

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 156/TT/2020

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member**

Date of Order: 20.02.2021

In the matter of

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission tariff from COD to 31.3.2019 for "Hot Line Speech Communication (Computer Dialling) System for Grid Operation" consisting of PABX & Associated items as installed and commissioned in NERLDC & 7 nos. of SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh, Manipur) of North Eastern Region under project - "Establishment of Fibre Optic Communication under Wide band Communication Expansion plan in North Eastern Region".

And in the matter of

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001

.... Petitioner

Versus

1. North- Eastern Electric Power Corporation Ltd.
(NEEPCO Ltd.), 15, NBCC Tower,
Bhikaji Cama Place, New Delhi
2. Assam Gas Based Power Plant,
NEEPCO Ltd., Kathalguri, Village- Bokuloni,
Tinsukia, Assam-786191
3. Agartala Gas Turbine Power Plant,
NEEPCO Ltd. Ramchandranagar,
Agartala-799008, Tripura (West).
4. Doyang HEP,
NEEPCO Ltd., Wokha,
Nagaland



5. Kopili HEP, NEEPCO Ltd.,
Umrangsoo, N.C.Hills,
Assam
6. Kopili-2 HEP,
NEEPCO Ltd., Umrangsoo,
N.C.Hills, Assam
7. Khandong HEP, NEEPCO Ltd.,
Umrangsoo, N.C.Hills,
Assam
8. Ranganadi HEP, NEEPCO Ltd.,
Yazali, Dist. Lower Subansiri,
Arunachal Pradesh-791119
9. National Hydro Power Corporation Ltd.
(NHPC), NHPC Office Complex,
Lodhi Road, New Delhi
10. Loktak HEP, NHPC Ltd.,
Vidyut Vihar, Komkeirap,
Manipur - 795124
11. ONGC Tripura Power Company Ltd.
(OTPC), 6th Floor, A-Wing, IFCI Tower,
61, Nehru Place, New Delhi 110019
12. North East Transmission Company Ltd.
(NETC), 1st Floor, Ambience Corporate Tower,
Ambience Mall, Ambience Island, Gurugram
13. National Thermal Power Corporation Ltd.
(NTPC), Bongaigaon TPP, Salakati,
Kokrajhar- 783369, Assam
14. Electricity Department,
Government of Arunachal Pradesh,
Itanagar- 791111, Arunachal Pradesh
15. Assam Power Distribution Company Ltd. (APDCL),
ASEB, Bijuli Bhavan, Paltan Bazar,
Guwahati-781001, Assam
16. Manipur State Electricity Distribution Company Limited
(Formerly Electricity Department, Government of Manipur)
Keishampat, Imphal- 795001, Manipur
17. Meghalaya Electricity Corp. Ltd.
MeECL, Lumjingshai, Short Round Road,
Shillong-793001, Meghalaya
18. Power and Electricity Department,



Government of Mizoram, Khatla,
Aizawl-796001, Mizoram

19. Department of Power
Government of Nagaland,
Kohima-797001, Nagaland
20. Tripura State Electricity Corporation Limited
Vidyut Bhawan, North Banamalipur,
Agartala-799001, Tripura (W).
21. Assam Electricity Grid Corporation Limited
(Formerly Assam State Electricity Board)
Bijulee Bhawan, Paltan Bazar
Guwahati - 781001,
Assam.
22. Meghalaya Energy Corporation Limited.
(Formerly Meghalaya State Electricity Board)
Short Round Road,
Shillong-793001.
Meghalaya
23. Electricity Department,
Government of Arunachal Pradesh,
Itanagar - 791111,
Arunachal Pradesh
24. Power and Electricity Department,
Government of Mizoram, Khatla,
Aizawl-796001, Mizoram
25. Electricity Department,
Government of Manipur,
Keishampat, Imphal- 795001,
Manipur
26. Department of Power
Government of Nagaland,
Kohima-797001,
Nagaland
27. Tripura State Electricity Corporation Limited
Vidyut Bhawan, North Banamalipur,
Agartala – 700001,
Tripura (W).
28. DONER Advisor (Power)
Government of India, North Eastern Council Secretariat
Shillong, Meghalaya

...Respondents

Parties present:



For Petitioner: Shri S. S. Raju, PGCIL
Shri Zafrul Hassan, PGCIL
Shri A. K. Verma, PGCIL
Shri V. P. Rastogi, PGCIL
Shri B. Dash, PGCIL

For Respondent: None

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (“the Petitioner”) for determination of transmission tariff from COD to 31.3.2019 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) in respect of “Hot Line Speech Communication (Computer Dialling) System for Grid Operation” consisting of PABX & Associated items as installed and commissioned in NERLDC and 7 SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh, Manipur) of North Eastern Region (hereinafter referred to as “the transmission asset”) under “Establishment of Fibre Optic Communication under Wide Band Communication Expansion Plan in North Eastern Region”, (hereinafter referred as “the transmission project”).

2. The Petitioner has made the following prayers:

- “1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para-11.3 above.*
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation projected to be incurred as per Regulation 14(1)(i) of CERC, Tariff Regulations, 2014.*
- 3) Allow the Petitioner to approach Hon’ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, applicable for 2014-19 tariff block.*
- 4) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause: 25 of the Tariff Regulations, 2014.*



- 5) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition;*
- 6) *Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation: 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*
- 7) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.*
- 8) *Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.*
- 9) *Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.*
- 10) *Allow the Petitioner to bill Tariff from actual DOCO.*

and pass such other relief as the 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 Petitioner was initially entrusted with the implementation of the scope of works under project “Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in North Eastern region”.

b) The Investment Approval (IA) to execute it was accorded by Board of Directors of Petitioner in its 313th meeting held on 17.4.2015 at an estimated cost of ₹8073 lakh including IDC of ₹523 lakh based on December 2014 price level (notified *vide* Memorandum No. C/CP/FO-CS-NER, dated 24.4.2015). Thus, “Hot Line Speech Communication (Computer Dialling) System for Grid Operation” was not included in the Investment Approval of the transmission project “Establishment of Fibre Optic Communication under Wide band Communication Expansion plan in North Eastern Region.”



c) Subsequently, in the 18th meeting of the NERPC held on 11.10.2017, it was discussed and agreed to include the transmission asset under the transmission project i.e., “Establishment of Fibre Optic Communication under Wide Band Communication Expansion Plan in North Eastern Region.”

d) Further, the Petitioner *vide* affidavit dated 9.7.2020 has submitted that the Revised Cost Estimate (RCE) of the transmission project including the transmission asset, was accorded by Board of Directors of the Petitioner in its 375th meeting held on 28.3.2020 at an estimated cost of ₹10344 lakh including IDC of ₹1036 lakh based on September, 2019 price level (notified *vide* Memorandum No. C/CP/PA1920-12-BH-RCE018, dated 31.3.2020). “Hot Line Speech Communication System for Grid Operation” in NERLDC and SLDCs of North Eastern Region got included through RCE.

e) The scope of the transmission project as per the aforesaid 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 1975 Km.

(ii) Installation of terminal equipment (74 Nos.) for communication based upon Synchronous Digital Hierarchy (SDH) technology at the substations of constituents and POWERGRID; installation of 129 Nos. Multiplexers/ D&I/ DACS at the new wide band nodes; Network Management System (NMS).

(iii) DC Power Supply at all wide band locations where equipment is to be installed.

(iv) Approach cable for providing connectivity between OPGW and equipment.

(v) Hot Line speech Communication (Computer Dialling) system for Grid Operations for NER part under Central Sector.

4. The details of petitions filed by the Petitioner under the transmission project in North-Eastern Region is as under:

S.N.	Asset	COD	Remarks
1	“Hot Line Speech Communication (Computer Dialling) System for Grid Operation” consisting of PABX & Associated items as installed and commissioned in NERLDC & 07 Nos. SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh and Manipur) of	1.4.2018 (Actual)	Covered under instant petition



	North Eastern Region		
2	Balance Assets of the subject project are under different stages of completion.	Yet to be commissioned	Petition shall be filed later

5. The status and details of the assets covered in the instant petition is as below:

Asset Detail	SCOD	COD
“Hot Line Speech Communication (Computer Dialling) System for Grid Operation” consisting of PABX & Associated items as installed and commissioned in NERLDC & 07 Nos. SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh and Manipur) of North Eastern Region	25.10.2017	1.4.2018 (Actual)

6. The details of the Annual Transmission Charges claimed by the Petitioner are as under:

Particulars	(₹ in lakh)
	Asset-1 2018-19
Depreciation	21.22
Interest on Loan	18.78
Return on Equity	19.87
Interest on Working Capital	2.54
O&M Expenses	26.09
Total	88.50

7. The details of the Interest on Working Capital (IWC) claimed by the Petitioner are as under:

Particulars	(₹ in lakh)
	Asset-1 2018-19
Maintenance Spares	3.91
O&M Expenses	2.17
Receivables	14.75
Total	20.83
Rate of Interest (%)	12.20
Interest on working Capital	2.54

8. The Respondents are the generating companies, distribution companies, electricity departments and transmission licensees, which are procuring transmission services (Communication) from the Petitioner and are mainly beneficiaries of the North Eastern Region.



9. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions or objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Notice dated 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter was also published on Commission's website. None of the respondents have filed any reply in the matter.

10. The hearing in this matter was held on 13.7.2020 and the order was reserved.

11. This order is issued considering the submissions made by the Petitioner in the petition dated 7.1.2020 and additional information regarding Revised Cost Estimate (RCE) submitted by the Petitioner *vide* affidavit dated 9.7.2020.

12. Having heard the representatives of the Petitioner and perusing the material on record, we proceed to dispose of the petition.

Date of Commercial Operation (COD)

13. The Petitioner has claimed the actual COD for the transmission asset, as per the following details:

S. N.	Name of Asset	Claimed COD
1	"Hot Line Speech Communication (Computer Dialling) System for Grid Operation" consisting of PABX & Associated items as installed and commissioned in NERLDC & 07 Nos. SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh and Manipur) of North Eastern Region	1.4.2018 (Actual)

14. The Petitioner has submitted that the Communication System under ULDC projects comprising of Fibre Optic & Microwave systems was established for providing communication connectivity between Control Centres and from data



concentrator nodes for handling large data volumes. The voltage for communication system operation is 24/48 Volt DC supply.

15. As per the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 (in short, “the 2010 CEA Regulations”), minimum voltage required for inspection is 650 V. Further, Central government has specified that the notified voltage for the purpose of self-certification under Regulations 30 and 43 of the 2010 CEA Regulations is 11 KV. Accordingly, no inspection is required by CEA inspector up to 11 kV. Hence, the CEA clearance letter is not applicable in case of communication system. The Petitioner has enclosed relevant extract of the 2010 CEA Regulations and Notification of Ministry of Power with the petition.

16. Further, the Commission, with reference to communication system, in paragraph 9 of order dated 27.1.2017 in Petition No.53/TT/2016, has recorded that CMD’s approval is required only when the asset in question is ready for commissioning and the corresponding upstream and downstream assets are not commissioned and that is not applicable in case of OPGW links like the transmission asset.

17. Accordingly, in support of COD, the Petitioner has submitted RLDC Certificate dated 18.7.2018 and COD letter dated 3.8.2018 in respect of the transmission asset.

18. Taking into consideration the RLDC Charging Certificate and COD letters of the Petitioner, the COD for the transmission asset is approved as 1.4.2018.

Capital Cost

19. Clauses (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:



“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of 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) Increase in cost in contract packages as approved by the Commission;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- (e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- (h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

20. The Petitioner has claimed capital cost and submitted Auditor Certificate dated 6.12.2019 for the transmission asset. The details of apportioned approved cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2018-19 and 2019-20 along with estimated completion cost as claimed by the Petitioner as per latest description of transmission asset are as under:

(₹ in lakh)					
Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Expenditure up to COD	Actual/ Projected Expenditure for FY		Estimated Completion Cost
			2018-19	2019-20	
241.00	406.72	338.30	2.47	7.12	347.89

Cost Over-run

21. The Petitioner has submitted that the capital cost is beyond the FR approved cost and has submitted detailed item-wise variation between FR cost and actual cost. The Petitioner vide affidavit dated 9.7.2020 has submitted copy of Revised Cost Estimate (RCE) approved by Board of Directors of the Petitioner at an estimated cost



of ₹10344 lakh including IDC of ₹1036 lakh based on September 2019 price level. Further, the Petitioner has submitted apportioned approved cost as per RCE and has also submitted revised element-wise break-up of the transmission asset as per apportioned approved RCE cost.

22. We have considered the submissions of Petitioner. As compared to the apportioned approved (FR) cost of ₹241.00 lakh for the Asset, the estimated completion cost (₹347.89 lakh) has increased by about ₹106.89 lakh (44.35%). The Petitioner has submitted approved Revised Cost Estimate (RCE), and we note that against the capital expenditure of ₹338.30 lakh as on COD i.e. 1.4.2018 and the estimated completion cost of ₹347.89 lakh, the apportioned approved cost as per RCE is ₹406.72 lakh. Therefore, there is no cost-over-run.

23. Accordingly, the capital cost considered as on COD, subject to scrutiny of IDC, IEDC and Initial Spares is as follows:

(₹ in lakh)			
Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Expenditure up to COD	Capital Cost Considered as on COD (subject to IDC, IEDC & Initial spares scrutiny)
241.00	406.72	338.30	338.30

Time over-run

24. As per the Investment Approval dated 17.4.2015, the scheduled commissioning date of the transmission project was 30 months. Accordingly, the scheduled commercial operation date of the assets under the transmission project was 17.10.2017 against which the transmission asset was put into commercial operation on 1.4.2018 with a delay of about 5 months and 15 days (166 days). The Petitioner has submitted that the delay is mainly on account of landslides, bandh, strike, flood, poor road condition, road blockage, storm/ rain intermittent violence/



insurgency, ROW problem, shutdown delays etc. during 2015 to 2018, which were beyond the control of Petitioner. The Petitioner has submitted the chronological details of time over-run along with documentary evidence. The chronology of time over-run is as under:

S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
1	28.2.2015	30.11.2015	276	0	276	Supply	MOM of 15th TCC & 15th NERPDC meeting confirmed the late handling over of work front i.e Manipur SLDC building.
2	28.2.2015	30.6.2016	472	276	196	Supply	Late handing over of work-front i.e. SLDC building by P&E, Mizoram.
3	28.2.2015	11.3.2017	743	472	271	Supply	MOM confirmed the late handling over of work front i.e Nagaland-SLDC Building.
4	28.2.2015	11.05.2017	804	743	61	Supply	Late handing over of work-front i.e. SLDC building space in Chimpu in Arunachal.
5	11.3.2015	13.03.2015	3	3	0	Supply	Indefinite Strike and Bandh called by Joint Action Committee and AMMSU in Manipur.
6	26.3.2015	26.03.2015	1	1	0	Supply	Bandh called by All Nyishi Students' Union(ANSU) opposing the installation of pre-paid electric meter in Arunachal.
7	2.4.2015	07.04.2015	6	6	0	Supply	Seasonal cyclonic rain storms affected power supply and surface transport in Mizoram and Tripura
8	20.4.2015	23.04.2015	4	4	0	Supply	Heavy rainfall hit Mizoram
9	27.4.2015	29.04.2015	3	3	0	Supply	Assam districts launch indefinite economic blockade on Mizoram.
10	27.4.2015	28.04.2015	2	2	0	Supply	48Hrs total bandh in all Naga Inhabited areas by UNC in Manipur.
11	30.4.2015	30.04.2015	1	1	0	Supply	Transport strike affects life in Tripura.
12	7.5.2015	07.05.2015	1	1	0	Supply	AGP calls 10-hour Assam bandh over Land Boundary Agreement.
13	25.5.2015	26.05.2015	2	2	0	Supply	Meghalaya alert against 48-hr bandh call by banned outfit.
14	13.6.2015	17.06.2015	5	5	0	Supply	Landslide in Meghalaya.(Annex-N)
15	4.6.2015	20.06.2015	17	17	0	Supply	Militant attacks cause tension in the area in Manipur.
16	7.7.2015	16.07.2015	10	10	0	Supply	Violence/Clash for demanding Inner Line Permit in Manipur.
17	20.7.2015	20.07.2015	1	1	0	Supply	AAJYCS calls Assam bandh.
18	25.7.2015	31.08.2015	38	38	0	Supply	Flood, Landslide due to heavy rainfall in Nagaland.
19	27.7.2015	29.07.2015	3	3	0	Supply	38 Hrs bandh called by JAC in Manipur.
20	19.8.2015	19.08.2015	3	3	0	Supply	Rain triggers landslides in Meghalaya.



S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
21	19.8.2015	30.08.2015	12	12	0	Supply	Disaster faced in Aizawl city due to heavy rain causing road sinking, flood & landslide which resulted in delay in supplying of material in advance.
22	19.8.2015	22.08.2015	4	4	0	Supply	Landslide cuts-off National highway of Imphal-Dimapur in Manipur.
23	23.8.2015	11.09.2015	20	20	0	Supply	Flood in Assam.
24	02.9.2015	02.09.2015	1	1	0	Supply	Strike in Tripura.
25	6.9.2015	08.09.2015	3	3	0	Supply	Landslide in Meghalaya.
26	12.9.2015	12.09.2015	1	1	0	Supply	Total bandh in Assam.
27	15.9.2015	17.09.2015	3	3	0	Supply	Supply of material (in advance) was disrupted by natural calamities in Mizoram.
28	21.9.2015	21.09.2015	1	1	0	Supply	AKRSU bandh hits life in Assam.
29	21.9.2015	21.09.2015	1	1	0	Supply	State wide general strike called by NRFM against the forced merger of Manipur into the Indian Union in Manipur.
30	24.9.2015	26.09.2015	3	3	0	Supply	Landslides disrupted in supplying the material in advance in Mizoram.
31	15.10.2015	15.10.2015	1	1	0	Supply	18 Hrs State wide general strike called by NRFM against the forced merger of Manipur into the Indian Union in Manipur.
32	19.10.2015	19.10.2015	1	1	0	Supply	12 Hr Bandh called by All Nyishi Students' Union (ANSU) demanding its charter of demand in Arunachal.
33	17.12.2015	17.12.2015	1	1	0	Supply	IPFT bandh in Tripura.
34	4.1.2016	04.01.2016	1	1	0	Service	Deadly Earthquake hit entire North East and caused damage to most part of Manipur.
35	5.2.2016	06.02.2016	2	2	0	Service	48-hour bandh to greet PM in Assam.
36	18.4.2016	18.04.2016	1	1	0	Service	Tripura: 24-hr 'General Strike' called by Congress.
37	18.4.2016	26.04.2016	9	9	0	Service	Flood and ,landslides due to Heavy rain in North east especially Assam, Arunachal Pradesh & Nagaland.
38	25.4.2016	01.07.2016	68	68	0	Service	Landslide due to heavy rain in Arunachal.
39	15.5.2016	18.05.2016	4	4	0	Service	Heavy rain caused flood in different parts of the state in Nagaland.
40	21.5.2016	26.05.2016	7	7	0	Service	Large area flooded due to heavy rain in Manipur.
41	22.5.2016	24.05.2016	3	3	0	Service	Road Blockage due to heavy rain causing delay in work in Mizoram.
42	30.5.2016	30.06.2016	31	31	0	Service	Poor Road condition made the transporters to hardly move in to the state in Arunachal .



S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
43	7.6.2016	08.06.2016	2	2	0	Service	Natural calamities like landslides, poor road condition, Road Block, storm/rain intermittent violence/insurgency in Arunachal.
44	10.6.2016	10.06.2016	1	1	0	Service	Bandh on NH 2 called in Nagaland.
45	17.6.2017	19.06.2017	3	3	0	Service	Landslide in Meghalaya.
46	18.6.2016	18.06.2016	1	1	0	Service	24 Hrs total bandh by UNC in Manipur.
47	25.6.2016	05.07.2016	11	11	0	Service	Heavy rain caused flood and landslide in different parts of the state in Nagaland.
48	26.6.2016	27.06.2016	2	2	0	Service	Natural calamities like landslides, poor road condition, Road Block, storm/rain intermittent violence/insurgency in Arunachal.
49	25.4.2016	01.07.2016				Service	Landslide due to heavy rain in Arunachal.
50	10.7.2016	10.07.2016	1	1	0	Service	24Hr Bandh By AAPSU for fulfilling its charter of demand in Arunachal.
51	15.7.2016	24.08.2016	41	41	0	Service	Flood in Assam
52	19.7.2016	21.07.2016	3	3	0	Service	Floods in Tripura.
53	26.7.2016	5.08.2016	11	11	0	Service	Massive landslide in Mizoram.
54	10.8.2016	10.08.2016	1	1	0	Service	Bomb Blast at the Main town shocked the whole area in Manipur.
55	10.8.2016	12.08.2016	3	3	0	Service	Violence eruption in Arunachal.
56	15.8.2016	17.08.2016	2	2	0	Service	Landslide due to heavy rain in Arunachal.
57	2.9.2016	02.09.2016	1	1	0	Service	Bharat Bandh: Life crippled in Tripura.
58	17.9.2016	21.09.2016	5	5	0	Service	Delay in supplying of material and team movement due to heavy rain and landslides and road blockage in Mizoram.
59	19.9.2016	19.09.2016	1	1	0	Service	Sudden death of Chief Minister causing tense in the main City in Arunachal.
60	6.10.2016	06.10.2016	1	1	0	Service	Indefinite National Highway bandh by CCoFA for fuel adulteration issue in Manipur.
61	17.10.2016	29.10.2016	10	10	0	Service	Indefinite National Highway Bandh called by CCoFA (Co-ordination Committee on Fuel Adulteration) on fuel adulteration issue in Nagaland.
62	20.10.2016	20.10.2016	1	1	0	Service	Bandh in Assam.
63	23.10.2016	25.10.2016	3	3	0	Service	Poor road condition due to severe monsoon and lack of fund for maintenance of roads in Mizoram.
64	1.11.2016	19.03.2017	139	139	0	Service	Economic blockage called by UNC in Manipur.
65	7.11.2016	11.11.2016	5	5	0	Service	Floods in Tripura.
66	28.11.2016	28.11.2016	1	1	0	Service	Left calls for strike in Tripura.



S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
67	14.12.2016	15.12.2016	2	2	0	Service	Insurgency in Arunachal Pradesh.
68	16.12.2016	16.12.2016	1	1	0	Service	24Hrs Bandh called by women vendors in State of Manipur in Manipur.
69	19.12.2016	20.12.2016	2	2	0	Service	Violence broke out Over the Naga economic Blockage in Manipur.
70	21.12.2016	07.01.2017	18	18	0	Service	Economic blockade on both the highways leading to Manipur which effect in other landlocked regions of North East India – both Tripura and Mizoram
71	7.1.2017	07.01.2017	1	1	0	Service	Tribal body called bandh in Nagaland.
72	25.1.2017	25.01.2017	1	1	0	Service	Bandh cloud over Naga civic polls in Nagaland.
73	31.1.2017	31.01.2017	1	1	0	Service	Nagaland JCC calls for 24-hour state-wide bandh.
74	3.2.2017	04.02.2017	2	2	0	Service	Violence eruption. Bandh called by Joint Co-ordination Committee in Nagaland.
75	13.2.2017	21.02.2017	9	9	0	Service	Indefinite state wide bandh called by Joint Co-ordination Committee in Nagaland.
76	25.2.2017	25.02.2017	1	1	0	Service	Bandh in Manipur for election campaign.
77	25.3.2017	25.03.2017	1	1	0	Service	Demand for white paper on Naga Agreement, bandh launched in Nagaland.
78	26.3.2017	26.03.2017	1	1	0	Service	17Hr strike called by DESAM in Manipur.
79	2.4.17	04.04.17	2	2	0	Service	Hailstorm in Mizoram
80	26.4.2017	26.04.2017	1	1	0	Service	24-hour strike hits bus services in Guwahati.
81	19.5.2017	19.05.2017	1	0	1	Service	24-hr strike cripples Agartala.
82	30.5.2017	30.05.2017	1	0	1	Service	12Hr General strike called in Dimapur.
83	05.6.2017	06.06.2017	2	0	2	Service	Highway Blockage in Mizoram.
84	13.06.2017	20.06.2017	8	0	8	Service	Heavy rainfall, Landslide in Mizoram.
85	19.06.2017	23.06.2017	5	2	3	Service	Floods in Tripura.
86	02.07.2017	20.07.2017	19	0	19	Service	Flood, Landslides due to un-stoppable rain.
87	04.07.2017	04.07.2017	1	1	0	Service	Assam 'bandh' for ST status hits normal life.
88	09.07.2017	20.07.2017	12	12	0	Service	Massive Landslide, flood due to incessant rain in Arunachal.
89	10.07.2017	25.08.2017	45	11	34	Service	Flood in Assam.
90	11.07.2017	25.07.2017	15	15	0	Service	Flood, Landslide due to heavy rain in Nagaland.
91	22.07.2017	22.07.2017	1	1	0	Service	12Hr capital complex bandh by APCC (Arunachal Pradesh Congress committee).
92	15.08.2017	20.08.2017	6	6	0	Service	Flood in Manipur.



S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
93	27.08.2017	30.08.2017	4	0	4	Service	Landslide due to heavy rain in Mizoram.
94	28.08.2017	29.08.2017	2	0	2	Service	Highway blockage and protest for Bodoland separate state in Assam.
95	28.08.2017	28.08.2017	1	1	0	Service	Bandh called by the opposition BJP and Congress against killing of Journalist in Tripura.
96	30.08.2017	31.08.2017	2	0	2	Service	48Hrs bandh called by the All Manipur Border Area Development Association in Manipur.
97	06.09.2017	07.09.2017	2	0	2	Service	48Hrs bandh called by the AKRSU in Assam.
98	11.09.2017	11.09.2017	1	0	1	Service	12Hrs bandh called by Bodo groups for Statehood Demand in Assam.
99	14.09.2017	14.09.2017	1	0	1	Service	12Hrs Bandh called by MNF In Mizoram.
100	15.09.2017	17.09.2017	3	0	3	Service	Bad road condition due to monsoon in Mizoram.
101	18.09.2017	18.09.2017	1	0	1	Service	12Hr bandh called by AAPSU against granting citizenship to Chakma and Hajong Refugees in Arunachal Pradesh.
102	21.09.2017	21.09.2017	1	0	1	Service	24Hrs general strike called by NRFM in Manipur.
103	06.10.2017	06.10.2017	1	0	1	Service	Bad road condition due to monsoon in Mizoram.
104	23.10.2017	25.10.2017	3	0	3	Service	Flood in Manipur.
105	31.10.2017	01.11.2017	2	0	2	Service	42Hrs National Highway Bandh Called by the KPU in Nagaland.
106	21.11.2017	22.11.2017	2	0	2	Service	26hrs CorCom General strike in Manipur.
107	23.11.2017	24.11.2017	2	0	2	Service	12Hrs & 24Hrs Bandh called by the opposition BJP and Congress against killing of Journalist in Tripura.
108	27.11.2017	29.11.2017	3	0	3	Service	Strike called by All Nagaland Dist. Ministerial Service Association in Nagaland.
109	29.11.2017	29.11.2017	1	1	0	Service	12Hrs bandh called by the Umbrella Organization of indigenous people in Assam.
110	12.12.2017	12.12.2017	1	0	1	Service	12Hrs Strike called by UPML in Arunachal Pradesh.
111	13.12.2017	13.12.2017	1	0	1	Service	Bandh and Blockage by ULFA(I) in Assam.
112	17.12.2017	17.12.2017	1	0	1	Service	Indefinite bandh called by ACVA in Nagaland.
113	29.12.2017	29.12.2017	1	0	1	Service	12Hrs capital bandh called by ATCO in Arunachal Pradesh.
114	16.01.2018	17.01.2018	2	0	2	Service	36Hrs bandh called by TSA in Manipur.
115	01.02.2018	01.02.2018	1	0	1	Service	12Hrs bandh called by CCNTHCo in Nagaland.
116	12.02.2018	12.02.2018	1	0	1	Service	24Hrs Chhaka bandh called by AAMWA in Assam.
117	18.02.2018	18.02.2018	1	0	1	Service	Tripura Election.



S.N.	From	To	Period of Hindrance (days)	Overlapping period (days)	Net Hindrance (days)	Activity	Cause of Hindrance
118	27.02.2018	27.02.2018	1	0	1	Service	Nagaland Election.
119	27.02.2018	27.02.2018	1	1	0	Service	Meghalaya Election.
120	13.03.2018	13.03.2018	1	0	1	Service	12Hrs bandh called by CCTOA in Assam.
121	16.03.2018	16.03.2018	1	0	1	Service	Cor Com bandh in Manipur.
122	19.03.2018	20.03.2018	2	0	2	Service	36Hrs bandh called by AAPYF in Arunachal Pradesh.
Total			3028	2112	916		

25. The Petitioner has submitted that the transmission project was discussed, agreed and approved in the 14th meeting of the NERPC held on 4.9.2013 and it was to be executed under the “Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in North Eastern Region” project. The transmission asset was not included in the Investment Approval dated 24.4.2015 for the transmission project, i.e. “Establishment of Fibre Optic Communication under Wide band Communication Expansion plan in North Eastern Region.” The Petitioner has submitted that subsequently in the 18th meeting of the NERPC held on 11.10.2017, it was agreed to include the transmission asset under “Establishment of Fibre Optic Communication under Wide band Communication Expansion plan in North Eastern Region.” The Petitioner has submitted that the transmission asset was included under the scope of the transmission project at the RCE stage approved by the Board of Directors of the Petitioner Company on 31.3.2020 and as per the RCE, the revised scheduled COD was June 2020.

26. The relevant extracts of the minutes of the 14th TCC meeting and 14th NERPC held on 4.9.2013 is as follows:

“ITEM No. D. Proposal for implementation of State of art PABX System:

During the recent grid disturbance, operators at control center faced many problems in voice communication with other control centers and important stations due to non-availability of fast dialling, easy directory sorting and inter-regional voice connectivity



etc. which consequently delayed the grid restoration process. Considering this, POWERGRID has proposed to install state of the art PABX system at all SLDCs, RLDCs and NLDC of the country with features such as computerized touch screen dialling, directory sorting, voice recording system etc. The proposal for implementation of state of art PABX system for NLDC/NERLDC & all SLDCs of North-Eastern region under the additional Fibre Optic Project requirements for central Sector of North Eastern Region was deliberated in 16th UCC meeting. The NIT for this requirement has already been floated and bids are under evaluation. This requirement is being included in the Additional Fibre Optic requirements for Central Sector project of North-Eastern Region approved by 12th NERPC meeting.

Further in the Special TCC meeting dated 09th February 2013, the members of the committee agreed for implementation of state of art PABX system.

Deliberation in the TCC meeting:

The committee noted as above.

Decision of members of NERPC

Members have approved the decision of TCC.”

27. The relevant extract of the minutes of the 18th TCC and 18th NERPC Meeting held on 10th & 11th October, 2017 at Shillong is as follows:

“B. 15 : VOIP EXCHANGE PROJECT IN NERLDC & SLDCS OF NER

It may be noted that VOIP exchange facility is under installation by M/s Orange under supervision of POWERGRID in NER for NERLDC & different SLDCs. Originally it was proposed to be booked under MW Vacation Project by POWERGRID. But MW vacation Project has only Assam & Central sector. During 6th NETeST, it was opined that “as VOIP Exchange pertains to all SLDCs specifically separately, POWERGRID may explore cost booking in line with philosophy adopted for SLDC Up gradation/Expansion project” in NER where specific head of each state SLDC is available.

It is proposed to book the cost under SLDC Project/ NER FO Expansion project.

Deliberation of the TCC

TCC recommended for approval of RPC. (Note: Cost to be booked under NER FO Expansion Project)

Deliberation of the RPC

The RPC noted and approved the recommendation of TCC.”

28. On perusal of the above minutes, it is observed that the implementation of the transmission project was approved in 14th NERPC meeting held on 4.9.2013 while in the 18th NERPC meeting held on 11.10.2017, it was only discussed about booking of



the cost of the VOIP exchange under the SLDC up-gradation/ expansion project. Therefore, we are unable to agree with the contention of the Petitioner that the transmission project was approved in the 18th NERPC meeting held on 11.10.2017. Moreover, as per the Form 5A submitted by the Petitioner, the Letter of Award (LOA) for the transmission asset was issued on 4.3.2014, wherein the date of start of work was 4.3.2014 and the date of completion of work as 3.9.2014. This only shows that the project was approved prior to 4.3.2014 and not when it was decided to include the transmission asset under the transmission project in the 18th NERPC meeting held on 11.10.2017. Further, though the transmission project was approved in 14th NERPC meeting held on 4.9.2013, the Petitioner has not included the transmission asset in the Investment Approval dated 17.4.2015. In fact , it is observed that the transmission asset was included by the Board of Director of the Petitioner's Company on 31.3.2020 at the stage of approving RCE i.e., after almost six and half years after the discussions in 14th TCC and 14th NERPC meetings held on 4.9.2013. The sequence of events submitted by the Petitioner show that there are several inconsistencies in the submissions made by the Petitioner.

29. We now go into the reasons given by the Petitioner in support of the time over-run of 5 months and 7 days in case of the transmission asset. The Petitioner has attributed the time over-run in case of the transmission asset to factors like late handing over of work front i.e., SLDC buildings, heavy rainfall, economic blockades, landslides, bandh, strike, flood, transport strikes, poor road condition, road blockage, storm/ rain intermittent violence/ insurgency etc. during the period from 2014 to 2018. However, the Petitioner has not deliberated as to how heavy rainfall, economic blockades, landslides, bandh, strike, flood, transport strikes, poor road condition, road blockage, storm/rain intermittent violence/ insurgency etc. has affected the installation



of the transmission asset that was to take place in the SLDC buildings. The reasons advanced by the Petitioner are vague.

30. The Petitioner has submitted a copy of the e-mail to show that the SLDC Buildings at Aizawl was handed over to the Petitioner late in June 2016. However, the Petitioner has not produced any document to show that the Petitioner had approached SLDC at Aizawl earlier in time, and that the building was not handed over to it in time in spite of the Petitioner taking it up with the SLDC at Aizawl. Even if the SLDC Building was handed over to the Petitioner in June 2016, as per the LOA the work should have been completed within six months, i.e., by December 2016. However, the transmission asset was put into commercial operation on 1.4.2018, after 21 months from the date of handing over of the SLDC Building at Aizawl. The Petitioner has not explained the time taken from the date of handing over of the building to the COD on 1.4.2018.

31. Considering the inconsistencies in submission of the Petitioner regarding inclusion of transmission asset in Investment Approval/ Revised Cost Estimates, lack of clarity as to how reasons advanced by the Petitioner has attributed to delay in implementation of transmission asset in SLDC buildings and reasons for delay in execution of work even after SLDC buildings were made available, we are of the view that the time over-run in case of the transmission asset is attributable to the Petitioner. Therefore, the time over-run of 166 days is not condoned. The time overrun condoned/ not condoned in respect of transmission asset is summarised as below:

Total Time overrun	Time overrun condoned	Time overrun Not condoned
166 days	Nil	166 days



Interest During Construction (IDC)

32. The Petitioner has claimed Interest During Construction (IDC) for the transmission asset and has submitted the Auditor's Certificate dated 6.12.2019, in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

33. IDC has been allowed considering the information submitted by the Petitioner for the Asset on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. Accordingly, IDC considered is as under:-

(₹ in lakh)

Assets (A)	IDC as per Auditor's certificate (B)	IDC Admissible (C)	IDC disallowed due to Time overrun not condoned/ Computational difference (D)= (B)- (C)	IDC Discharged as on COD (E)	IDC Un-discharged as on COD (F)= (C)-(E)	IDC Discharged
						2018-19
Asset	43.99	35.95	8.04	35.27	0.69	0.69

Incidental Expenditure During Construction (IEDC)

34. The Petitioner has claimed IEDC vide Auditor's Certificate dated 6.12.2019, which, as per Form-12, is as follows:

(₹ in lakh)

Period	IEDC
Up to 31.3.2016	23.92
1.4.2016 to 31.3.2017 (as per form 12 A)	5.02
1.4.2017 to 31.3.2018 (as per form 12 A)	5.44
From 1.4.2018 (COD) to 31.3.2019 (as per Auditor certificate)	-
Total IEDC claimed as on 1.4.2018 (COD)	34.37



35. We observe that IEDC claimed is beyond the percentage of hard cost i.e., 10.75% as indicated in the abstract cost estimate. Hence, IEDC claimed by the Petitioner for the transmission asset is restricted in line with the ceiling. Further, the Petitioner has submitted that IEDC was fully discharged as on respective dates and no liquidated damages has been recovered for the transmission asset.

36. Details of IEDC considered for tariff computation, subject to revision at the time of true-up is as below:-

(₹ in lakh)							
IEDC claimed as per Audit or certificate	Hard cost up to 31.03.2019	% of Hard Cost as per ACE	IEDC allowable as on COD (Restricted as per % of Hard Cost as per ACE)	IEDC disallowed due to excess claim	IEDC disallowed due to time overrun	Total IEDC disallowed	Total Allowable IEDC as on COD
34.37	262.41	10.75%	28.21	6.16	4.33	10.49	23.88

37. IEDC allowed for the transmission asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 as implemented vide the Commission's Order dated 4.2.2020 in petition no 1/TT/2019, at the time of truing up, after all the assets under the transmission project scope are put to commercial use and the actual quantum of IEDC is known. The Petitioner is directed to furnish the IEDC details of all the assets of the transmission project at the time of true-up.

Initial Spares

38. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

(i) Transmission line - 1.00%

(ii) Transmission Sub-station (Green Field) - 4.00%

(iii) Transmission Sub-station (Brown Field) - 6.00%

(iv) Series Compensation devices and HVDC Station - 4.00%

(v) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%

Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) Xxxxx

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

39. The Petitioner has claimed initial spares for transmission asset and has submitted Auditor Certificate in support of the same. The Petitioner, *vide* affidavit dated 20.3.2020, has also submitted details of year-wise capitalisation and initial spares discharged up to COD. The Petitioner has further submitted that the expenditure incurred towards initial spares have been included in capital cost as on COD. The amount towards balance initial spares liabilities have been considered in additional capital expenditure of the respective year and the Petitioner has prayed to allow the entire initial spares claimed under the instant petition. The details of initial spares claimed by the Petitioner is as follows:



Particulars	Plant and Machinery Cost (excluding IDC and IEDC, land cost and cost of civil works) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit claimed (C) (in %)	Initial Spares worked out by the Petitioner (₹ in lakh)
Communication System	269.53	6.68	3.5	9.53

40. We have considered the submissions made by the Petitioner. The initial spares are allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019. Accordingly, the initial spares allowed for the 2014-19 tariff period are as under:

(₹ in lakh)

Element	Plant and Machinery Cost up to the cut-off date/31.3.2019 (excluding IDC and IEDC, land cost and cost of civil works) (₹ in lakh)	Initial spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (%)	Initial spares allowed (₹ in lakh)
Communication System	262.41	6.68	3.50	6.68

Capital cost as on COD

41. Accordingly, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulations is summarized as under:

(₹ in lakh)

Capital Cost as on COD as per Auditor Certificate	Less: IDC disallowed as on COD due to		Less: IEDC disallowed due to excess claim/ Time overrun not condoned	Less: Excess/ undischarged Initial Spares	Capital Cost considered as on COD
	Computational difference/ time overrun not condoned	Un-discharged			
1	2	3	4	5	6=1-2-3-4-5
338.30	8.04	0.69	10.49	0.00	319.08



Additional Capital Expenditure (ACE)

42. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:

“(1) The capital expenditure in respect of the 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:

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

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in Law or compliance of any existing law:

Provided that 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 shall be submitted along with the application for determination of tariff.”

43. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:

“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation”

44. The Petitioner has claimed following additional capitalisation for transmission asset for 2014-19 tariff period and has submitted Auditor’s Certificate dated 6.12.2019 in support of the same, as under:

		(₹ in lakh)
Additional Capital Expenditure in FY		Total ACE
2018-19	2019-20	
2.47	7.12	9.59

45. We have considered the submissions made by the Petitioner. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for transmission asset is 31.3.2020. The Petitioner has claimed ACE vide Auditor’s Certificate for the FY 2018-19 and 2019-20 in respect of the transmission asset. ACE during 2019-20 will be considered during 2019-24 tariff period.



46. The Petitioner has claimed ACE for the year 2018-19 under Regulation 14(1)(i) (Undischarged liabilities) and 14(1)(ii) (works deferred for execution) of the 2014 Tariff Regulations, balance and retention payment within cut-off date. Accordingly, the allowed Additional Capital Expenditure is summarized below which is subject to true up:

(₹ in lakh)		
Particulars	Regulation	2018-19
ACE to the extent of Balance & Retention Payment & works deferred for execution	14 (1)(i) & 14(1)(ii)	2.47
Add: IDC discharged during the FY	14 (1)(i)	0.69
Total		3.16

Capital cost for the tariff period 2014-19

47. Accordingly, the capital cost considered for the tariff period 2014-19, subject to true up, is as follows:

(₹ in lakh)				
Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Capital Cost allowed as on COD	ACE allowed in 2018-19	Capital cost allowed as on 31.3.2019
241.00	406.72	319.08	3.16	322.24

48. Based on the above, the tariff in respect of the Asset from 1.4.2018 to 31.3.2019 (period of 365 days in FY 2018-19) is determined in subsequent paragraphs.

Debt-Equity Ratio

49. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specify as follows:

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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.”

50. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE for the transmission asset. This debt-equity ratio has been allowed for capital cost as on COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same is summarised as under:-

Particular	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	223.36	70	225.57	70
Equity	95.73	30	96.67	30
Total	319.08	100	322.24	100

Return on Equity (ROE)

51. Clauses (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the 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:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:



(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% 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)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

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

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

52. The Petitioner has submitted that ROE has been calculated at the rate of 19.758% after grossing up ROE with MAT rate of 21.5488% as per provisions of Regulations 24 and 25 of the 2014 Tariff Regulations and submitted Form-8. The Petitioner has further submitted that the grossed up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.



53. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, as the actual MAT rate for FY 2018-19 is available, this rate has been considered for the purpose of working out the return on equity.

54. Accordingly, the ROE allowed is as follows:

Particulars	(₹ in lakh)
	2018-19
Net Opening Equity	95.73
Increase in Equity due to addition during the year	0.95
Closing Equity	96.67
Average Equity	96.20
Return on Equity (Base Rate) (%)	15.50
Tax Rate applicable (%)	21.549
Applicable ROE Rate (%)	19.758
Return on Equity for the year	19.01

Interest on Loan (IOL)

55. Regulation 26 of the 2014 Tariff Regulations are provided as under:

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of decapitalisation 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.

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

56. The Petitioner has submitted that IOL has been claimed on the basis of rates prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

57. We have calculated IOL on the basis of rates prevailing as on the date of commercial operation as furnished by the Petitioner. The IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:

- (i) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition including additional information.
- (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
- (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

58. The details of IOL allowed for the transmission asset is as follows:-

Particulars	(₹ in lakh)
	2018-19
Gross Normative Loan	223.36
Cumulative Repayment up to previous Year	0.00
Net Loan-Opening	223.36
Addition due to ACE	2.21
Repayment during the year	20.30
Net Loan-Closing	205.27



Particulars	2018-19
Average Loan	214.32
Weighted Average Rate of Interest on Loan (%)	8.3806%
Interest on Loan	17.96

Depreciation

59. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. 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 or elements thereof.

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 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 in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further 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 generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and 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-II to these regulations for the assets of the generating station and transmission system:

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.”

60. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The transmission asset was put under commercial operation during 2018-19. The weighted average life of the Asset has been worked out at 15 years. The Gross Block during 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2018-19 is as under:

Particulars	(₹ in lakh)
	2018-19
Opening Gross Block	319.08
Additional Capitalisation	3.16
Closing Gross Block	322.24
Average Gross Block	320.66
Value of Freehold Land included above	0.00
Aggregated Depreciable Value	288.60
Remaining Aggregate Depreciable Value at the beginning of the year	288.60
No. of completed years at the beginning of the year	0
Balance useful life of the asset at the beginning of the year	15
Weighted Average Rate of Depreciation (WAROD) (%)	6.3300
Combined Depreciation during the Year	20.30
Cumulative Depreciation at the end of the year	20.30

Operation and Maintenance Expenses (O&M Expenses)

61. The Petitioner has claimed the O&M expenses for transmission asset as per the following details:

Asset	(₹ in lakh)
	2018-19
“Hot Line Speech Communication (Computer Dialling) System for Grid Operation” consisting of PABX & Associated items as installed and	26.09



commissioned in NERLDC & 07 Nos. SLDCs (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Arunachal Pradesh and Manipur) of North Eastern Region	
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62. The Petitioner has submitted that O&M expenses have been claimed for 2018-19 and has been calculated @7.5% of the capital cost in line with Petition No. 68/2010 dated 8.12.2011 (Communication portion) with escalation of 3.32% per annum in line with 2014 Tariff Regulations. The Petitioner has claimed O&M expenses of ₹26.09 lakh in respect of the Asset. However, in support of the claim of O&M expenses, the Petitioner has not furnished the Auditor's Certificate.

63. We have considered the submission of Petitioner. The Commission vide order dated 20.2.2019 in Petition No. 168/TT/2018, held as under:

"25. Operation and Maintenance Expenses (O&M Expenses)

..... with regard to Asset-8, the petitioner has not submitted Auditor Certificate and has claimed O&M expenses @7.5% of capital cost as on COD. No O&M expenses have been allowed for the instant asset. Petitioner is directed to submit the actual O&M expenses at the time of truing up and the same will be reviewed at the time of truing up."

64. We observe that the Petitioner has not submitted the Auditor's Certificate for O&M expenditure of 2018-19. Hence, no O&M expenses are being allowed for the Asset. However, the Petitioner is directed to submit the details of actual O&M expenses duly supported by Auditor certificate at the time of truing up of 2014-19 tariff period.

Interest on Working Capital (IWC)

65. Clause 1(c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:

"28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;



(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance 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 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 72 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

66. As per the 2014 Tariff Regulations, the components of the working capital and the interest thereon are discussed hereinafter:

a) Maintenance spares:

Maintenance spares @15% Operation and maintenance expenses specified in Regulation 29.

b) O & M expenses:

Operation and maintenance expenses have been considered for one month of the O&M expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months of annual fixed cost as worked out above.

d) Rate of interest on working capital:

As per Clause 28(3) of the 2014 Tariff Regulations, SBI Base Rate as on 1.4.2018 (8.70%) plus 350 bps i.e. 12.20% has been considered as the rate of interest on working capital.

67. Accordingly, the interest on working capital is summarized as under:

Particulars	(₹ in lakh)
	2018-19
Maintenance Spares	0.00
O&M Expenses	0.00
Receivable	9.74
Total	9.74
Rate of Interest (%)	12.20
Interest on Working Capital	1.19



Annual Transmission charges

68. Accordingly, the annual transmission charges being allowed for the transmission asset are as under:

Particulars	(₹ in lakh)
	2018-19
Depreciation	20.30
Interest on Loan	17.96
Return on Equity	19.01
Interest on Working Capital	1.19
O&M Expenses	0.00
Total	58.45

Filing fee and the publication expenses

69. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses in terms of Regulation 52 of the 2014 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

License fee and RLDC Fees and Charges

70. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the 2014 Tariff Regulations.

Goods and Services Tax

71. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.



Sharing of Transmission Charges

72. The Tariff for Transmission (Communication system) of Electricity (Annual Fixed Cost) shall be shared as per Regulation 43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges shall be recovered on monthly basis and the billing, collection and disbursement of Transmission Charges shall be governed by provision of CERC (Sharing of interstate Transmission Charges and Losses) Regulations, 2010.

73. This order disposes of Petition No.156/TT/2020.

Sd/-
(Arun Goyal)
Member

Sd/-
(I. S. Jha)
Member



ANNEXURE-1**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD
Asset-1**

Asset-1 (2014-19) Capital Expenditure	Admitted Capital Cost as on 1.4.2014/ COD	Projected Additional Capitalisation during tariff period 2014-19		Admitted Capital Cost as on 31.3.2019	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations				
						2014-15	2015-16	2016-17	2017-18	2018-19
Land- Freehold	0.00	0.00		0.00	0.00%	-	-	-	-	0.00
Land-Lease hold	0.00	0.00		0.00	3.34%	-	-	-	-	0.00
Building, Civil Works & Colony	0.00	0.00		0.00	3.34%	-	-	-	-	0.00
Transmission Line	0.00	0.00		0.00	5.28%	-	-	-	-	0.00
Substation	0.00	0.00		0.00	5.28%	-	-	-	-	0.00
PLCC	319.08	3.16		322.24	6.33%	-	-	-	-	20.30
IT Equipment (Incl. Software)	0.00	0.00		0.00	15.00%	-	-	-	-	0.00
Total	319.08	3.16		322.24	Total	-	-	-	-	20.30
Average Gross Block (₹ in lakh)						-	-	-	-	320.66
Weighted Average Rate of Depreciation (WAROD)						-	-	-	-	6.3300%

