## CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

## **Petition No. 192/TT/2022**

Coram:

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

Date of Order: 16.01.2024

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset 1:** 11 Nos. of Central Sector Communication Links, **Asset-2**: 1 Nos. of Central Sector Communication Links, under "Fiber Optic Communication system in lieu of existing Unified Load Dispatch and Communication (ULDC) Microwave links in the North-Eastern region".

#### And in the matter of:

Power Grid Corporation of India Limited, SAUDAMINI, Plot No-2, Sector-29, Gurgaon-122 001 (Haryana).

....Petitioner

#### Versus

- Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board), Bijulee Bhawan, Paltan Bazar, Guwahati-781001, Assam.
- Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai" Shillong-793001, Meghalaya.
- 3. Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh.



4. Power and Electricity Department, Government of Mizoram,

Aizawl. Mizoram.

5. Manipur State Power Distribution Corporation Limited,

(Formerly Electricity Department, Government of Manipur).

Keishampat, Imphal.

6. Department of Power,

Government of Nagaland,

Kohima, Nagaland.

7. Tripura State Electricity Corporation Limited,

Vidyut Bhawan, North Banamalipur,

Agartala, Tripura (W)-799001, Tripura.

...Respondent(s)

For Petitioner:

Shri S.S. Raju, PGCIL

Shri Zafrul Hassan, PGCIL

Shri D.K Biswal, PGCIL

Shri Ved Rastogi, PGCIL

Shri Vipin Joseph, PGCIL

For Respondent: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited for

determination of tariff under Central Electricity Regulatory Commission (Terms and

Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff

Regulations") of the period from COD to 31.3.2024 in respect of the following assets

under "Fiber Optic Communication system in lieu of existing Unified Load Dispatch and

Communication (ULDC) Microwave links in the North Eastern region":

Asset-1: 11 numbers of Central Sector Communication Links;

Asset-2: 1 number of Central Sector Communication Link.

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

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- "1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
- 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.4 above.
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8.5 above for respective block.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.9 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- 10) Allow the initial spares as claimed in the instant petition on project level.
- 11) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
- 12) Allow Final tariff in accordance with Regulation 10 (5) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
  - 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) and expenditure sanction of the transmission project was accorded by Board of Directors of the Petitioner's Company in 248<sup>th</sup> meeting dated 8.2.2011, vide Memorandum No. C/CP/Fibre Optic in

- NER dated 15.2.2011 at an estimated cost of ₹3413 lakh including an IDC ₹200 lakh based on 3<sup>rd</sup> Quarter, 2010 price level.
- b. Further, in the 15<sup>th</sup> NERPC Meeting held on 20.8.2015 and 21.8.2015, considering various aspects like connectivity of upcoming SLDCs, redundancy of NERLDC to SLDC, Connectivity with AP, Generating stations, non-availability of lines etc., OPGW Links under the instant project were revised. Accordingly, the Revised Cost Estimate (RCE) was accorded by the Board of Directors of the Petitioner's Company in meeting dated 29.3.2017, vide Memorandum No.C/CP/PA1617-03-0AC-RCE017 dated 30.3.2017 for ₹189141 lakh including an IDC of ₹13969 lakh based on December, 2016 price level.
- c. The scope of work covered under the transmission project broadly includes:
  - (i) Installation of OPGW Fibre Optic cable on the existing EHV transmission line of POWERGRID and constituents, the estimated length of such cable is approx. 1160 kms
  - (ii) The terminal equipment for communication based upon synchronous digital hierarchy (SDH) technology shall be installed in the substations of constituents and POWERGRID. The project would also involve installation of primary multiplexers at the new wide band nodes. To monitor the network, Network Management System (NMS) would also be required.

The constituent wise breakup of the scope of work is as follows:

SI. No	Utility	OPGW Cable (in km)	SDH (Nos.)	DCPS (Nos.)
1	Central Sector	401	13	13
2	AEGCL	759	11	11
	Total	1160	24	24

d. The Petitioner has further submitted that in the 15<sup>th</sup> NERPC Meeting held on 20.8.2015 and 21.8.2015, considering various aspects like connectivity of upcoming SLDCs, redundancy of NERLDC to SLDC, Connectivity with AP, Generating stations, non-availability of lines etc., OPGW Links under the instant project were revised as follows:

SI. No	Description of Element	As per FR (in km)	As per RCE (in km)
Α	OPGW link		
	Central Sector		
1	Badarpur (PG)-Silchar(PG)	37	19.221
2	Gohpur(AEGCL)-Itanagar (PG)	45	
3	Mariani (State)-Mariani(PG)	10	1.52
4	Namsai (PG)-Tinsukia(State)	100	
4.a	Ranganadi-Ziro		44.292
4.b	Balipara-Ranganadi LILO part		25.89
5	Itanagar (PG)-Itanagar (SLDC)	32	
5.a	LILO Nirjuli Ranaganadi		5.554
5.b	NirjuliLekhi-Chimpu		13.63
6	Badarpur (PG)-Kolasib	108	106.759
7	132 kV Kolasib-Aizawl	66	65.733
8	Gohpur-Ranganadi(NEEPCO)		
8.1	132 kV Gohpur(AEGCL)- Nirjuli(PG)-(Part)		12.033
8.2	400 kV Balipara(PG)- Ranganadi ckt-II(Part)		61.239
9	132 kV Nirjuli(PG)-Ranganadi(NEEPCO)( including LILO at Parey HEP(NEEPCO)		21.692
10	66 kV Tinsukia(AEGCL)- Rupai(AEGCL)-[under Namsai- Tinsukia]- To be used as Central sector Spare & Parey generation connectivity		24.824
11	132 kV S/C Imphal(PG) –Imphal (STATE)		0.769
12	132 kV D/C Silchar(PG)- Srikona(AEGCL)		1.199
13	132 kV D/C Mokokchung(PG) – Mokokchung(State)		1.611
14	132 kV D/C Melriat(PG) – Sihhmui (State)		6.441
15	132 kV Aizwal(PG)- Melriat(PG)		4.959
17	132 kV NEHU-Khliehriat(Up to Tower No.25)		7.532
18	220 kV MISA-SAMAGURI	35	34.374
19	400 kV BTPS Bongaigaon (Up to NTPC) & Salakati-Bongaigaon	3	4
21	Dimapur-Dimapur (SLDC)		0.647
22	Aizwal-Aizwal/Zimabawk-2		6.719

SI. No	Description of Element	As per FR (in km)	As per RCE (in km)		
24	Badarpur (PG)-Badarpur (AEGCL)	4	1.023		
	AEGCL Sector				
1	BTPS Agia 220	67	65.5736		
2	220 kV Agia-Sarusujai (with LILO at Boko, Mirza) & Kahilipara SLDC node	131	130.981		
3	Namrup Tinsukia 132	49	43.571		
4	Balipara Gohpur 132	75	101.124		
5	Jiribam Pailapool 132	15	12.753		
6	Pailapool Srikona 132	45	33.692		
7	Badarpur (AEGCL) -Srikona	15	19.586		
8	132 kV Mariani-Lakwa	82	79.298		
9	220 kV DC Samaguri-Mariani	185	169.717		
10	132 kV Namrup-Lakwa	56	58.394		
	GRAND TOTAL CENTRAL SECTOR+ AEGCL	1160	1186.3506		
	For RCE purpose 1186.3506 ( = 15TH NERPC) may be kept against length of links				

- e. The Revised scope of works as per RCE is as follows:
  - (i) Installation of OPGW Fibre Optic cable on the existing EHV transmission line of POWERGRID and constituents, the estimated length of such cable is approximately 1186 km.
  - (ii) Installation of terminal equipment for communication based upon synchronous digital hierarchy (SDH) technology in the sub-stations of constituents and POWERGRID. Installation of 79 numbers primary multiplexers at the new wide band nodes and monitor the network, Network Management System (NMS) is also required. The revised constituent wise breakup of the scope of work is as follows:

SI. No.	Utility	OPGW Cable (in km)	SDH (Nos.)	DCPS (Nos.)
1	Central Sector	470	32	12
2	AEGCL	716	15	12
	Total	1186	47	24

f. The details of the assets covered under the transmission project and in the instant petition are as follows:

SI. No	Asset	COD
1	Asset-1: 11 numbers of Central Sector Communication Links viz., (i) 132 kV Mariani (PG)-Mariani (State)-1.52 km (approx.), (ii)132 kV Itanagar (SLDC)-Itanagar (PG) achieved via Nirjuli-Lekhi-Chimpu (SLDC): a. LILO of 132 kV Itanagar (PG)-Ranganadi(NEEPCO) at Lekhi b. Part via 132 kV Lekhi—Chimpu(SLDC). (a)7.906 km, (b) 13.631 km approx., (iii) 132 kV Nirjuli (PG)-Ranganadi (NEEPCO) & LILO of Ranganadi-Nirjuli at Pare-21.692 km (approx), (iv) Gohpur-Ranganadi achieved via: (a) Part over line 132 kV Gohpur (AEGCL)-Nirjuli (PG). (b) Part over line 400 kV Balipara (PG)-Ranganadi (NEEPCO). (a)12.033, (b)61.239 km approx, (v)132 kV Imphal (PG)-Imphal (State-SLDC)-0.898 km (approx), (vi)132 kV Mokokchung (PG)-Mokokchung (State) 1.45 km approx, (vii) Dimapur (PG)-Dimapur (SLDC)-0.847 kms approx, (viii) 132 kV Aizwal (PG)—Melriat (PG) (LILO of Aizwal-Zembwak-II at Melriat)-11.813 km approx, (ix) 132 kV Ranganadi (NEEPCO)-Ziro (PG)-44.292 km (approx), (x) LILO of 400 kV Ranganadi-Balipara (PG) at Biswanath Chariali- 25.93 km approx, (xi) 132 kV Melriat (PG)-Sihhmui (State)-6.441 km (approx)	17.7.2020
2	<b>Asset-2:</b> 01 number of Central Sector Communication Links viz., Aizawl-Zembawak-II link- 6.719 km	16.1.2021

- g. As per IA dated 8.2.2011, the transmission assets were scheduled to be put into commercial operation within 30 months from the date of IA i.e. by 8.8.2013.
- h. However, during 15th NERPC Meeting held on 20th and 21st August, 2015 IA was revised. The links revised during 15th NERPC Meeting and included in the instant petition are as follows:

SI. No.	Link	Length (km)	Remarks
1	132 kV Mariani (PG)-Mariani (State)	1.52	Length revised
2	132 kV Itanagar (SLDC)-Itanagar (PG)- Deleted Achieved via Nirjuli-Lekhi-Chimpu (SLDC) (2a and 2b)-		Direct link NA
2a	LILO of 132 kV Itanagar (PG)-Ranganadi (NEEPCO) at Lekhi	7.906	Ranganadi end to be redundantly connected from Nirjuli
2b	Part via 132 kV Lekhi-Chimpu (SLDC)	13.631	Chimpu is SLDC location andso connectivity required
3	132kV Nirjuli (PG)-Ranganadi (NEEPCO) & LILO of Ranganadi-Nirjuli at Pare	21.692	New Link added



4	Gohpur-Ranganadi- Deleted Achieved via 4a ar	nd 4b	
4a	132 kV Gohpur (AEGCL)-Nirjuli (PG)	12.033	Back Link and for Main Link of Connectivity of Ranganadi
4b	400 kV Balipara (PG)-Ranganadi (NEEPCO)	61.239	ISGS
5	132 kV Imphal (PG)-Imphal (State-SLDC)-	0.898	
6	132 kV Mokokchung (PG)-Mokokchung (State)	1.45	
7	Dimapur (PG)-Dimapur (SLDC)	0.847	New Links added
8	132 kV Aizwal (PG)–Melriat (PG) (LILO of Aizwal-Zembwak-II at Melriat)-11.813 km approx.	11.813	
9	Namsai (PG)-Tinsukia (State)- Deleted Achieve	d via 9a and 9b	
9a	132 kV Ranganadi (NEEPCO)-Ziro (PG)-	44.292	Link is must keeping in no connectivity with Ziro part, Telemetry data of Ziro and nearby stations are required to be monitored
9b	LILO of 400 kV Ranganadi-Balipara (PG) at Biswanath Chariali-	25.93	This is required for continuation NKN Link Balipara-Nirjuli (part over Balipara Ranaganadi)
10	132 kV Melriat (PG)-Sihhmui (State)-6.441km (approx)	6.441	New Link added
11	Aizawl-Zembawak-II link	6.719	

- Accordingly, the Petitioner has submitted that the revised SCOD for the new links is considered within 30 months from the date of NERPC approval i.e. 20.8.2015. Accordingly, the revised SCOD is 20.2.2018. The COD of Asset-1 and Asset-2 was 17.7.2020 and 16.1.2021 respectively with a time overrun of 29 months and 35 months.
- j. The details of the transmission assets including scheduled commercial operation date (SCOD), date of commercial operation (COD) and time overrun are as follows:

Assets	SCOD	COD	Time over-run
Asset-1	20.2.2018	17.7.2020	878 days
Asset-2	20.2.2016	16.1.2021	1061 days

- 4. The Respondents are distribution licensees and power departments which are procuring transmission service from the Petitioner, mainly beneficiaries of the North-Eastern Region.
- 5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in 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 notice published in the newspapers by the Petitioner.
- 6. The hearing in this matter was held on 9.1.2023 through video conference and the order was reserved.
- 7. This order is issued considering the submissions made by the Petitioner in the petition and affidavit dated 3.8.2022.
- 8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

## **Determination of Annual Fixed Charges for 2019-24 Tariff Period**

9. The Petitioner has claimed the following transmission charges in respect of the transmission assets for the 2019-24 tariff period:

Asset-1

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
Depreciation	63.34	102.29	102.98	102.98
Interest on Loan	50.48	75.85	68.84	61.19
Return on Equity	56.39	91.05	91.66	91.66
Interest on Working Capital	3.33	5.11	5.03	4.91
O&M Expenses	23.00	32.54	32.54	32.54
Total	196.54	306.84	301.05	293.28

## Asset-2

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Depreciation	0.35	2.13	2.42	2.42
Interest on Loan	0.26	1.52	1.58	1.41
Return on Equity	0.31	1.90	2.15	2.15
Interest on Working Capital	0.02	0.11	0.12	0.11
O&M Expenses	0.16	0.76	0.76	0.76
Total	1.10	6.42	7.03	6.85

10. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission assets for 2019-24 tariff period:

# Asset-1

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
O&M Expenses	2.71	2.71	2.71	2.71
Maintenance Spares	4.88	4.88	4.88	4.88
Receivables	34.28	37.83	37.12	36.06
Total Working Capital	41.87	45.42	44.71	43.65
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	3.33	5.11	5.03	4.91

## Asset-2

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
O&M Expenses	0.06	0.06	0.06	0.06
Maintenance Spares	0.11	0.11	0.11	0.11
Receivables	0.66	0.79	0.87	0.84
Total Working Capital	0.83	0.96	1.04	1.01
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	0.02	0.11	0.12	0.11

# **Data of Commercial Operation ("COD")**

- 11. As stated above, the Petitioner has claimed COD of Asset-1 as 17.7.2020 and for Asset-2 as 16.1.2021.
- 12. Regulation 5 of the 2019 Tariff Regulations provides as follows:



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- "5. Date of Commercial Operation: (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.
- (2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;
- (c) Implementation Agreement, if any, executed by the parties;
- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects."
- 13. The Petitioner has submitted the following documents in support of COD of the transmission assets covered under the instant petition:

Asset	COD	Document Submitted
Asset-1	17.7.2020	RLDC Certificates dated 18.9.2020
Asset-2	16.1.2021	RLDC Certificates dated 1.2.2021

14. Taking into consideration RLDC Charging Certificates, COD of Asset-1 is approved as 17.7.2020 and COD of Asset-2 is approved as 16.1.2021.

#### Capital Cost

15. 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
  - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
  - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
  - (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
  - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 16. The Petitioner vide Auditor's Certificate dated 4.11.2020 and 17.2.2021 has claimed capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission assets and the same are as follows:



	FR Apportioned			Project	Estimated	
Assets	apportioned approved cost	approved cost (As per RCE)	Expenditure up to COD	2020-21	2021-22	completion cost
Asset-1	571.89	1744.00	1248.74	359.14	18.90	1626.78
Asset-2	33.71	226.80	24.13	5.22	8.81	38.16

17. The Petitioner has submitted the revised Auditor Certificate and tariff forms for Asset-2 vide affidavit dated 24.8.2021.

## **Cost Over-run**

18. The estimated completion cost for the Asset-1 and Asset-2 is within the RCE approved apportioned cost. The Petitioner has submitted the following reasons for cost variation:

#### Asset-1:

19. The cost over-run vis-à-vis the FR apportioned cost is ₹1054.89 lakh.

SI. No	Description	Cost as per FR	Estimated Capital Cost	Increase in cost
1	Communication System	510.67	1176.20	665.53
2	Over heads	25.06	235.53	210.47
3	Interest During Construction (IDC)	36.16	215.05	178.89
4	Grand Total	571.89	1626.78	1054.89

- 20. The Petitioner has submitted the following reasons for cost variation:
  - a. Cost variation (increase) of ₹665.53 lakh in case of Asset-1 w.r.t. FR is on account of difference between FR rates and actual award rates for major communication equipment. The cost variation is due to the rate received through competitive biddings also effects the actual variation of the item w.r.t. estimate of the contracts for various packages under this project were awarded

to the lowest evaluated and responsive bidder, on the basis of Open International/Domestic Competitive Bidding. The award prices represent the lowest prices available at the time of bidding of various packages, thus capturing the price level at the bidding stage.

b. Being a government enterprise, the Petitioner has the obligation for indigenous development of manufacturer as well as to adhere to Government of India guidelines in vogue. Accordingly, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Route of International Competitive Bidding (ICB) as well as Domestic Competitive Bidding (DCB) process have been followed to award this special mega project. Through this process, lowest possible market prices for required product/services/as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements, whereas the estimates are prepared by the Petitioner as per well-defined procedures for cost estimate. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. The cost estimate of the project is on the basis of 3rd quarter, 2010 price level.

c. The FR costs of individual items/materials are inclusive of taxes and duties. Increase of tax is mainly on accounts of actual Taxes & duties, Custom duty, excise duty, GST etc. paid based on the prevailing rate and charges raised by

respective district, state, and statutory authorities at the time of execution of project.

d. IDC as per FR cost was estimated at ₹36.16 lakh, the actual IDC is ₹215.05 lakh. Thus, there is an increase of ₹178.89 lakh in case of Asset-1. The main reason for the increase in IDC is attributable to time over-run and, increase in overall capital cost which was affected by severe bandhs, unprecedented rains and flash floods in Assam. The actual IDC accrued up to COD has been considered in the Auditor Certificate.

e. The IEDC including contingencies, establishment and other overheads for the asset in FR was estimated at ₹25.06 lakh, whereas, actual IEDC was is ₹235.53 lakh. Thus, IEDC under the project has increased by ₹210.47 lakh w.r.t. to FR in case of Asset-1. The Petitioner has submitted that during estimation for FR, 3% and 10.75% of equipment cost and Civil Works has been considered for Contingency and overheads respectively. The actual amount of IEDC, Establishment and Contingency has been claimed as part of the capital cost. The Petitioner has further submitted that the project timeline was 30 months as per FR against which the SCOD of the project was 8.8.2013 against which Asset-1 achieved COD in 113 months (as per the initial IA) due to various uncontrollable factors. Therefore, the delay of almost 59 months in commissioning of the instant assets, IEDC should be considered proportionately as against 7.48% as per FR considering the actual completion period of 113 months in case of Asset-1

### Asset-2

21. The cost over-run vis-à-vis the FR apportioned cost in case of Asset-2 is ₹5.08 lakh.

SI. No	Description	Cost as per FR	Estimated Capital Cost	Increase in capital cost
1	Communication System	27.90	26.06	1.84
2	Over heads	3.84	7.23	3.39
3	Interest During Construction (IDC)	1.98	5.50	3.52
4	Grand Total	33.71	38.79	5.08

- 22. The Petitioner has submitted that the cost variation is due to difference in the cost estimated and the cost discovered through bidding and increase in IDC and IEDC. The detailed reasons submitted by the Petitioner for time over-run are as follows:
  - a. The cost variation (decrease) of ₹1.84 lakh w.r.t. FR is on account of difference between FR rates and actual award rates for major communication equipment. The cost variation is due to the rate received through competitive biddings also effects the actual variation of the item w.r.t estimate The Contracts for various packages under this project were awarded to the lowest evaluated and responsive bidder, on the basis of Open International/Domestic Competitive Bidding. The award prices represent the lowest prices available at the time of bidding of various packages, thus capturing the price level at the bidding stage.
  - b. Being a Government enterprise, the Petitioner has the obligation for indigenous development of manufacturer as well as to adhere to Govt. of India guidelines in vogue. Accordingly, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Route of International Competitive Bidding (ICB) as well

as Domestic Competitive Bidding (DCB) process have been followed to award this special mega project. Through this process, lowest possible market prices for required product/services/as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements. Whereas, the estimates are prepared by the petitioner as per well-defined procedures for cost estimate. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. The cost estimate of the project is on the basis of 3rd quarter, 2010 price level. The FR costs of individual items/materials are inclusive of taxes and duties. Increase of Tax is mainly on accounts of actual Taxes & duties, Custom duty, excise duty, GST etc paid based on the prevailing rate and charges raised by respective district, state and statutory authorities at the time of execution of project.

c. IDC for the asset as per FR cost was estimated at ₹1.98 lakh, the IDC for the asset works out to ₹5.50 lakh. Thus, there is an increase of ₹3.52 lakh w.r.t. FR in IDC. The main reason for the increase in IDC is attributable to delay in commissioning of the asset and, increase in overall capital cost due to severe bandhs, unprecedented rains and flash floods in Assam. The actual IDC accrued upto DOCO has been considered in the Auditor Certificate.

d. The IEDC including contingencies, establishment and other overheads for the asset in approved FR was estimated at ₹3.84 lakh, whereas, based on the actual expenditure incurred, IEDC works out to ₹7.23 lakh. Thus, IEDC under the project

has increased by ₹3.39 lakh w.r.t. to FR in case of Asset-2. The Petitioner has submitted that during estimation for FR, 3% and 10.75% of Equipment cost and Civil Works has been considered for Contingency and overheads respectively. The actual amount of IEDC, Establishment and Contingency has been considered for claiming the tariff. The Petitioner has further submitted that the project timeline was 30 months as per FR against which the Asset-2 has been commissioned in around 118 months due to various uncontrollable factors and thus on account of the delay of almost 63 months in commissioning of the instant assets, IEDC should be considered proportionately as against 7.32% as per FR considering the actual completion period of 118 months in case of instant Asset-2.

23. We have considered the submission of the Petitioner. The estimated completion cost of the transmission assets is less than the RCE cost. Therefore, the capital cost claimed by the Petitioner is allowed.

# Time over-run

24. As stated above, the links under the instant petition were revised and added during 15<sup>th</sup> NERPC Meeting held on 20<sup>th</sup> and 21<sup>st</sup> August, 2015 and the timeline for implementation of the Project was also revised to 30 months from the date of NERPC approval. Accordingly, the Revised SCOD of the Project is 20.2.2018. Asset-1 and Asset-2 are put under commercial operation on 17.7.2020 and 16.1.2021 with a time over-run of 878 days and 1061 days respectively. The details are as follows:

Assets	SCOD as per IA	Revised SCOD as per approval of NERPC	Actual COD	Time over-run
Asset-1	8.8.2013	20.2.2018	17.7.2020	878 days
Asset-2	0.0.2013	20.2.2016	16.1.2021	1061 days

25. The detailed reasons submitted by the Petitioner for time over-run in case of the transmission assets are as follows:

## Reasons of time over-run in case of Asset-1

26. The Petitioner has submitted that the time over-run of 878 days in case of Asset-1 is due to work being hampered by landslides, bandh, strike, flood, poor road condition, road blockage, storm/rain intermittent violence/ insurgency, unprecedented rains and flash floods in Assam, Site Hindrances and Working Space Constraints during 2015 to 2020, which were beyond the control of the Petitioner. The chronology justifying the delay in execution of Asset-1 as submitted by the Petitioner is as follows:

From	То	Period of Hindrance (days)	Over lapping period (days)	Net Hindranc e (days)	Activity	Cause of Hindrance
3.9.2015	3.9.2015	1	0	1	Supply	Nationwide strike in Assam
12.9.2015	12.9.2015	1	1	0	Supply	12-hourstate wide bandh called by 14 organisations in Assam.
13.9.2015	13.9.2015	1	1	0	Supply	Bandh in Assam.
15.9.2015	15.9.2015	1	1	0	Supply	Total bandh in Assam.
21.9.2015	21.9.2015	1	0	1	Supply	AKRSU bandh hits life in Assam.
27.9.2015	27.9.2015	1	0	1	Supply	BJP calls Barak Bandh in Jiribam.
29.9.2015	29.9.2015	1	0	1	Supply	BJP's 12 hour shutdown in Assam's Barak Valley.
19.10.2015	19.10.2015	1	0	1		12 hour Bandh called by All Nyishi Students' Union (ANSU) demanding its charter of demand.
15.10.2015	15.10.2015	1	0	1	Supply	18 hour statewide bandh called by CorCom.
18.12.2015	18.12.2015	1	0	1	Supply	12 hour Assam and Tripura bandh called by the tiol Federation for New States (NFNS).
20.12.2015	21.12.2015	2	0	2	Supply	Bandh supporters block traffic on Imphal-Silchar road.
6.1.2016	8.1.2016	3	0	3	,	Deadly earthquake caused damage to whole part of Manipur.
5.2.2016	6.2.2016	2	0	2	Erection	48-hour bandh to greet PM in Assam.
13.3.2016	14.3.2016	2	0	2	Erection	The indefinite Imphal-Jiribam highway bandh (shutdown) called in protest against the arrest of three church functionaries of Namthanjang village.
10.6.2016	10.6.2016	1	1	0		Bandh on NH 2 called in Nagaland.
18.6.2016	18.6.2016	1	1	0		24 hours total bandh by UNC.
10.7.2016	10.7.2016	1	1	0		24 hours Bandh by AAPSU for fulfilling its charter of demand.
1.8.2016	30.11.2016	122	22	100	Erection	OPGW re-work and frequent bandh as per minutes in 5th NETeST Meeting.
30.8.2016	30.8.2016	1	1	0	Erection	The 24-hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).
19.9.2016	19.9.2016	1	1	0		Sudden death of Chief Minister causing tense in the main city.
6.10.2016	6.10.2016	1	1	0		Indefinite National Highway bandh by CCoFA for fuel adulteration issue.
20.10.2016	20.10.2016	1	1	0	Erection	Bandh in Assam.
17.10.2016	29.10.2016	13	13	0		Indefinite National Highway Bandh called by CCoFA (Co-ordination Committee on Fuel Adulteration) on fuel adulteration issue.
1.11.2016	19.3.2017	139	30	109		Economic blockage called by UNC.
20.10.2016	21.10.2016	2	2	0	Erection	The 36-hour Assam bandh called by Soy Janagusti Aikya Mancha.
29.11.2016	29.11.2016	1	1	0		12 hour at Itanagar.
16.12.2016	16.12.2016	1	0	1	Erection	Bandh for a day paralyses normal life in Assam's Barak Valley.

From	То	Period of Hindrance (days)	Over lapping period (days)	Net Hindranc e (days)	Activity	Cause of Hindrance
21.12.2016	7.1.2017	17	17	0		Economic blockade on both the highways leading to Manipur which effect in other landlocked regions of North East India – both Tripura and Mizoram
3.2.2017	4.2.2017	2	2	0		Violence eruption. Bandh called by Joint Co-ordination Committee.
13.2.2017	16.2.2017	4	4	0		Indefinite state wide bandh called by Joint Co- ordination Committee.
25.3.2017	25.3.2017	1	1	0	Erection	24 hour bandh called by Manipur Muslim Welfare Association.
26.3.2017	26.3.2017	1	1	0	Erection	17 hour bandh called by Democratic Students Alliance of Manipur (Desam)
24.4.2017	24.4.2017	1	1	0	Erection	24 hour strike hits bus services in Guwahati.
4.7.2017	4.7.2017	1	1	0	Erection	Assam 'bandh' for ST status hits normal life.
21.7.2017	21.7.2017	1	1	0		12 hour capital complex bandh by APCC (Arunachal pradesh Congress committee).
11.9.2017	11.9.2017	1	0	1		Strike called by Dimapur District Autorickshaw Driver Union.
18.9.2017	18.9.2017	1	1	0		12 hour bandh called by AAPSU against granting citizenship to Chakma and Hajong Refugees.
6.10.2017	8.10.2017	3	0	3	Erection	Indefinite total bandh along Imphal-Jiribam Highway (NH-37) imposed by the JAC and civil society organisations.
29.11.2017	29.11.2017	1	0	1	Erection	12 hour bandh called by the Umbrella Organization of indigenous people in Assam.
13.12.2017	13.12.2017	1	0	1	Erection	Bandh and Blockage by ULFA(I) in Assam.
16.1.2018	17.1.2018	2	0	2	Erection	36 hourr bandh in Manipur.
25.1.2018	26.1.2018	2	0	2	Erection	Strike in Assam.
1.2.2018	1.2.2018	1	0	1		12 hour bandh at Nagaland.
12.2.2018	12.2.2018	1	0	1	Erection	24 hour Chhaka bandh called by AAMWA in Assam.
13.3.2018 17.3.2018	14.3.2018 18.3.2018	2	0	2 2		48 hour bandh at Manipur.
13.3.2018	13.3.2018	1	0	1	Erection	36 hour bandh in Itanagar.  12 hourbandh called by CCTOA in Assam.
18.3.2018	18.3.2018	1	0	1	Erection	12 hour Assam Bandh.
13.7.2018	13.7.2018	1	1	0	Licetion	24 hourGeneral Strike at Manipur.
23.7.2018	23.7.2018	1	1	0	Erection	12 hour bandh called jointly by organizations representing six ethnic communities in Assam
23.7.2018	24.7.2018	2	2	0	Erection	48 hour Assam Bandh.
31.7.2018	31.7.2018	1	1	0	Erection	24 hour General Strike in Manipur.
17.8.2018	17.8.2018	1	1	0	Erection	24 hourbandh in Manipur called in Zeliangrong in Imphal-Jiribam Road
9.9.2018	13.9.2018	5	5	0	Erection	100 hour blockade called by All Manipur Students' Union (AMSU) in Imphal-Jiribam Road.
12.9.2018	13.9.2018	2	2	0	Erection	12 hour chakka bandh' in Goalpara and Kamrup (R) districts, called by seven Garo organisations.
19.9.2018	19.9.2018	1	1	0	Erection	Blockage called by HPC Paper Mills Revival Action Committee in Silchar-Imphal & Silchar-Shillong.
27.9.2018	28.9.2018	2	2	0		48 hour bandh at Manipur.
15.10.2018	15.10.2018	1	1	0		Bandh at Manipur.
22.10.2018	22.10.2018	1	0	1	Erection	12 hour Assam Bandh called by the 46 organisations.
23.10.2018 3.11.2018	23.10.2018 3.11.2018	1	0	1	Erection Erection	12 hour Assam bandh against citizenship bill.      12 hour bandh in south Assam's Barak Valley called by All Cachar Karimganj Hailakandi Students' Association.
18.11.2018	18.11.2018			0		CAB protest.
22.11.2018	22.11.2018	1	0	1	Erection	Assam: 12 hour bandh called to revive paper mills shuts down Barak Valley.
9.12.2018	9.12.2018	1	1	0		12 hour Bandh at Dimapur.
24.12.2018	24.12.2018	1	1	0		12 hour bandh at Itanagar.
7.1.2019	7.1.2019	1	1	0		11 hourbandh at Mizoram
8.1.2019	8.1.2019	1	1	0		11 hour bandh at Itanagar.
21.2.2019	22.2.2019	2	2	0		48 hour Strike Itanagar.
11.2.2019 5.3.2019	12.2.2019 5.3.2019	<u>2</u> 1	<u>2</u> 1	0		36 hour bandh at Manipur.  Bharat Bandh.
1.8.2019	1.8.2019	1	0	1		14 hour Bandh at Manipur.
13.10.2019	13.10.2019	1	0	1		12 hour bandh at Manipur.
31.10.2019	31.10.2019	1	0	1		20 hourstrike at Manipur.
18.11.2019	18.11.2019	1	0	1		18 hour Nagaland bandh.
10.12.2019	10.12.2019	1	0	1		15 hour bandh at Manipur.
14.12.2019	14.12.2019	1	0	1		6 hour bandh at Nagaland.
18.1.2020 26.2.2020	18.1.2020 26.2.2020	1	0	1 1		12 hour bandh. 12 hour bandh at Itanagar.
	30.8.2015	10	0	10		Heavy rainfall & landslide at Mizoram.
21.8 2015		<u>_</u>				i i i i i i i i i i i i i i i i
21.8.2015 6.9.2015	8.9.2015	3	3	0	Supply & erection	Landslide in Meghalaya.

From	То	Period of Hindrance (days)	Over lapping period (days)	Net Hindranc e (days)	Activity	Cause of Hindrance
21.4.2016	1.7.2016	72	6	66		Landslide due to heavy rain.
26.7.2016	5.8.2016	10	10	0		Massive landslide in Mizoram.
16.8.2016	17.8.2016	2	2	0		Landslide due to heay rain.
13.6.2017	13.7.2017	1	0	1		Flood, landslide in Mizoram.
2.7.2017	24.7.2017	23	11	12		Flood, Landslides due to un-stoppable rain.
26.8.2017	31.8.2017	5	0	5		Landslide in Mizoram.
17.9.2017	20.9.2017	3	0	3		Landslide in Mizoram.
5.6.2018	12.6.2018	8	8	0		Landslide in Mizoram.
13.6.2018	1.7.2018	19	19	0		Heavy rainfall & Landslide.
2.7.2018	12.7.2018	11	11	0		Heavy rainfall & Landslide.
16.6.2019	22.7.2019	37	0	37		Landslide at Itanagar.
4.9.2015	15.9.2015	12	0	12	Supply & erection	Flood in Assam.
7.9.2015	13.9.2015	5	5	0	Supply & erection	Floods in Assam.
1.4.2016	30.4.2016	30	0	30	Erection	Floods cause havoc in Assam.
18.4.2016	26.4.2016	9	0	9		Flood, Landslides due to Heavy rain.
15.5.2016	18.5.2016	4	4	0		Heavy rain caused flood in different parts of the state.
21.5.2016	26.5.2016	5	5	0		Large area flooded due to heavy rain.
25.6.2016	5.7.2016	10	6	4		Heavy rain caused flood and landslide in different parts of the state.
1.7.2016	22.8.2016	54	5	49	Erection	Flood in Assam.
9.10.2016	11.10.2016	3	3	0	Erection	Flash floods hit normal life in Silchar.
31.5.2017	20.6.2017	21	21	0		Heavy rainfall in & around Manipur.
5.7.2017	25.8.2017	52	20	32	Erection	Flood in Assam.
9.7.2017	20.7.2017	12	12	0		Massive Landslide, flood due to incessant rain.
11.7.2017	25.7.2017	15	15	0		Flood, Landslide due to heavy rain.
20.8.2017	25.8.2017	6	6	0		Road blockage due to landslide and heavy rainfall.
7.5.2018	7.6.2018	1	1	0		Heavy rainfall & flood at Manipur.
11.7.2018	15.7.2018	6	6	0	Erection	Flood in Assam, Manipur.
1.8.2018	16.9.2018	47	47	0	Erection	Flood in Assam, Landslide in Manipur.
31.8.2018	8.9.2018	9	9	0		Nagaland flood.
14.9.2018	20.9.2018	7	7	0		Itanagar Flash flood.
17.9.2018	17.10.2018	1	1	0		Flash flood at Manipur.
15.7.2019	25.7.2019	11	8	3		Flood in Mizoram.
27.10.2019	27.11.2019	1	0	1		Flood in Manipur.
30.5.2016	30.6.2016	30	30	0		Poor Road condition made the transporters to hardly move in to the state.
15.10.2017	16.10.2017	2	0	2	Erection	Bad road condition in Jiribam.
18.10.2019	26.10.2019	9	0	9		Poor road condition in Mizoram.
10.8.2016	12.8.2016	3	3	0	_	Violence eruption.
14.12.2016	15.12.2016	2	2	0		Insurgency in Arunachal Pradesh.
19.12.2016	20.12.2016	2	2	0		Violence broke out over the Naga economic Blockage.
31.12.2016	30.6.2017	182	79	103	Erection	OPGW rectification work and frequent bandh as per minutes in 6th NETeST Meeting.
11.4.2018	6.6.2019	422	0	422		ROW & delay in provision of tower schedule of new route.
Total		1571	500	1071		

# Reasons of time over-run in case of Assset-2

27. The time over-run of 1061 days in case of Asset-2 is due to work being hampered by landslides, bandh, strike, flood, poor road condition, road blockage, storm/rain intermittent violence/ insurgency, unprecedented rains and flash floods in Assam, Site Hindrances and Working Space Constraints during 2015 to 2020, which were beyond control of Petitioner. The chronology of events justifying the time over-run as submitted by the Petitioner is as follows:



12.9.2015 13.9.2015 15.9.2015 21.9.2015 29.9.2015 5.2.2016 30.8.2016 20.10.2016 20.10.2016 21.6.12.2016 124.4.2017 21.7.2017 21.7.2017 29.11.2017 21.3.12.2017 1	3.9.2015 12.9.2015 13.9.2015 15.9.2015 21.9.2015 29.9.2015 6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 1 1 1 1 2 1 1 2	(days) 0 1 1 1 0 0 1 1 2 0 1	1 0 0 0 1 1 1 2 0 0	Supply Supply Supply Supply Supply Supply Erection Erection Erection Erection	Nationwide strike in Assam.  12 hour statewide bandh called by 14 organisations in Assam.  Bandh in Assam.  Total bandh in Assam.  AKRSU bandh hits life in Assam.  BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
13.9.2015 15.9.2015 21.9.2015 29.9.2016 30.8.2016 20.10.2016 20.10.2016 20.10.2016 16.12.2016 124.4.2017 4.7.2017 21.7.2017 29.11.2017 29.11.2017 13.12.2017	13.9.2015 15.9.2015 21.9.2015 29.9.2015 6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 1 1 1 2 1 1 2	1 1 0 0 0 1 1 2	0 0 1 1 2 0 0	Supply Supply Supply Supply Erection Erection	in Assam.  Bandh in Assam.  Total bandh in Assam.  AKRSU bandh hits life in Assam.  BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
15.9.2015 21.9.2015 29.9.2015 5.2.2016 30.8.2016 20.10.2016 20.10.2016 24.4.2017 24.7.2017 21.7.2017 29.11.2017 29.11.2017 21.3.12.2017	15.9.2015 21.9.2015 29.9.2015 6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 1 2 1 1 2 1 1	1 0 0 0 1 1 2	0 1 1 2 0 0	Supply Supply Supply Erection Erection Erection	Total bandh in Assam.  AKRSU bandh hits life in Assam.  BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
21.9.2015 2 29.9.2015 2 5.2.2016 3 30.8.2016 2 20.10.2016 2 20.10.2016 1 24.4.2017 2 4.7.2017 2 29.11.2017 2 13.12.2017 1	21.9.2015 29.9.2015 6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 1 2 1 1 2 1 1	0 0 0 1 1 2 0	1 1 2 0 0	Supply Supply Erection Erection Erection	AKRSU bandh hits life in Assam.  BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
29.9.2015 2 5.2.2016 3 0.8.2016 2 20.10.2016 2 20.10.2016 1 24.4.2017 2 4.7.2017 2 29.11.2017 2 13.12.2017 1	29.9.2015 6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 2 1 1 2 1	0 0 1 1 2	1 2 0 0	Supply Erection Erection Erection	BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
29.9.2015 2 5.2.2016 3 0.8.2016 2 20.10.2016 2 20.10.2016 1 24.4.2017 2 4.7.2017 2 29.11.2017 2 13.12.2017 1	6.2.2016 30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	2 1 1 2 1	0 1 1 2 0	2 0 0 0	Supply Erection Erection Erection	BJP's 12 hour shutdown in Assam's Barak Valley.  48-hour bandh to greet PM in Assam.  The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
30.8.2016 3 20.10.2016 2 20.10.2016 2 16.12.2016 1 24.4.2017 4.7.2017 2 29.11.2017 2 13.12.2017 1	30.8.2016 20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 1 2 1	1 1 2 0	0 0 0	Erection Erection	The 24 hour Assam bandh called by the All Koch Rajbongshi Students' Union (AKRSU). Bandh in Assam. The 36 hour Assam bandh called by Soy Janagusti
20.10.2016 2 20.10.2016 2 16.12.2016 1 24.4.2017 2 4.7.2017 2 29.11.2017 2 13.12.2017 1	20.10.2016 21.10.2016 16.12.2016 24.4.2017 4.7.2017	1 2 1	1 2 0	0	Erection	Rajbongshi Students' Union (AKRSU).  Bandh in Assam.  The 36 hour Assam bandh called by Soy Janagusti
20.10.2016 2 16.12.2016 1 24.4.2017 2 4.7.2017 2 1.7.2017 2 13.12.2017 1	21.10.2016 16.12.2016 24.4.2017 4.7.2017	2 1 1	2	0		The 36 hour Assam bandh called by Soy Janagusti
16.12.2016 1 24.4.2017 2 4.7.2017 2 21.7.2017 2 29.11.2017 2 13.12.2017 1	16.12.2016 24.4.2017 4.7.2017	1	0	-	Erection	
24.4.2017 2 4.7.2017 2 21.7.2017 2 29.11.2017 2 13.12.2017 1	24.4.2017 4.7.2017	1		1		Aikya Mancha.
4.7.2017 21.7.2017 29.11.2017 2 13.12.2017	4.7.2017		1		Erection	Bandh for a day paralyses normal life in Assam's Barak Valley.
21.7.2017 2 29.11.2017 2 13.12.2017 1		1	I	0	Erection	24 hour strike hits bus services in Guwahati.
29.11.2017 2 13.12.2017 1	21.7.2017		1	0	Erection	Assam 'bandh' for ST status hits normal life.
13.12.2017 1		1	1	0		12 hourcapital complex bandh by APCC(Arunachal pradesh Congress committee).
	29.11.2017	1	0	1	Erection	12 hour bandh called by the Umbrella Organization of indigenous people in Assam.
	13.12.2017	1	0	1	Erection	Bandh and Blockage by ULFA(I) in Assam.
	26.1.2018	2	0	2	Erection	Strike in Assam.
	12.2.2018	1	0	1	Erection	24 hour Chhaka bandh called by AAMWA in Assam.
	13.3.2018	1	0	1	Erection	12 hour bandh called by CCTOA in Assam.
18.3.2018	18.3.2018	1	0	1	Erection	12 hour Assam Bandh.
23.7.2018	23.7.2018	1	1	0	Erection	12 hour bandh called jointly by organizations representing six ethnic communities in Assam.
23.7.2018 2	24.7.2018	2	2	0	Erection	48 hour Assam Bandh.
	22.10.2018	1	0	1	Erection	12 hour Assam Bandh called by the 46 organisations.
23.10.2018 2	23.10.2018	1	0	1	Erection	12 hour Assam bandh against citizenship bill.
3.11.2018	3.11.2018	1	0	1	Erection	12 hour bandh in south Ass-am's Barak Valley called by All Cachar Karimganj Hailakandi Students' Association.
18.11.2018 1	18.11.2018			0		CAB protest.
22.11.2018 2	22.11.2018	1	0	1	Erection	Assam: 12 hour bandh called to revive paper mills shuts down Barak Valley.
	7.1.2019	1	1	0		11 hour bandh at Mizoram.
	5.3.2019	1	1	0		Bharat Bandh.
	18.1.2020	1	0	1		12 hour bandh.
	30.8.2015	10	0	10		Heavy rainfall & landslide at Mizoram.
	8.9.2015	3	3	0	Supply & erection	Landslide in Meghalaya.
	9.4.2016	5	0	5		Storm affects power, transport in Mizoram, Tripura.
	1.7.2016	72	6	66		Landslide due to heavy rain
	5.8.2016 17.8.2016	10 2	10 2	0		Massive landslide in Mizoram.  Landslide due to heavy rain.
	13.7.2017	1	0	1		Flood, landslide in Mizoram.
	24.7.2017	23	11	12		Flood, Landslides due to un-stoppable rain
	31.8.2017	5	0	5		Landslide in Mizoram.
	20.9.2017	3	0	3		Landslide in Mizoram.
	12.6.2018	8	8	0		Landslide in Mizoram.
	1.7.2018	19	19	0		Heavy rainfall & Landslide.
2.7.2018	12.7.2018	11	11	0		Heavy rainfall & Landslide.
16.6.2019	22.7.2019	37	0	37		Landslide at Itanagar.
	15.9.2015	12	0	12	Supply & erection	Flood in Assam.
	13.9.2015	5	5	0	Supply & erection	Floods in Assam.
	30.4.2016	30	0	30	Erection	Floods cause havoc in Assam.
	26.4.2016 18.5.2016	9	0 4	9		Flood, Landslides due to Heavy rain Heavy rain caused flood in different parts of the
	26.5.2016	5	5	0		state.  Large area flooded due to heavy rain.
	5.7.2016	10	6	4		Heavy rain caused flood and landslide in different parts of the state.
1.7.2016 2	22.8.2016	54	5	49	Erection	Flood in Assam.
	11.10.2016	3	3	0	Erection	Flash floods hit normal life in Silchar.

From	То	Period of Hindrance (days)	Over lapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
5.7.2017	25.8.2017	52	20	32	Erection	Flood in Assam.
9.7.2017	20.7.2017	12	12	0		Massive Landslide, flood due to incessant rain.
11.7.2017	25.7.2017	15	15	0		Flood, Landslide due to heavy rain.
20.8.2017	25.8.2017	6	6	0		Road blockage due to landslide and heavy rainfall.
15.7.2019	25.7.2019	11	8	3		Flood in Mizoram.
30.5.2016	30.6.2016	30	30	0		Poor Road condition made the transporters to hardly move into the state.
15.10.2017	16.10.2017	2	0	2	Erection	Bad road condition in Jiribam.
18.10.2019	26.10.2019	9	0	9		Poor road condition in Mizoram.
15.3.2020	30.11.2020	260	0	260	_	Delay due to COVID 19
То	tal	771	204	567		

- 28. The Petitioner has submitted that as is evident from the above, the time over-run was beyond the control of the Petitioner. Based on the above unforeseen reasons, the Petitioner has prayed to the Commission to condone the time over-run as it is beyond the control of the Petitioner.
- 29. We have considered the submission of the Petitioner and have gone through the documentary evidence produced on record to justify the time over-run. As per the IA dated 8.2.2011, the scheduled COD of the assets was 30 months from date of IA i.e. 8.8.2013. The OPGW links under the instant petition were revised and approved by 15<sup>th</sup> NERPC Meeting held on 20<sup>th</sup> and 21<sup>st</sup> August, 2015. The relevant extracts of the minutes of the 15<sup>th</sup> TCC and 15<sup>th</sup> NERPC is as follows:

## "A.21 : REVISION OF OPGW LINK AGAINST MW VACATION PROJECT-AGENDA REF.NO.B.18

The revision of OPGW Links being established to vacate MW links was discussed during 21<sup>st</sup> UCC meeting considering various aspects like connectivity of upcoming SLDC, redundancy of NERLD to SLDC, Connectivity with AP, Generating stations, non-availability of lines etc. Accordingly, members agreed to revise the links as per Annexure-XII for which original quantity of supply changed from 1163 KM to 1231 KM and laying of OPGW changed from 1145 KM to 1187 KM.

The issue was subsequently deliberated during 111<sup>th</sup> OCC Meeting and POWERGRID was suggested for further needful in line with discussion of 21<sup>st</sup> UCC Meeting.

Placed for approval of TCC/NERPC

**Deliberation of the TCC** 

TCC recommended for approval of NERPC

Deliberation of the RPC

The RPC noted and approved the recommendation of TCC."



- 30. As per the above minutes, the members of NERPC agreed to revise the links due to which the original quantity of supply changed from 1163 km to 1231 km and laying of OPGW changed from 1145 km to 1187 km. The Petitioner has claimed this led to the time over-run in case of the OPGW links. Taking into consideration the approval of the 15<sup>th</sup> TCC and 15<sup>th</sup> NERPC dated 20<sup>th</sup> and 21<sup>st</sup> August, 2015, the revised SCOD is approved and considered as 20.2.2018. Accordingly, the time over-run in case of Asset-1 and Asset-2 as per revised SCOD is 878 days and 1061 days respectively.
- 31. The Petitioner has submitted that the time over-run in case of Asset-1 is due to landslides, bandh, strike, flood, poor road condition, road blockage, storm/rain intermittent violence/insurgency, unprecedented rains and flash floods in Assam, site hindrances and working space constraints. In support of its contentions, the Petitioner has submitted paper clippings to show that there were bandhs. The Petitioner has submitted that period of hindrance is 1571 days, out of which the net hindrance is 1071 days. The reasons submitted by the Petitioner upto 20.02.2018 are within revised SCOD. The net impact of the time over-run from the revised SCOD of 20.2.2018 to upto COD of the Asset-1 i.e. 17.7.2020 is analysed. From the submissions made by the Petitioner, it is observed that only about 68 days are affected due to bandhs during the period from 20.2.2018 to 17.7.2020 and in support of the same the Petitioner has submitted various paper clippings. Factoring the same, the time over-run of 68 days in case of Asset 1 is condoned as it was beyond the control of the Petitioner.

#### Asset-2:

32. As regards Asset-2, the Petitioner has submitted that the main reasons for time over-run is because due to landslides, bandh, strike, flood, poor road condition, road

blockage, storm/rain intermittent violence/insurgency, unprecedented rains and flash floods in Assam, site hindrances and working space constraints.

- 33. In support of its contentions, the Petitioner has submitted paper clippings to show that there were bandhs. The Petitioner has submitted that period of hindrance is 771 days, out of which the net hindrance is 567 days by excluding overlapping period of 204 days. The reasons submitted by the Petitioner upto 20.2.2018 are within the revised SCOD Asset-2. The net impact of time over-run from 20.2.2018 to upto COD of the Asset-1 i.e. 16.1.2021, is analysed. From the submissions made by the Petitioner, it is observed that about 53 days is affected due to bandhs during the time period from 20.2.2018 to 16.1.2021 and in support of the same, the Petitioner has submitted various paper clippings. Factoring the same, the total time delay of 53 days in case of Asset-2 was beyond the control of the Petitioner and, therefore, the same has been condoned.
- 34. The summary of the time over-run condoned/not condoned are as follows:

Asset	Revised SCOD	Actual COD	Time over-run	Time over- run Condoned	Time over- run not condoned
Asset-1	20.2.2018	17.7.2020	878 days	68 days	810
Asset-2	20.2.2010	16.1.2021	1061 days	53 days	1008 days

# <u>Interest During Construction (IDC) / Incidental Expenditure During Construction (IEDC)</u>

35. The Petitioner has submitted the statement showing IDC claim, discharge of IDC liability as on the date of commercial operation and thereafter, which is as follows:

Assets	IDC as per Auditor Certificate	IDC discharged upto COD	IDC discharged during 2020-21	IDC discharged during 2021-22
Asset-1	215.06	192.60	19.72	2.74
Asset-2	3.82	3.60	0.03	0.19

36. We have considered the submissions of the Petitioner. As discussed above in this order, the time over-run in case of Asset-1 and Asset-2 has been partially condoned. There is a discrepancy in the IDC claimed in the Auditor certificate and the IDC discharge statement. Accordingly, the IDC on cash basis up to the COD has been worked out on the basis of the loan details given in the Statement showing discharge of IDC and Form-9C. The IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination subject to revision at the time of truing up is as follows:

(₹ in lakh)

Assets	IDC as per Auditor Certificate	IDC disallowed due to time over-run not condoned	IDC allowed	IDC discharged upto COD	IDC discharged during 2020-21	IDC discharged during 2021-22
Asset-1	215.06	152.73	62.32	62.32	0.00	0.00
Asset-2	3.82	3.51	0.31	0.31	0.00	0.00

37. The Petitioner has claimed IEDC for the transmission assets as per the Auditor Certificate. The Petitioner has submitted that the entire IEDC mentioned in the Auditor Certificate is on cash basis and was discharged up to the date of commercial operation. As the time over-run in case of Asset-1 and Asset-2 has been partially condoned, there is dis-allowance of IEDC in Asset-1 and Asset-2. The IEDC claimed as per Auditor's Certificate, IEDC considered and discharged up to COD is as follows:

Assets	IEDC claimed as per Auditor certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (A-B)
Asset-1	235.53	55.35	180.18
Asset-2	8.28	2.30	5.98

## **Initial Spares**

38. Regulation 23(d) of the 2019 Tariff Regulations provides that Initial Spares shall be capitalised as a percentage of plant and machinery cost up to 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%

- Brown Field: 6.00%

iii. Series Compensation devices and HVDC Station: 4.00%

iv. Gas Insulated Sub-station (GIS)

Green Field: 5.00%Brown Field: 7.00%

v. Communication System: 3.50%

vi. Static Synchronous Compensator: 6.00%"

39. The Petitioner has claimed Initial Spares for Asset-1 and has not claimed any Initial Spares for Asset-2. The Initial Spares claimed by the Petitioner are as follows:

			Initial spar	Ceiling limit as	
Assets	Particulars	Plant and machinery cost	Amount Percentage (₹) (in %)		per Regulations (in %)
		Α	В		С
Asset-1	PLCC	1176.20	121.12	10.30	3.50
Asset-2	PLCC	26.06	0.00	0.00	3.50

- 40. The Petitioner has claimed the Initial Spares at the project level. In the instant case, all assets covered in the transmission project have been put into commercial operation, but they are not combined in the 2019-24 tariff period. Accordingly, the Initial Spares are allowed on the basis of the individual capital cost of the transmission assets in the 2019-24 tariff period.
- 41. The Petitioner's claim of Initial Spares for Asset-1 is more than the norm in the 2019 Tariff Regulations. Therefore, the claim is restricted to the norm. The Initial Spares allowed for the transmission assets are as follows:



Assets	Particulars	Plant and Machinery cost (excluding IDC and IEDC, Land cost & Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		Α	В	С	D=(A-B)*C/ (100-C)	E=B-D	
Asset-1	PLCC	1176.20	121.12	3.50	38.27	82.85	38.27
Asset-2	PLCC	26.06	0.00	3.50	0.00	0.00	0.00

42. The Petitioner has claimed the Initial Spares discharge for Asset-1 as follows:

(₹ in lakh)

Assets	Particulars	Initial Spares claimed	Initial Spares discharged upto COD	Initial Spares discharged in 2020-21	Initial Spares discharged in 2021-22
Asset-1	PLCC	121.12	56.87	61.04	3.21

- 43. Since the Petitioner's claim of Initial Spares for Asset-1 is more than the norms under the 2019 Tariff Regulations, Initial Spares of ₹82.85 lakh has been disallowed from the Petitioner's claim from the respective years of discharge.
- 44. The capital cost allowed as on COD is as follows:

(₹ in lakh)

Assets	Capital cost claimed as on COD (Auditor Certificate) (A)	Undischarged IDC as on COD (B)	IDC disallowed (C)	IEDC disallowed (D)	IS disallowed as on COD (E)	Capital cost considered as on COD (F=A-B-C-D- E)
Asset-1	1248.74	0.00	152.73	55.35	18.60	1022.06
Asset-2	24.13	0.00	3.51	2.30	0.00	18.32

45. In response to the Commission's query on whether the transmission assets are currently in use and information in respect of decapitalization, if any, the Petitioner has submitted that the instant assets are in use since its COD, and no decapitalization is applicable for same. The Petitioner has further submitted that the OPGW under the



transmission assets has been installed after replacement of existing earth wire at various transmission lines of central and state sector. In addition, it is relevant to mention here that, the replaced earth wire of the state sector were given to back respective state, whereas the replaced earth wire under central sector lines, will be either used as per requirement or shall be scrapped and credit for scrap value, in capital cost shall be given while truing up.

# Additional Capital Expenditure (ACE)

46. 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."
- 47. The Petitioner has submitted that the ACE incurred/projected to be incurred for the transmission assets is mainly on account of Balance/Retention Payments and is claimed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the following capital cost as on 31.3.2024:

(₹ in lakh)

		Projected A	Capital cost as	
Assets	Capital cost as on COD	2020-21 2021-22		on 31.3.2024
Asset-1	1248.74	359.14	18.90	1626.78
Asset-2	24.13	5.22	8.81	38.16

48. In response to the Commission's query on package-wise and vendor-wise details of ACE, the Petitioner has submitted the following:

Asset	Package name	Vendor name	ACE	20	020-21	2021-22	
				Liability	Unexecuted work (Work done before COD but bill received later)	Liability	Unexecuted work (Work done before COD but bill received later)
		ECI Telecom	7.32	2.03	4.93	0.37	0.00
Asset-1	OPGW	Tejas	5.63	5.34	0.00	0.28	0.00
		TEN DOT	88.30	64.60	19.29	4.42	0.00
		KEC	276.80	132.75	130.21	4.89	8.5
Asset-2	OPGW	TEN DOT	9.00	0.00	3.15	0.00	5.85
A3361-Z	OI GW	KEC	5.02	0.00	2.07	2.59	0.37

49. We have considered the submissions made by the Petitioner. The ACE claimed by the Petitioner for the transmission assets has been allowed under Regulation



24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. Accordingly, the ACE allowed for the 2019-24 period is as follows:

(₹ in lakh)

Assets		ACE 2020-	21	ACE 2021-22		
Assets	ACE	Disallowed	Total ACE	ACE	Disallowed	Total ACE
Asset-1	359.14	61.04	298.10	18.90	3.21	15.69
Asset-2	5.22	0.00	5.22	8.81	0.00	8.81

50. The capital cost considered for the transmission assets for the 2019-24 tariff period is as follows:

(₹ in lakh)

	Capital	ACE 2	ACE 2019-24		
Assets	Cost as on COD	2020-21	2021-22	Capital Cost as on 31.3.2024	
Asset-1	1022.06	298.10	15.69	1335.85	
Asset-2	18.31	5.22	8.81	32.35	

## **Debt-Equity ratio**

51. 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."
- 52. The debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period for the transmission assets is as follows:

### Asset-1

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	715.44	70.00	219.65	70.00	935.10	70.00
Equity	306.62	30.00	94.14	30.00	400.75	30.00
Total	1022.06	100.00	313.79	100.00	1335.85	100.00

#### Asset-2

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	12.82	70.00	9.82	70.00	22.64	70.00
Equity	5.50	30.00	4.21	30.00	9.71	30.00
Total	18.32	100.00	14.03	100.00	32.35	100.00

# **Depreciation**

- 53. 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 31<sup>st</sup> 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."



54. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The weighted average rate of depreciation (WAROD) has been worked (Annexure-I for Asset-1 and Annexure-II for Asset-2) as per the rates of depreciation prescribed in the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

Asset-1

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
Depreciation				
Opening Gross Block	1022.06	1320.16	1335.85	1335.85
ACE	298.10	15.69	0.00	0.00
Closing Gross Block	1320.16	1335.85	1335.85	1335.85
Average Gross Block	1171.11	1328.01	1335.85	1335.85
Freehold Land	0.00	0.00	0.00	0.00
Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
Balance useful life of the asset	15	15	14	13
Lapsed life at the beginning of the year	0	0	1	2
Aggregate Depreciable Value	1054.00	1195.21	1202.27	1202.27
Combined Depreciation during the year	52.40	84.06	84.56	84.56
Aggregate Cumulative Depreciation	52.40	136.46	221.02	305.58
Remaining Aggregate Depreciable Value	1001.60	1058.75	981.25	896.69

## Asset-2

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Depreciation				
Opening Gross Block	18.32	23.54	32.35	32.35
ACE	5.22	8.81	0.00	0.00
Closing Gross Block	23.54	32.35	32.35	32.35
Average Gross Block	20.93	27.95	32.35	32.35
Freehold Land	0.00	0.00	0.00	0.00

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Weighted average rate of Depreciation (WAROD) (in %)	6.33	6.33	6.33	6.33
Balance useful life of the asset	15	15	14	13
Lapsed life at the beginning of the year	0	0	1	2
Aggregate Depreciable Value	18.84	25.15	29.12	29.12
Combined Depreciation during the year	0.27	1.77	2.05	2.05
Aggregate Cumulative Depreciation	0.27	2.04	4.09	6.14
Remaining Aggregate Depreciable Value	18.57	23.11	25.03	22.98

# Interest on Loan (IoL)

- 55. 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."
- 56. The Weighted Average Rate of IoL (WAROI) has been considered on the basis of rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed is as follows:

Asset-1 (₹ in lakh)

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
Gross Normative Loan	715.44	924.11	935.09	935.09
Cumulative Repayments upto Previous Year	0.00	52.40	136.46	221.02
Net Loan-Opening	715.44	871.71	798.63	714.07
Additions	208.67	10.98	0.00	0.00
Repayment during the year	52.40	84.06	84.56	84.56
Net Loan-Closing	871.71	798.63	714.07	629.51
Average Loan	793.58	835.17	756.35	671.79
Weighted Average Rate of Interest on Loan (in %)	7.4441	7.4604	7.4692	7.4743
Interest on Loan	41.76	62.31	56.49	50.21

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Gross Normative Loan	12.82	16.47	22.64	22.64



Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Cumulative Repayments upto Previous Year	0.00	0.27	2.04	4.09
Net Loan-Opening	12.82	16.20	20.60	18.55
Additions	3.65	6.17	0.00	0.00
Repayment during the year	0.27	1.77	2.05	2.05
Net Loan-Closing	16.20	20.60	18.55	16.50
Average Loan	14.51	18.40	19.58	17.53
Weighted Average Rate of Interest on Loan (in %)	6.8434	6.8425	6.8449	6.8550
Interest on Loan	0.20	1.26	1.34	1.20

# Return on Equity (RoE)

- 57. 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 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

#### Provided further that:

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



on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues:

- iii. in case of a thermal generating station, with effect from 1.4.2020:
  - 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 ₹ 1,000 crore;
- (b) Estimated Advance Tax for the year on above is ₹ 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore/₹ 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."
- 58. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission assets is as follows:

Asset-1

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
Opening Equity (A)	306.62	396.05	400.76	400.76
Additions (B)	89.43	4.71	0.00	0.00
Closing Equity (C) = (A+B)	396.05	400.76	400.76	400.76
Average Equity (D) = (A+C)/2	351.34	398.40	400.76	400.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782
Return on Equity	46.64	74.83	75.27	75.27

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Opening Equity (A)	5.50	7.07	9.71	9.71
Additions (B)	1.57	2.64	0.00	0.00
Closing Equity (C) = (A+B)	7.07	9.71	9.71	9.71
Average Equity (D) = (A+C)/2	6.28	8.39	9.71	9.71
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782
Return on Equity	0.24	1.58	1.82	1.82

# Operation & Maintenance Expenses (O&M Expenses)

59. The O&M Expenses claimed by the Petitioner for the transmission assets for the 2019-24 period are as follows:

### Asset-1

(₹ in lakh)

	- /-	III iakii)		
Particulars	2020-21 (Pro-rata for 2021-22 2022-23 258 days)		2022-23	2023-24
OPGW (@ 2% of capital cost)				
Original Project cost (₹ lakh)	23.00	32.54	32.54	32.54
Total O&M expenses	23.00	32.54	32.54	32.54

### Asset-2

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
OPGW (@ 2% of capital cost)				
Original Project cost (₹ lakh)	0.26	0.78	0.78	0.78
Total O&M expenses	0.26	0.78	0.78	0.78

60. The Regulation 35(4) of the 2019 Tariff Regulations provides for the norm for communication system as follows:

# "35. Operation and Maintenance Expenses:



- (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."
- 61. We have considered the submissions of the Petitioner. The O&M Expenses are allowed as per Regulation 35(4) of the 2019 Tariff Regulations and the same are as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
OPGW (@ 2% of capital cost)				
Original Project cost (₹ lakh)	1335.85	1335.85	1335.85	1335.85
Total O&M expenses	18.88	26.72	26.72	26.72

#### Asset-2

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
OPGW (@ 2% of capital cost)				
Original Project cost (₹ lakh)	32.35	32.35	32.35	32.35
Total O&M expenses	0.13	0.65	0.65	0.65

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

- 62. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:
  - "34. Interest on Working Capital: (1) The working capital shall cover:
    - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
      - (i) Receivables equivalent to 45 days of annual fixed cost;
      - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
      - (iii) Operation and maintenance expenses, including security expenses for one month.
  - (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 1<sup>st</sup> 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:-

'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;"

- 63. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.
- 64. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas, ROI for 2021-22 and 2022-23 has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points), ROI for 2023-24 has been considered as 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points). The components of the working capital and interest thereon allowed are as follows:

Asset-1

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	2.23	2.23	2.23	2.23
WC for Maintenance Spares (15% of O&M Expenses)	4.01	4.01	4.01	4.01

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
WC for Receivables (Equivalent to 45 days of annual transmission charges)	28.33	31.05	30.44	29.64
Total Working Capital	34.57	37.28	36.67	35.87
Rate of Interest (in %)	11.25	10.50	10.50	12.00
Interest on Working Capital	2.75	3.91	3.85	4.30

(₹ in lakh)

Particulars	2020-21 (Pro-rata 75 for days)	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	0.05	0.05	0.05	0.05
WC for Maintenance Spares (15% of O&M Expenses)	0.10	0.10	0.10	0.10
WC for Receivables (Equivalent to 45 days of annual transmission charges)	0.52	0.66	0.73	0.72
Total Working Capital	0.67	0.81	0.88	0.87
Rate of Interest (%)	11.25	10.50	10.50	12.00
Interest on Working Capital	0.02	0.08	0.09	0.10

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

65. The transmission charges allowed for the transmission assets for the 2019-24 tariff period is as follows:

# Asset-1

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
Depreciation	52.40	84.06	84.56	84.56
Interest on Loan	41.76	62.31	56.49	50.21
Return on Equity	46.64	74.83	75.27	75.27
O&M Expenses	18.88	26.72	26.72	26.72
Interest on Working Capital	2.75	3.91	3.85	4.30
Total	162.43	251.83	246.89	241.06

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
Depreciation	0.27	1.77	2.05	2.05
Interest on Loan	0.20	1.26	1.34	1.20
Return on Equity	0.24	1.58	1.82	1.82
O&M Expenses	0.13	0.65	0.65	0.65
Interest on Working Capital	0.02	0.08	0.09	0.10
Total	0.86	5.34	5.95	5.82

# Filing Fee and the Publication Expenses

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

### Licence Fee & RLDC Fees and Charges

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

### **Goods and Services Tax**

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

69. 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

70. The Petitioner has submitted that security expenses in respect of transmission

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

claiming the overall security expenses and the consequential IWC.

71. We have considered the above submissions of Petitioner. The Petitioner has

claimed consolidated security expenses for all the transmission asset owned by it on

projected basis for the 2019-24 tariff period on the basis of actual security expenses

incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been

disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's

prayer in the instant petition for allowing it to file a separate petition for claiming the

overall security expenses and consequential IWC has become infructuous.

Capital Spares

72. The Petitioner has sought reimbursement of capital spares at the end of tariff

period. The Petitioner's claim, if any, shall be dealt with in accordance with the

provisions of the 2019 Tariff Regulations.

**Sharing of Transmission Charges** 

73. With effect from 1.7.2011, sharing of transmission charges for inter-State

transmission systems was governed by the 2010 Sharing Regulations and with effect

from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission

charges is governed by the 2020 Sharing Regulations. Accordingly, the billing,

collection and disbursement of the transmission charges for the transmission assets, which are communication equipment, shall be recovered in terms of provisions of the applicable Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

74. To summarise, the AFC allowed for the transmission assets for the 2019-24 tariff period in this order are as follows:

### Asset-1

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 258 days)	2021-22	2022-23	2023-24
AFC	162.43	251.83	246.89	241.06

### Asset-2

(₹ in lakh)

				(*
Particulars	2020-21 (Pro-rata for 75 days)	2021-22	2022-23	2023-24
AFC	0.86	5.34	5.95	5.82

- 75. The Annexure(s) to this order form part of the order.
- 76. This order disposes of Petition No. 192/TT/2022 in terms of the above findings and discussions.

sd/- sd/(P. K. Singh) (Arun Goyal) (I.S. Jha)
Member Member Member

# **ANNEXURE-I**

2019-24	Admitted Capital		ojected ACE (₹ in lakh)		Admitted Rate of Depreciation		Annual Depreciation as per Regulations (₹ in lakh)			
Capital Expenditure	Cost as on 1.4.2019 (₹ in lakh)	2020-21	2021-22	Total	as on 31.3.2024 (₹ in lakh)	as per Regulations	2020-21	2021-22	2022-23	2023-24
PLCC	1022.06	298.10	15.69	313.79	1335.85	6.33%	74.13	84.06	84.56	84.56
Total	1022.06	298.10	15.69	313.79	1335.85		74.13	84.06	84.56	84.56
					Average Gross Block (₹ in lakh)		1171.11	1328.01	1335.85	1335.85
					Weighted Average Rate of Depreciation		6.33%	6.33%	6.33%	6.33%

# **ANNEXURE-II**

2019-24	Admitted Capital		jected ACE ₹ in lakh)		Admitted Capital Cost	Rate of Depreciation	Annual Depreciation as per Regulations (₹ in lakh)			
Capital Expenditure	Cost as on 1.4.2019 (₹ in lakh)	2020-21	2021-22	Total	as on 31.3.2024 (₹ in lakh)	as per Regulations	2020-21	2021-22	2022-23	2023-24
PLCC	18.32	5.22	8.81	14.03	32.35	6.33%	1.32	1.77	2.05	2.05
Total	18.32	5.22	8.81	14.03	32.35		1.32	1.77	2.05	2.05
					Average G (₹ in	ross Block lakh)	20.93	27.95	32.35	32.35
					Weighted A of Depre	verage Rate eciation	6.33%	6.33%	6.33%	6.33%