ in lakh)

	Capital	ACE					Capital cost
Assets	cost as on 31.3.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.3.2024
Asset-1	325.96	59.82	45.79	273.60			705.17
Asset-3	461.19	32.12	29.40	330.01			852.71
Combined Asset (Asset-1 and Asset-3)	787.14	91.94	75.19	603.61			1557.88

(₹ in lakh)

	Capital		ACE					
Asset	cost as on 31.3.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.3.2024	
Asset-2	117.94	6.98	3.24				128.16	

Debt-Equity ratio

89. 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."
- 90. The debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 tariff period is allowed under Regulation 18(3) of the 2019 Tariff Regulations. The debt-equity ratio considered for the purpose of computation of tariff for the Combined Asset (Asset-1 and Asset-3) for the 2019-24 tariff period is as follows:

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE in 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	551.00	70.00	539.52	70.00	1090.52	70.00
Equity	236.14	30.00	231.22	30.00	467.36	30.00

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE in 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Total	787.14	100.00	770.74	100.00	1557.88	100.00

91. The debt-equity ratio considered for the purpose of computation of tariff for Asset-

2 for the 2019-24 tariff period is as follows:

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE in 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	82.56	70.00	7.15	70.00	89.71	70.00
Equity	35.38	30.00	3.07	30.00	38.45	30.00
Total	117.94	100.00	10.22	100.00	128.16	100.00

Depreciation

- 92. Regulation 33 of the 2019 Tariff Regulations provides as follows:
 - **"33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

Provided further that in case of hydro generating stations, the salvage value

shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized 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."
- 93. We have considered the Petitioner's submissions. The depreciation has been worked out, considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Since the communication assets consist of only one element of PLCC, the gross block during the 2019-24 tariff period has been depreciated at the rate of 6.33%, as provided for communication equipment in the 2019 Tariff Regulations. The depreciation allowed for the Combined Asset (Asset 1 and Asset 3) and Asset-2 is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
	Depreciation						
Α	Opening Gross Block	787.14	879.08	954.27	1557.88	1557.88	
В	ACE	91.94	75.19	603.61	0.00	0.00	
С	Closing Gross Block (A+B)	879.08	954.27	1557.88	1557.88	1557.88	
D	Average Gross Block (A+C)/2	833.11	916.68	1256.08	1557.88	1557.88	
Е	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33	
F	Balance useful life of the asset (Year)	15	14	13	12	11	
G	Lapsed life at the beginning of the year (Year)	0	1	2	3	4	
H	Aggregate Depreciable Value	749.80	825.01	1130.47	1402.09	1402.09	
-	Depreciation during the year	52.74	58.03	79.51	98.61	98.61	
J	Cumulative Depreciation	58.87	116.90	196.41	295.02	393.63	
K	Remaining Depreciable Value (H-J)	690.93	708.11	934.06	1107.07	1008.46	

Cumulative depreciation as on 31.3.2019 is ₹6.13 lakh

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
Α	Opening Gross Block	117.94	124.92	128.16	128.16	128.16
В	ACE	6.98	3.24	0.00	0.00	0.00
С	Closing Gross Block (A+B)	124.92	128.16	128.16	128.16	128.16
D	Average Gross Block (A+C)/2	121.43	126.54	128.16	128.16	128.16
Е	Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33	6.33
F	Balance useful life of the asset (Year)	15	14	13	12	11
G	Lapsed life at the beginning of the year (Year)	0	1	2	3	4
Н	Aggregate Depreciable Value	109.29	113.88	115.34	115.34	115.34
	Depreciation during the year	7.69	8.01	8.11	8.11	8.11
J	Cumulative Depreciation	8.30	16.31	24.42	32.54	40.65
K	Remaining Depreciable Value (H-J)	100.98	97.57	90.92	82.81	74.69

Cumulative depreciation as on 31.3.2019 is ₹0.62 lakh

Interest on Loan ("IoL")

- 94. Regulation 32 of the 2019 Tariff Regulations provides as follows:
 - **"32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
 - (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.
- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."
- 95. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted.
- 96. We have considered the submissions of the Petitioner. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, will be considered at the time of true-up. The IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the Combined Asset (Asset-1 and Asset-3) and Asset-2 for the 2019-24 tariff period is as follows:

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
Α	Gross Normative Loan	551.00	615.36	667.99	1090.52	1090.52
В	Cumulative Repayments up to Previous Year	6.14	58.87	116.90	196.41	295.02
С	Net Loan-Opening (A-B)	544.86	556.49	551.09	894.11	795.50
D	Additions	64.36	52.63	422.53	0.00	0.00
Е	Repayment during the year	52.74	58.03	79.51	98.61	98.61
F	Net Loan-Closing (C+D-E)	556.49	551.09	894.11	795.50	696.88
G	Average Loan (C+F)/2	550.68	553.79	722.60	844.80	746.19

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Н	Weighted Average Rate of Interest on Loan (in %)	8.3990	8.3850	7.8228	7.4581	7.4081
I	Interest on Loan (G*H)	46.25	46.44	56.53	63.01	55.28

(₹ in lakh)

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	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
Α	Gross Normative Loan	82.56	87.44	89.71	89.71	89.71
В	Cumulative Repayments upto Previous Year	0.62	8.30	16.31	24.42	32.54
С	Net Loan-Opening (A-B)	81.94	79.14	73.40	65.29	57.17
D	Additions	4.89	2.27	0.00	0.00	0.00
Е	Repayment during the year	7.69	8.01	8.11	8.11	8.11
F	Net Loan-Closing (C+D-E)	79.14	73.40	65.29	57.17	49.06
G	Average Loan (C+F)/2	80.54	76.27	69.34	61.23	53.12
Н	Weighted Average Rate of Interest on Loan (in %)	8.5381	8.4548	8.4379	8.4437	8.4400
I	Interest on Loan (G*H)	6.88	6.45	5.85	5.17	4.48

Return on Equity ("RoE")

- 97. 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 cutoff 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 Page 52 of 64



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:

Rate of pre-tax return on equity = 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:

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."
- 98. The Petitioner has submitted that the MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable for 2019-20 has been considered for the purpose of RoE, which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset (Asset-1 and Asset-3) and Asset-2 is as follows:

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
Α	Opening Equity	236.14	263.72	286.28	467.36	467.36
В	Additions	27.58	22.56	181.08	0.00	0.00
С	Closing Equity (A+B)	263.72	286.28	467.36	467.36	467.36
D	Average Equity (A+C)/2	249.93	275.00	376.82	467.36	467.36
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (D*G)	46.94	51.65	70.77	87.78	87.78

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
Α	Opening Equity	35.38	37.48	38.45	38.45	38.45
В	Additions	2.09	0.97	0.00	0.00	0.00
С	Closing Equity (A+B)	37.48	38.45	38.45	38.45	38.45
D	Average Equity (A+C)/2	36.43	37.96	38.45	38.45	38.45
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (D*G)	6.84	7.13	7.22	7.22	7.22

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

- 99. The Petitioner has not claimed any O&M Expenses for Asset-2, which is under State portion.
- 100. The Petitioner has submitted that the admitted capital cost of the Combined Asset (Asset-1 and Asset-3) is ₹1631.26 lakh and has claimed O&M Expenses for the Combined Asset (Asset-1 and Asset-3) @ 2% of the original project cost as provided under Regulation 35(4) of the 2019 Tariff Regulations and it is as follows:

Portioulore	С	Combined Asset (Asset-1 and Asset-3)								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
Normative O&M Expenses										
Communication System	1730.67	1730.67	1730.67	1730.67	1730.67					
Total Normative O&M Expenses	34.61	34.61	34.61	34.61	34.61					

- 101. Regulation 35(4) of the 2019 Tariff Regulations provides as follows:
 - **"(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."
- 102. We have considered the submission of the Petitioner. The Petitioner is directed to submit details of actual O&M Expenses at the time of true-up. The O&M Expenses approved for the Combined Asset (Asset-1 and Asset-3) @ of 2% of the original project

cost as provided under Regulation 35(4) of the 2019 Tariff Regulations and the same is as follows:

Portioulore	С	Combined Asset (Asset-1 and Asset-3)								
Particulars Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
Normative O&M Expenses										
Communication System	1730.67	1730.67	1730.67	1730.67	1730.67					
Total Normative O&M Expenses	34.61	34.61	34.61	34.61	34.61					

Interest on Working Capital ("IWC")

- 103. Regulation 34(1)(c), Regulation 34(3) and 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:

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- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - (i) Receivables equivalent to 45 days of annual fixed cost;
 - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
 - (iii) Operation and maintenance expenses, including security expenses for one month. "

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

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

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. Definitions. In these regulations, unless the context otherwise requires:-
- '(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;"



104. The Petitioner has submitted that it has claimed 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 Interest (RoI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 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 1.4.2020 of 7.00% plus 350 basis points) for 2021-22 and 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2022 of 8.50% plus 350 basis points) for 2023-24. The components of the working capital and interest allowed thereon for the Combined Asset (Asset-1 and Asset-3) are as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
Α	O&M Expenses (O&M Expenses for one month)	2.88	2.88	2.88	2.88	2.88
В	Maintenance Spares (15% of O&M Expenses)	5.19	5.19	5.19	5.19	5.19
С	Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	22.65	23.96	30.26	35.58	34.60
D	Total Working Capital (A+B+C)	30.73	32.03	38.34	43.66	42.68
Е	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on working capital (D*E)	3.70	3.60	4.03	4.58	5.12

105. The components of the working capital and interest allowed thereon for Asset-2 are as follows:

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
Α	O&M Expenses (O&M Expenses for one month)	0.00	0.00	0.00	0.00	0.00
В	Maintenance Spares	0.00	0.00	0.00	0.00	0.00

Page 57 of 64



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	(15% of O&M Expenses)					
С	Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	2.68	2.70	2.65	2.56	2.47
D	Total Working Capital (A+B+C)	2.68	2.70	2.65	2.56	2.47
Ε	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on working capital (D*E)	0.32	0.30	0.28	0.27	0.30

Annual Fixed Charges of the 2019-24 Tariff Period

106. The transmission charges allowed in respect of the Combined Asset (Asset-1 and Asset-3) for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	52.74	58.03	79.51	98.61	98.61
Interest on Loan	46.25	46.44	56.53	63.01	55.28
Return on Equity	46.94	51.65	70.77	87.78	87.78
O&M Expenses	34.61	34.61	34.61	34.61	34.61
Interest on Working Capital	3.70	3.60	4.03	4.58	5.12
Total	184.25	194.33	245.45	288.60	281.41

107. The transmission charges allowed in respect of Asset-2 for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	7.69	8.01	8.11	8.11	8.11
Interest on Loan	6.88	6.45	5.85	5.17	4.48
Return on Equity	6.84	7.13	7.22	7.22	7.22
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	0.32	0.30	0.28	0.27	0.30
Total	21.73	21.90	21.46	20.77	20.11

Filing Fee and Publication Expenses

108. The Petitioner has sought reimbursement of the fee paid by it for filing the Petition and publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present Petition directly from the

beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

License Fee and Publication Expenses

109. The Petitioner shall be entitled to reimbursement of licence fee in accordance

with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The

Petitioner shall also be entitled to recovery of RLDC fees and charges in accordance

with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

110. The Petitioner has submitted that if GST is levied at any rate and at any point of

time in the future on charges of transmission of electricity, the same shall be borne and

additionally paid by the Respondent(s) to the Petitioner, and the same will be charged

and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by

the Petitioner on account of demand from Government/ Statutory authorities, the same

may be allowed to be recovered from the beneficiaries.

111. We have considered the submissions of the Petitioner. Since GST is not levied

on transmission service at present, we are of the view that the Petitioner's prayer is

premature.

Security Expenses

112. The Petitioner has submitted that security expenses for the communication

assets are not claimed in the instant petition, and it would file a separate petition for

claiming the overall security expenses and consequential IWC.

Page **59** of **64**

113. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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

Sharing of Transmission Charges

115. Asset-2 pertains to the state sector, i.e., MPPTCL. Therefore, the transmission charges approved for Asset-2 in this order for the period from its COD to 31.3.2019 and the 2019-24 tariff period shall be borne by MPPTCL.

116. With effect from 1.7.2011, the sharing of transmission charges for inter-State transmission systems was governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010. With effect from 1.11.2020, the sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, "the 2020 Sharing Regulations"). Accordingly, the billing, collection, and Page 60 of 64

disbursement of the transmission charges approved in this order for Asset-1 and Asset-3 for the period from their COD to 31.3.2019 and the Combined Asset (Asset-1 and Asset-3) for the 2019-24 tariff period shall be governed by the provisions of the applicable Sharing Regulations as provided in Regulation 43(2) of the 2014 Tariff Regulations and Regulation 57(2) of the 2019 Tariff Regulations respectively.

117. To summarise:

a. The trued-up Annual Fixed Charges (AFC) allowed for the 2014-19 tariff period are as follows:

	(₹ in lakh)
Particulars	2018-19
Asset-1	27.43
Asset-2	1.82
Asset-3	12.05

b. Annual Fixed Charges allowed in respect of the Combined Asset (Asset-1 and Asset-3) and Asset-2 for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset (Asset-1 and Asset-3)	184.25	194.33	245.45	288.60	281.41
Asset-2	21.73	21.90	21.46	20.77	20.11

- 118. The Annexure-I and Annexure-II were given hereinafter form part of the order.
- 119. This order disposes of Petition No. 116/TT/2023 in terms of the above discussions and findings.

sd/- sd/- sd/(P. K. Singh) (Arun Goyal) (Jishnu Barua)
Member Member Chairperson

Annexure-I

Asset-1

2014-19	Admitted capital		additional lisation		ACE (₹ in lakh)				Admitted capital cost	Rate of depreciation	Annual depreciation as per Regulations (₹ in lakh)				
Capital expenditure	cost as on 1.4.2014/COD (₹ in lakh)	2018-19	Total Claimed	2014-15	2015- 16	2016- 17	2017- 18	2018-19	Total	as on 31.3.2019 (₹ in lakh)	as per Regulations (in %)	2015-16	2016-17	2017-18	2018-19
PLCC	586.06	-259.78	-259.78	-	-	-	-	-260.10	-260.10	325.96	6.33	7.62	37.10	37.10	28.87
Total	586.06	-259.78	-259.78	-	-	-		-260.10	-260.10	325.96	Total	7.62	37.10	37.10	28.87
							ross block lakh)	0.00	0.00	0.00	456.01				
										Weighted a	verage rate	6.33	6.33	6.33	6.33

Asset-2

2014-19	Admitted capital ACE cost as on (₹ in lakh)		Admitted capital cost as on 31,3,2019	Rate of depreciation as per Regulations (in	Annual depreciation as per Regulations (₹ in lakh)				
Capital expenditure	1.4.2014/COD (₹ in lakh)	2018-19	Total	(₹ in lakh)	%)	2015-16	2016-17	2017-18	2018-19
PLCC	111.08	6.86	6.86	117.94	6.33	0.60	7.03	7.03	7.25
Total	111.08	6.86	6.86	117.94	Total	0.60	7.03	7.03	7.25
Average gross block (₹ in lakh)						0.00	0.00	0.00	114.51
				Weighted a	6.33	6.33	6.33	6.33	

Asset-3

2014-19	Admitted capital cost as on	ACE (₹ in lakh)		Admitted capital cost as on 31.3.2019	Rate of depreciation as per	Annual depreciation as per Regulations (₹ in lakh)			
Capital expenditure	1.4.2014/COD (₹ in lakh)	2018-19	Total	(₹ in lakh)	Regulations (in %)	2015-16	2016-17	2017-18	2018-19
PLCC	715.80	-254.61	-254.61	461.19	6.33	0.25	45.31	45.31	37.25
IT Equipment (Incl. Software)	-	-	-	-	5.28	-	-	-	-
Total	715.80	-254.61	-254.61	461.19	Total	0.25	45.31	45.31	37.25
	Average gross block (₹ in lakh)					0.00	0.00	0.00	588.49
				Weighted average rate			6.33	6.33	6.33

Annexure-II

Combined Asset (Asset-1 and Asset-3)

2019-24	Admitted capital		Projecte (₹ in l	Admitted capital cost	Rate of depreciatio	Annual depreciation as per Regulations (₹ in lakh)						
Capital expenditure	cost as on 1.4.2019 (₹ in lakh)	2019-20	2020-21	2021-22	Total	as on 31.3.2024 (₹ in lakh)	n as per Regulations (in %)	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
PLCC	787.14	91.94	75.19	603.61	770.74	1557.88	6.33	52.74	58.03	79.51	98.61	98.61
Total	787.14	91.94	75.19	603.61	770.74	1557.88		52.74	58.03	79.51	98.61	98.61
						Average gross block (₹ in lakh)		833.11	916.68	1256.08	1557.88	1557.88
						Weighted average rate of depreciation (in %)		6.33	6.33	6.33	6.33	6.33

Asset-2

2019-24 Admitted capita cost as on		Projected ACE (₹ in lakh)			Admitted capital cost as on 31.3.2024	Rate of depreciation as per	Annual depreciation as per Regulations (₹ in lakh)				
Capital expenditure	1.4.2019 (₹ in lakh)	2019-20	2020-21	Total	(₹ in lakh)	Regulations (in %)	2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	117.94	6.98	3.24	10.22	128.16	6.33	7.69	8.01	8.11	8.11	8.11
Total	117.94	6.98	3.24	10.22	128.16		7.69	8.01	8.11	8.11	8.11
					Average g (₹ in	121.43	126.54	128.16	128.16	128.16	
					Weighted a of deprecia	6.33	6.33	6.33	6.33	6.33	