

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 45/TT/2023

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member
Shri Harish Dudani, Member**

Date of Order: 19.07.2025

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the determination of Transmission Tariff from COD to 31.3.2024 for Transmission Assets: 400kV D/C (quad) Alipurduar-Jigmeling Transmission line (Indian Portion) and 02 Nos. 400 kV line bays at Alipurduar Substation under "Transmission System Strengthening in Indian System for Transfer of power from Mangdechhu Hydroelectric Project in Bhutan."

And in the matter of:

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

...Petitioner

Versus

1. **West Bengal State Electricity Distribution Company Limited**
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector II, Salt Lake City,
Calcutta-700091
2. **Bihar State Electricity Board**
(Bihar State Holding Company Limited),
Vidyut Bhawan, Bailey Road
Patna-800001.
3. **Grid Corporation of Orissa Limited,**
Shahid Nagar,
Bhubaneswar - 751007
4. **Damodar Valley Corporation,**
DVC Tower, Maniktala
Civic Centre, Vip Road,
Calcutta-700054.



5. **Power Department,**
Government of Sikkim,
Gangtok - 737101
6. **Jharkhand State Electricity Board**
In Front of Main Secretariat
Doranda, Ranchi - 834002
7. **Chief Engineer, (Comml),**
North Bihar Power Distribution Company Limited
Vidyut Bhawan, Bailey Road
Patna, Bihar- 800 001
8. **Chief Engineer, (Comml),**
South Bihar Power Distribution Company Limited
Vidyut Bhawan, Bailey Road
Patna, Bihar- 800 001
9. **Assam Electricity Grid Corporation Limited**
(Formerly Assam State Electricity Board)
Bijulee Bhawan, Paltan Bazar,
Guwahati – 781001, Assam
10. **Meghalaya Energy Corporation Limited**
(Formerly Meghalaya State Electricity Board)
Short Round Road, “Lumjingshai”
Shillong – 793001, Meghalaya
11. **Government of Arunachal Pradesh**
Itanagar, Arunachal Pradesh
12. **Power and Electricity Department**
Government of Mizoram
Aizawl, Mizoram
13. **Manipur State Power Distribution Corporation Limited**
(Formerly Electricity Department, Government of Manipur)
Keishampat, Imphal
14. **Department of Power**
Government of Nagaland
Kohima, Nagaland
15. **Tripura State Electricity Corporation Limited**
Vidyut Bhawan, North Banamalipur,
Agartala– 799001, Tripura (W).



16. Mangdechhu Hydroelectric Project Authority (MHPA)

Post box no: 579, Dangdung

Trongsa, Bhutan.

...Respondent(s)

Parties Present : Ms. Swapna Seshadri, Advocate, PGCIL
Shri Utkarsh Singh, Advocate, PGCIL
Ms. Sneha, Advocate, PGCIL
Ms. Rohini Prasad, Advocate, BSPHCL
Shri Mohd. Mohsin, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Arjun Malhotra, PGCIL

ORDER

The instant Petition has been filed by Power Grid Corporation of India Limited for the determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the 2019 Tariff Regulations) from the proposed COD to 31.3.2024 for Asset: 400kV D/C (quad) Alipuduar-Jigmeling Transmission Line (Indian Portion) and 2 Nos. 400kV line bays at Alipurduar Substation under "Transmission System Strengthening in Indian System for Transfer of Power from Mangdechhu Hydroelectric Project in Bhutan".

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

- 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 8.40 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 claim the overall security expenses and consequential IOWC on that security expenses separately 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 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.*
- 11) *Allow the entire initial spares as claimed in the instant petition on project level.*
- 12) *Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with CERC Regulations'2019*

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. Punatsangchhu-I (1200MW), Punatsangchhu II (990MW), Mangdechhu (720MW), and Wangchhu (570MW) are hydro generating stations being developed in Bhutan and are at various stages of development. Generations from these projects would be transferred to India after meeting small local demand in Bhutan. The associated transmission systems evolved as part of the National Transmission Grid Master Plan (NTGMP) for Bhutan

- corresponding to the 2020 and 2030 time frames.
- b. The Mangdechhu Hydroelectric Project Authority (MHPA), Bhutan, is implementing the 4x180 MW Mangdechhu Hydroelectric Project. It is a run-of-river power plant built on the Mangdechhu River in Trongsa Dzongkhag District, Central Bhutan. The first of the four power plant units was commissioned in June 2019, while the second unit was commissioned in July 2019, and power was transferred to India through an alternative arrangement. MHPA has signed the implementation agreement with the Petitioner on 12.09.2015, with the commissioning scheduled for Units as January, 2018 to April, 2018 respectively, and the associated transmission system as March, 2018.
 - c. The scheme has been discussed and agreed in the meeting of the Standing Committee on Power System Planning in Eastern Region held on 2nd May 2014 at NRPC, New Delhi. The matter was further discussed and approved in the 27th TCC & ERPC meeting held on 30th & 31st May 2014 at Gangtok, Sikkim. Subsequently, in the 33rd Empowered Committee meeting held on 30th September, 2014, in the Central Electricity Authority (CEA), it was decided that the said transmission elements may be implemented by the Petitioner company.
 - d. The prior approval of the Government of India under Section 68 of the Electricity (Supply) Act, 2003, for the subject project has been obtained vide MoP's letter dated 27.11.2014.
 - e. The Ministry of Power vide letters dated 24.07.2015 and 07.03.2019 allocated the power from Punatsangchu-I (1200MW), Punatsangchu-II (1020MW), and Mangdechhu HEP (720MW), Bhutan, to the constituents of the Northern

Eastern Region and the Eastern regional constituent states.

- f. The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioners Company in its 326th Meeting held on dated 9.3.2016 and circulated vide Memorandum Ref.: C/CP/Mangdechhu HEP in Bhutan dated 15.03.2016, at an estimated cost of ₹80863.00 lakh including IDC of ₹4685.00 lakh based on October, 2015 price level. The transmission project was scheduled to be put into commercial operation within twenty-two (22) months from the date of Investment Approval.

- g. The scope of work covered under the transmission project broadly includes:

Transmission lines:

- (i) Jigmeling-Alipurduar 400kV D/C (Quad) line (Indian Side)-NER portion
- (ii) Jigmeling-Alipurduar 400kV D/C (Quad) line (Indian Side)-ER-II portion (D/C + M/C portion)

Substation:

(i) 400 kV Alipurduar Substation Extension.

- 2 Nos 400 kV line bays for termination of Jigmeling -Alipurduar 400 kV D/C (Quad) line.

- h. The Revised Cost Estimate (RCE) of the project was accorded by the competent authority of the Petitioner Company on 20.01.2022 and circulated vide Memorandum No. C/CP/PA2122-10-0AU-RCE011 dated 25.01.2022 with an estimated cost of ₹92290.00 lakhs including IDC of ₹10343.00 lakhs, at September, 2021 price level.
- i. The assets under the instant transmission project have been completed. The scheduled commercial operation date (SCOD), actual date of commercial operation (COD), the transmission asset considered under this Petition is as follows:



Asset	SCOD	COD
400kV D/C (quad) Alipurduar-Jigmeling Transmission line (Indian Portion) and 02 nos. 400kV line bays at Alipurduar Substation	09.01.2018	24.06.2021

4. The Respondents are generating stations, distribution licensees, and power departments procuring transmission service from the Petitioner, all of which are mainly beneficiaries of the North Eastern Region.

5. The Petitioner has served the Petition on the Respondents, and notice regarding the filing of this Petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003 (the Act). No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Bihar State Power Holding Company Limited (BSPHCL) (Respondent No. 1), North Bihar Power Distribution Company Limited (Respondent No. 07), and South Bihar Power Distribution Company Limited (Respondent No. 08) through BSPHCL vide affidavit dated 20.03.2024 have filed their reply and have raised the issues of delay in commissioning of the asset. The Petitioner has filed a rejoinder vide affidavit dated 28.03.2024 in response to the reply filed by BSPHCL. The issues raised by BSPHCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. Since the order in the matter, which was reserved on 27.2.2024, could not be passed before a Member of the Commission, who formed part of Coram, demitting office, the matter was re-listed for the hearing on 30.9.2024, and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the Petition, vide affidavit dated 20.4.2022, the reply filed by BSPHCL, NBPDC, and SBPDCL through BSPHCL vide affidavit dated 20.3.2024, and the Petitioner's rejoinder vide affidavit dated 28.3.2024.

8. Having heard the representatives of the Petitioner and after perusing the material

on record, we proceed to dispose of the Petition.

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

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

(₹ in lakhs)			
Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
Depreciation	3524.06	4697.18	4790.79
Interest on Loan	2343.73	2901.09	2740.99
Return on Equity	3758.12	5009.64	5109.47
O&M Expenses	135.01	177.14	177.52
Interest on Working Capital	231.13	310.81	321.64
Total	9992.05	13095.86	13140.41

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

(₹ in lakhs)			
Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
O&M Expenses	25.02	25.90	26.80
Maintenance Spares	45.03	46.62	48.25
Receivables	1,600.15	1,614.56	1,615.62
Total Working Capital	1,670.20	1,687.08	1,690.67
Rate of Interest (in %)	10.50	10.50	10.50%
Interest on Working Capital	135.01	177.14	177.52

Data of Commercial Operation ("COD")

11. The Petitioner has claimed the COD of the transmission asset as 24.6.2021. The Petitioner has submitted a CEA Energisation Certificates dated 6.10.2.17, 15.3.2021 & 23.3.2021, an NLDC Certificate dated 14.10.2021 for the completion of trial operation on 23.6.2021, a self-declaration of COD vide Notification dated 24.6.2021, and a CMD Certificate in support of the COD of the transmission asset.

12. Taking into consideration the CEA Energization Certificates, NLDC Certificate for

Completion of Trial Operation, and self-declared COD letter and CMD Certificate, the COD of the transmission asset is approved as 24.6.2021.

Capital Cost

13. 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 up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of 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 up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
- Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be 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."*

14. The Petitioner vide Auditor's Certificate dated 17.1.2022 has claimed capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission asset, and the same is as follows:

(₹ in lakhs)

Approved Cost (FR)	Approved Cost (RCE)	Expenditure Up to COD	Projected Expenditure			Estimated Completion Cost
			2021-22	2022-23	2023-24	
80863.00	92290.00	85992.80	1902.20	2035.26	1499.87	91430.13

15. The Petitioner has submitted that the FR apportioned approved cost is ₹80863.00 lakh, and the estimated completion cost is ₹91430.13 lakh, which is more than the approved apportioned cost as per FR. However, the same is within the approved cost as per RCE, and, therefore, there is no cost overrun with respect to RCE. The cost variation with respect to FR apportioned cost and approved cost as per RCE is as follows:

(₹ in lakhs)

S. No	Description	Cost as per FR	Cost as per RCE	Estimated Capital Cost	Variation FR. (- decrease, +increase)	Variation RCE (- decrease, +increase)
		a	b	c	d = c - a	e = c - b
1	Preliminary works incl. compensation	9019.00	19076.00	19136.03	10117.03	60.03
A	Transmission Lines material					
2	Towers Steel	16492.61	18306.8	18098.45	1605.84	-208.35
3	Conductor	15140.81	15585	15519.12	378.31	-65.88
4	Insulators	3999.99	1006.81	942.59	-3057.4	-64.22
5	Hardware Fittings	1692.47	2894.57	2632.91	940.44	-261.66
6	Erection, Stringing & Civil works including foundation	21926.12	15553.17	15797.15	-6128.97	243.98
7	Miscellaneous T/L	1466.00	1809.03	1657.89	191.89	-151.14
B	Substations					
1	Civil Works & Preliminary works Substation	115.73	186.00	150.58	34.85	-35.42
2	Switchgear (CT,PT, CB, Isolator etc)	537.62	375.85	355.74	-181.88	-20.11



S. No	Description	Cost as per FR	Cost as per RCE	Estimated Capital Cost	Variation FR. (- decrease, +increase)	Variation RCE (- decrease, +increase)
		a	b	c	d = c - a	e = c - b
3	Control , Relay & Protection Panel	106.43	75.82	69.32	-37.11	-6.5
4	PLCC	270.00	88.79	77.13	-192.87	-11.66
C	Miscellaneous S/s	152.22	780.16	636.34	484.12	-143.82
D	Over heads	5259.00	5762.00	5707.50	448.50	-54.50
E	Interest During Construction (IDC)	4685.00	10343.00	9496.36	4811.36	-846.64
F	Foreign Exchange Rate Variation (FERV)	0.00	447.00	1153.02	1153.02	706.02
	Grand Total	80863.00	92290.00	91430.13	10567.13	-859.87

16. Reasons for Cost Variation between the approved FR Cost Vs.the approved RCEs are given as under:

Sl. No.	Variation on account of:	Variation w.r.t. approved cost	
		(Rs. in crore)	(%)
(i)	Price Variation		
a	DPR to Award (on competitive bidding while tendering)	19.17	2.37 %
b	Provision kept as per contract (based on applicable indices)	42.66	5.28 %
	Sub-Total (i)	61.83	7.65 %
(ii)	Variation in quantities of approved items	(-) 114.45	(-) 14.15 %
(iii)	Compensation for Transmission Line	101.32	12.53 %
(iv)	FERV (in contractual payments)	(-) 0.07	(-) 0.01 %
	Sub-Total [(i) to (iv)]	48.63	6.01 %
(v)	FERV (on foreign loan revaluation) above DBC	4.47	0.54 %
(vi)	Other Reasons (IEDC and IDC)		
a	IEDC (incl. Contingencies)	4.60	0.57 %
b	IDC incl. FERV upto DBC	56.58	7.00 %
	Sub- Total (vi)	61.18	7.57 %
	GRAND TOTAL (i) to (vi)	114.27	14.13 %

17. The Petitioner has submitted the following reasons for cost variation:

a. Price Variation (PV)/Quantity variation (Net decrease of Rs 52.62 crore: 6.5 %)

There has been a decrease in the cost of the project by **Rs. 52.62 crores** on this



account, which works out to 6.5% of the approved cost. The said variation is attributable to variation in quantities executed during the execution of the project w.r.t. FR and associated variation in prices during execution of the project vis-a-vis prices considered in FR.

b. Compensation for Transmission Line (Net increase of Rs.101.32 crore: 12.53 %)

There was a provision of ₹89.25 crore in the approved DPR under this head. However, based on the actual expenditure incurred and the balance anticipated expenditure, an amount of ₹190.57 crores is incurred/likely to be incurred under the head, resulting in an increase of ₹101.32 crores in the cost of the project. The detail of the increase in cost under the head is explained hereunder:

<i>Description</i>	<i>As per DPR (₹ in crores)</i>	<i>As per RCE (₹crores)</i>	<i>Remarks</i>
<i>i) Compensation towards Crop, Tree, PTCC, Hutment and Railways etc.</i>	6.70	57.21	Crop and Tree compensation of ₹ 5.71 crores in the DPR was approved at ₹5 lakh/km on a normative basis, which now in RCE works out to about ₹51.56 crores, i.e. ₹31.16 lakh/km. One of the reasons for the increase in crop and tree compensation is the payment of crop & tree compensation to forest dwellers in the NER portion, which was not envisaged during the DPR. As per the Bodoland Territorial Council Order dated 7.9.2019, an amount of ₹10.14 crore out of ₹51.56 crores has been considered for the payment of crop and tree compensation to forest dwellers in the forest area.
<i>ii) Compensation towards Forest</i>	51.29	66.94	During DPR, forest area involvement was envisaged about 387.68 Ha for which there was a provision of ₹51.29 crores at ₹13.23 lakh/Ha. However, about ₹66.94 crore has been incurred at ₹32.06 lakh/ha towards actual forest area with involvement of 208.807 Ha of line. Further reasons for the increase in forest compensation are also due to the payment of about ₹7.10 crore towards wild life clearance as the involved forest area also falls in the buffer zone of the Manas National Park (Assam), which was not envisaged during DPR.

Description	As per DPR (₹ in crores)	As per RCE (₹crores)	Remarks
iii) Compensation towards Tower Base and diminution of land value in the width of Right of Way (RoW) Corridor	31.26	66.42	Compensation has been increased from ₹11.48 crore estimated in DPR to ₹46.64 crores (₹33.55 crores for non-forest area and ₹13.09 crores for forest area) based on the Assam Govt. Notification dated 10.3.2017 and Bodoland Territorial Council Order dated 7.9.2019 for land/crop/trees/huts, etc. in forest area. It may be mentioned that the payment of subject compensation in the forest area was not envisaged in the DPR.
TOTAL	89.25	190.57	Increase of Rs. 101.32 crores.

c. Foreign Exchange Rate Variation (FERV) (Net increase of Rs. 4.39 crores: 0.54 %)

There has been a net increase of ₹4.39 crores in the project cost under the head of FERV, namely. (i) The project involves payments in foreign currency towards the contracts awarded in foreign currency under the project. Based on payments made under these contracts, there has been a decrease of ₹0.07 Crore on account of FERV in RCE from the approved DPR cost, and (ii) the project also involves partial funding through KfW and Sumitomo loan in foreign currency. FERV (above DBC) due to foreign currency loan revaluation till Q1 of FY 2021-22 is ₹4.46 Crore.

d. Variation in IDC/IEDC (Net increase of ₹61.18 crore: 7.57 %)

The total cost of the project under the head 'IEDC and IDC' of the project has increased by ₹59.64 crore in comparison with the approved cost, which works out to 7.57 % as per the following break-up.

a. Increase in IEDC (4.60 crores):

In the Investment Approval, IEDC, and Contingency of 10.75% and 3% have been considered, respectively. However, based on the actual expenditure under the subject head, IEDC has been considered in the Auditor Certificate. The

project time cycle (PTC) increased from 22 months, considered in FR, to 63 months as per the actual commissioning. Further, the claimed IEDC is within the IEDC, considered in RCE.

b. Increase in IDC:

The variation in IDC w.r.t. FR is attributable to an increase in overall capital cost (excl. IDC) w.r.t. FR is due to an increase in project time cycle (PTC) from 22 months, considered in FR, to 63 months as per the actual commissioning, variation in rate of interest considered in FR v/s actuals, and deployment of funds based on actuals. In FR, IDC was calculated considering the rate of interest for domestic loans @10.5%. However, in actuality, the weighted average rate of interest of deployed loans has been considered. The actual IDC accrued up to DOCO has been considered at the time of the claim of the tariff.

18. The Petitioner has submitted that the price variation under the project is attributable to the actual line routing and compensation paid based on the assessment of Govt. officials of the State and also inflationary trend prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages, Conductor, IEDC, and FERV, etc.

19. Respondent No. 2, BSPHCL vide affidavit dated 20.3.2024, has submitted that the major reason for the cost overrun has been attributed to compensation for the transmission line by the Petitioner. The payment of compensation as per the relevant legal framework should have been considered while planning for the project. Further, in the Minutes of Meeting regarding payment of compensation to forest dwellers, there was no new compensation element that was introduced, and it was within the existing framework that the decisions made were adopted. The Petitioner is also required to provide the supporting documents regarding payment of such compensation.

20. We have considered the submissions of the Petitioner and the Respondent. The estimated completion cost as on 31.3.2024 is ₹91430.13 lakh, which is more than the FR apportioned approved capital cost of ₹80863.00 lakh. However, the estimated completion cost, including ACE, is within the apportioned approved cost as per RCE. Since the estimated completion cost of the transmission assets is within the respective RCE apportioned approved cost, we approve the same.

21. It has been noted that while the crop and tree compensation was initially envisaged at ₹5 lakh/km, the Revised Cost Estimate (RCE) indicates ₹31.16 lakh/km. However, the petitioner has not submitted any supporting documents to justify this rate. Additionally, the petitioner has claimed that ₹51.56 crore has been considered for compensating forest dwellers based on the Bodoland Territorial Council (BTC) order dated 07.09.2019, but has not submitted a copy of this order. The petitioner is accordingly directed to furnish the relevant supporting documents, which will be examined during the truing-up.

22. The petitioner has submitted that compensation towards the forest as per DPR is estimated as ₹13.23 lakh/Ha, whereas ₹32.06 lakh/Ha has been paid towards the actual forest area. The petitioner is accordingly directed to furnish the relevant supporting documents, which will be examined during the truing-up.

23. The petitioner further submitted that based on Assam Govt. notification dated 10.03.2017 and Bodoland Territorial Council (BTC) order dated 07.09.2019, compensation is increased from ₹11.48 crore to ₹46.64 crore due to compensation towards tower base and diminution of land value in the width of Right of way (RoW) corridor but not submitted a copy of this order. The petitioner is accordingly directed to furnish the relevant supporting documents, which will be examined during the truing-up.

24. We provisionally allowed the capital cost claimed by the petitioner subject to the above mentioned compensation related issues will examine at the time of truing-up.



Time overrun

25. As per the IA dated 9.3.2016, the transmission asset was scheduled to be commissioned within 22 months from the date of IA, i.e., the SCOD was 9.1.2018. However, the transmission asset was put into commercial operation on 24.6.2021 with a time overrun of 41 months and 10 days. The Petitioner has submitted that the delay is mainly due to forest clearance issues in Assam, RoW problems, law and order issues during transmission line construction, and litigation. After managing intense statutory clearances, difficult terrain conditions, court cases in transmission line, ROW problems & other construction challenges in the Eastern Regions and North Eastern Region, the prolonged delay was reduced and the asset was put into commercial operation w.e.f. 24.6.2021. The detailed reasons for the time overrun are as follows:

Reasons for Time Overrun of Asset-1

With regard to the delay in receipt of Forest / Wildlife Clearances, the Petitioner has mainly submitted as under:

- (i) The Petitioner had applied for Forest Clearance on 16.5.2016 through online mode, reference No. FP/AS/TRANS/19330/2016 for diversion of 208.807 ha forest land for a stretch of 45.40 km of line length construction of 400 KV D/C (Q) JATL. The forest proposal was duly accepted by the Nodal Office, and the Petitioner was instructed to submit duly signed hard copies of the proposal to the concerned DFO office for further processing on 26.05.2016.
- (ii) The DFOs were intimated vide letter dated 7.11.2016, regarding the processing of Part-II of the forest proposal and for identification of Compensatory Afforestation (CA) land in degraded forest land in their respective divisions. 'In Principal' Approval was conveyed by the Additional PCCF, MoEFCC, GoI, NER-Shillong vide letter No.



3-AS C 023/2017-SHI 2660-61 dated 18.10.2018 and 14.11.2018 after continuous persuasion by the Petitioner. Accordingly, the concerned DFO of BTAD, Assam, forwarded a demand note for payment against the diversion of 208.807 ha of land, which was promptly fulfilled. Payment to the forest department was done for diversion of 208.807 ha of forest land to facilitate working in the portion of the aforesaid line and was intimated to the forest department about the payment completion without accounting compensation payment for land area and forest trees to the forest dwellers as it was already paid to the forest department.

(iii) While starting work in the forest area, severe ROW issues were faced from the forest dwellers demanding land and forest tree compensation, and hence, the letter was written to BTC, Kokrajhar, stating the issue and asking for their intervention. A joint meeting was held between BTC, PGCIL officials, and the head of the village, headman/ forest villagers on 12.3.2019. After MoM, BTC concluded that forest dwellers need to be compensated at land value rate determined by BTC (Bodoland Territorial Council). Finally, the Working Permission was received from the Chief Conservator of Forests & Nodal Officer at 06.09.2019 for working in the forest portion of the line after continuous long persuasion. This led to the delay in starting work in the forest portion of the aforesaid line. However, the final approval for diversion of 208.807 ha of forest land was accorded on 15.02.2021.

(iv) Further, the proposal was made on 16.05.2016 for the Forest Clearance. Although the proposal for Forest Clearance is typically granted within 10-12 months, the instant case was approved on 18.10.2018 (Stage-I) and finalized on 15.02.2021 (Stage-II). This has led to a major delay of around 57 months, as a large amount of forest is involved in the route of this transmission line. The delay pertaining to Forest clearance affected the starting phase of the line construction and spilled over as a



cascading effect, and ultimately pushed the project timeline beyond its scheduled completion target. Accordingly, this delay, which is of unforeseen nature, be condoned by the Commission.

Delay due to the Citizenship Amendment Bill:

(v) The Citizenship (Amendment) Bill, 2019, was cleared by the Union Cabinet for introduction in the parliament. After the bill was cleared, violent protests erupted in Assam from 4th December 2019 and continued almost till March 2020. Curfews were imposed in various parts of Assam and were even extended to an indefinite period. Almost all roads and rail transportation were blocked. This caused a delay in the transportation of the man and materials at the site and created inconvenience in the execution of work.

Law and Order Issues:

(vi) In order to ensure execution and commissioning of the project within the timeframe, the orders for supply of material and erection works pertaining to towers, substation, etc., were placed well within the stipulated timeline. However, frequent bandhs, strikes, and blockades called by various organizations on different issues within the State and outside of the State resulted in loss of man-days during the construction of the transmission line. Moreover, due to the remoteness of the location and the unavailability of skilled labour, laborers from other States were required to be engaged. However, due to issues like ILP (Inter labour Permit), etc., there were constraints in bringing such laborers to the site. Due to law & order problems, laborers often vacated the site, which resulted in slow progress of works. Furthermore, incidents happened during construction activity, like threatening, etc., also hampered the normal working in adjacent locations, and due to prevalent fear-psychosis, the gang's output was reduced

considerably.

(vii) The law and order situation at certain locations was resolved with the support of the administration, which caused the delay in the commissioning of the transmission line from the scheduled completion. Furthermore, various local organisations /extremist groups have called for an Assam bandh to lay their demands before the State government. A total of around 80 days of bandh were encountered from the date of the initial start of construction of the aforesaid line. These local bandhs also added to the delay in the commissioning of the line as curfews were imposed in various regions of Assam.

Floods:

(viii) Due to heavy rains in various districts, a flood-like situation occurred in Alipurduar, Cooch Behar, and Kokrajhar areas. The rains were recorded as the highest for the last 20 years, which had severely affected nearby villages in these districts. All the working areas were submerged, and work could not be commenced in full swing. Unprecedented heavy rain had set in, resulting in sites being waterlogged and unapproachable at most of the locations, which also led to the project's delay.

District	Month of heavy Rainfall	Total no of affected months
Kokrajhar	Mar-17, Aug-17, Oct-17, May-19, Jul-19, Jun-20, Jul-20, Sept-20	08
Bongaigaon	Feb-17, Apr-17, Aug-17, Sept-17, Oct-17, Mar-18, Sept-18, Dec-18, Jul-19, May-20, Sept-20, Nov-20	12
Chirang	Apr-17, Jun-17, Aug-17, Sept-17, Oct-17, Mar-18, May-18, Jun-18, Sept-18, Feb-19, Jul-19, Nov-19, May-20, Jun-20, Sept-20	15
Cooch Behar	Mar-17, Apr-17, Aug-17, Apr-19, Sept-20	5
Jalpaiguri	Mar-17, Aug-17, Jul-19, Jun-20, Jul-20, Sept-20	6

Difficult Terrain Conditions:

(ix) In the advent of the monsoon season, the approach roads to the locations got washed away due to landslides, interrupting communication and movement of manpower and material, and due to the deteriorated condition of the leftover stretches, it is nearly impossible to carry the materials. The daily working hours are limited in the forested hilly area. Due to unfavorable locations of working sites, the workforce had to travel long distances to their working site, limiting the effective working hours of the gangs.

Severe Right of Way Issues:

(x) Upon Investment Approval, preliminary actions were initiated immediately for taking up the survey works of this transmission line. In this regard, the Petitioner acted proactively and intimated the concerned State/ district authorities regarding this upcoming project involving the construction of s transmission line. Further, the authorities were also requested to extend their cooperation and support whenever the Petitioner may encounter related hindrances. The transmission line is traversing through various districts of West Bengal and Assam state, and due to increased infrastructure projects, an increasing number of severe ROW issues were encountered right from the onset of transmission line works, including during the stage of preliminary survey, line plotting, and land scheduling. The ROW issues involved the demand of an exorbitant amount of crop compensation, land compensation, manhandling of workers, etc. Further, wherever possible, persuasive measures were adopted to pacify the landowners/ villagers agitating against the line construction. However, at certain locations, verbal persuasions did not suffice, and eventually, the help and assistance of the District administration the and Police department were sought to mitigate the ROW

issues. Many of the landowners had also taken the course of the courts to oppose the construction of the line through their premises. The villagers were demanding a very high amount of compensation, and meetings were held with the local & District Civil and Police administration, including the Bodo-land Territorial Council (BTC) Authority, ULFA, NDFB, etc. Resolution of these issues took a considerable amount of time, while in some cases, the matter could be resolved only with the involvement of local authorities.

(xi) In the forest area in the North Eastern region, even after obtaining Forest Clearance, the villagers obstructed/stopped all construction activities, demanding compensation against the land. Several rounds of meetings & discussions with the BTAD authorities were held, as a result of which, the BTAD authorities directed the Petitioner to pay of the compensation to the beneficiaries in the settled forest land. In this regard, intervention was also sought from the State/ district /local authorities under the Government of respective States as a bottom-down approach to get the issues resolved without further delay.

(xii) During the construction of the transmission line, several critical ROW issues were faced in various locations. Also, severe ROW problems were faced while executing construction activities under the Bishmuri Police Station, and the Petitioner had to approach the District Magistrate to depute a Magistrate along with armed CRPF personnel. Accordingly, the District Magistrate had circulated an order dated 19.12.2020, and the work was completed in the presence of the Police Personnel from Serfanguri PS and Bishmuri PS for safeguard.

(xiii) Another similar ROW issue was faced in the Gossaigaon section, where illegal huts were constructed by the landowners along the line corridor for a stretch of around 2 km, even after the completion of foundation and erection works. The Petitioner

approached the SDO (Civil), Gossaigaon, for the resolution of the issue. After consultation with him, he obligated the concern to be genuine and deputed an Executive Magistrate vide their order dated 22.12.2020 for liaison with police and other security forces in respect of maintenance of law and order. Despite continuous persuasion, the Petitioner, along with the local administration/ Magistrate, failed to convince the villagers/ landowners, as they demanded high compensation, which was not legitimate and thus not acceptable. Ultimately, with no other option but determined to complete the work, the Petitioner requested the Superintendent of Police, Kokrajhar, BTR, Assam, to deploy security personnel along with lady police w.e.f 22.1.2021 and whenever required to complete the stringing activities in this stretch of around 6 km. The broad chronology of the RoW issues faced and steps undertaken for their mitigation are tabulated below:

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
1	35/0	9-Jun-2016	9-Apr-2018	669	Letter to Administration On dated 04.08.2016, 23.10.2017, and 15.02.2018	Foundation work has been obstructed by landowners demanding illogical and exorbitant compensation
2	57/1	10-Jan-2017	6-Jun-2017	147	Letter to Administration On dated 13.02.2017 and 23.03.2017	
3	34/1	13-Feb-2017	20-May-2018	461	Letter to Administration On dated 15.03.2017, 24.05.2017, 23.10.2017 and 15.02.2018	
4	46/1	20-Mar-2017	24-Mar-2017	4		Erection work stopped due to non-payment of compensation
5	71/0	20-Apr-2017	26-Dec-2017	250	Letter to Administration On dated 20.04.2017	Foundation work has been obstructed in the ground of illogical and exorbitant demands for Compensation for damage by landowners
6	74/1	20-Apr-2017	3-Jun-2017	44		Work has been stopped, demanding illogical and exorbitant compensation by Land landowners
7	71/0	20-Apr-2017	3-Jan-2018	258		
8	72/0	20-Apr-2017	16-Jan-2018	271		
9	22/0	23-May-2017	7-Jun-2017	15		Work stopped by villagers due

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
10	23/0	2-Jun-2017	7-Jun-2017	5		to the use of the village approach road & demanding compensation
11	17/3	2-Jun-2017	2-Oct-2017	122	Letter Administration No.3484A on dated 2.6.2017 to	Foundation work has been obstructed by landowners demanding illogical and exorbitant compensation
12	19/0	2-Jun-2017	5-Dec-2017	186		
13	18/0	2-Jun-2017	8-Dec-2017	189		
14	14/0	2-Jun-2017	28-Nov-2017	179		
15	32/0	2-Jun-2017	28-Dec-2017	209		
16	20/0	2-Jun-2017	3-Feb-2018	246		
17	21/0	2-Jun-2017	3-Feb-2018	246		
18	10/0	2-Jun-2017	26-Feb-2018	269		
19	14/2	2-Jun-2017	23-Jun-2018	386		
20	76A/0	28-Jun-2017	26-Feb-2018	243	Letter Administration on dated 28.6.2017 to	Work obstructed by Land owners demanding high compensation for damage
21	79/1	28-Jun-2017	3-Dec-2017	158		
22	27/0	14-Jul-2017	28-Nov-2017	137		Approved on 14.7.2017 & work started after deposit of Fees
23	29/0	14-Jul-2017	28-Nov-2017	137		Railway Crossing, Approved on 14.7.2017 & work started after deposit of Fees
24	85/0	28-Nov-2017	30-Nov-2017	2		Work stopped by villagers due to damage of village approach road
25	2/0	2-Dec-2017	8-Dec-2017	6	Letter Administration dated 2.12.2017 to On	Foundation work has been obstructed in grounds of illogical and exorbitant demands for Compensation of damage by landowners
26	3/0	2-Dec-2017	10-Feb-2018	70		
27	4/0	2-Dec-2017	26-Mar-2018	114		
28	5/0	2-Dec-2017	4-Mar-2018	92		
29	6/0	2-Dec-2017	12-Dec-2017	10		
30	7/0	2-Dec-2017	12-Dec-2017	10		
31	7/1	2-Dec-2017	12-Dec-2017	10		
32	9A/0	2-Dec-2017	13-Jan-2018	42		
33	9/0	2-Dec-2017	28-Dec-2017	26		
34	13/0	2-Dec-2017	10-Jan-2018	39	Letter Administration No.3484A On dated 3.12.2017 to	Work has been stopped by land owners for illogical and exorbitant demands for Compensation
35	14/3	3-Dec-2017	12-Mar-2018	99		
36	16/2	3-Dec-2017	27-Dec-2017	24		
37	17/2	3-Dec-2017	1-Mar-2018	88		
38	17/3	3-Dec-2017	27-Apr-2018	145		
39	18/0	3-Dec-2017	14-Dec-2017	11		
40	18/0	3-Dec-2017	21-Mar-2018	108		
41	19/0	3-Dec-2017	5-Dec-2017	2		
42	19/0	3-Dec-2017	10-May-2018	158		
43	20/0	3-Dec-2017	12-Mar-2018	99		
44	21/0	3-Dec-2017	10-Nov-2018	342		
45	27/0	3-Dec-2017	2-May-2018	150		
46	28/0	3-Dec-2017	15-Nov-2018	347		
47	28/2	3-Dec-2017	10-Apr-2018	128		

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
48	29/0	3-Dec-2017	15-Apr-2018	133		
49	8/0	16-Dec-2017	18-Dec-2017	2		Work stopped by villagers due to damage of village approach road
50	62/0	16-Dec-2017	18-Dec-2017	2		Work obstructed due to heavy rain
51	76A/0	18-Dec-2017	10-May-2018	143	Letter to Administration On dated 18.12.2017	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
52	74/0	18-Dec-2017	1-Jan-2018	14		
53	70/0	18-Dec-2017	28-Dec-2017	10		
54	74/1	18-Dec-2017	19-Dec-2017	1		
55	83/3	18-Dec-2017	25-Dec-2017	7		
56	62/2	18-Dec-2017	22-Dec-2017	4		
57	63/0	18-Dec-2017	1-Feb-2018	45		
58	61/0	18-Dec-2017	22-Dec-2017	4		
59	62/0	18-Dec-2017	18-Feb-2018	62		
60	62/1	18-Dec-2017	24-Dec-2017	6		
61	82/0	18-Dec-2017	10-Mar-2018	82		
62	68/0	18-Dec-2017	1-Nov-2018	318		
63	72/0	18-Dec-2017	15-Mar-2018	87		
64	72/0	18-Dec-2017	10-Apr-2018	113		
65	71/0	18-Dec-2017	20-Mar-2018	92		
66	81/0	18-Dec-2017	18-Mar-2018	90		
67	71/0	18-Dec-2017	15-Feb-2018	59		
68	83/1	18-Dec-2017	21-Mar-2018	93		
69	83/2	18-Dec-2017	10-Apr-2018	113		
70	83/0	18-Dec-2017	25-Apr-2018	128		
71	85/0	18-Dec-2017	15-Apr-2018	118		
72	79/2	18-Dec-2017	10-Nov-2018	327		
73	80/0	18-Dec-2017	1-Dec-2018	348		
74	53/1	10-Jan-2018	12-Jan-2018	2	Letter to Administration Letter No. APD/TLC/4059 B dtd-10/01/2018	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
75	45/1	10-Jan-2018	13-Jan-2018	3		
76	56/0	10-Jan-2018	28-Jan-2018	18		
77	83/4	10-Jan-2018	26-Jan-2018	16		
78	56A/0	10-Jan-2018	27-Jan-2018	17		
79	52/0	10-Jan-2018	22-Jan-2018	12		
80	51/0	10-Jan-2018	27-Jan-2018	17	Letter to Administration Letter No. APD/TLC/5016D on dated 23.01.2018	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
81	9/0	23-Jan-2018	3-Apr-2018	70		
82	2/0	23-Jan-2018	15-Feb-2018	23		
83	13/0	23-Jan-2018	25-Apr-2018	92		
84	9A/0	23-Jan-2018	10-Apr-2018	77		
85	6/0	23-Jan-2018	14-Feb-2018	22		
86	7/0	23-Jan-2018	20-Mar-2018	56		
87	7/1	23-Jan-2018	20-Mar-2018	56		
88	8/0	23-Jan-2018	26-Mar-2018	62		

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
89	10/0	23-Jan-2018	24-Jun-2018	152		
90	14/1	23-Jan-2018	1-Jul-2018	159		
91	11/0	23-Jan-2018	10-Oct-2018	260		
92	14/2	23-Jan-2018	25-Nov-2018	306		
93	14/0	23-Jan-2018	25-Nov-2018	306		
94	44/0	27-Jan-2018	30-Jan-2018	3	Letter to Administration Letter No. APD/TLC/5032 E dtd-27/01/2018	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
95	44/2	27-Jan-2018	28-Jan-2018	1		
96	44/1	27-Jan-2018	2-Feb-2018	6		
97	43/1	27-Jan-2018	4-Feb-2018	8		
98	45/0	27-Jan-2018	5-Feb-2018	9		
99	35/0	27-Jan-2018	8-Sep-2018	224		
100	41/0	27-Jan-2018	12-Feb-2018	16	Letter to Administration On dated 08.02.2018	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
101	28/1	8-Feb-2018	10-Mar-2018	30		
102	31/0	8-Feb-2018	26-Feb-2018	18		
103	30/0	8-Feb-2018	9-Feb-2018	1		
104	32/0	8-Feb-2018	8-Sep-2018	212		Work stopped due to trees & crops clearance by land owners
105	60A/0	25-Feb-2018	26-Feb-2018	1		
106	53/0-54/0	10-May-2018	10-Jul-2020	792	Letter to Administration On dated 10.05.18, 21.05.18, 04.06.18, 09.01.2019, 19.08.19, 05.09.19, 13.09.19, 01.11.18, 09.09.19, 15.06.20, 12.06.20	Stringing work has been obstructed by Khagen Dakua, Someswar Dakua and others Vill - Salbari, Block - Tufanganj - II constructed hutment under line corridor with malafide intention & demanding illogical and exorbitant demand for Compensation
107	28/0	6-Jun-2018	8-Jun-2018	2		Railway Crossing Proposal Approved on 06.06.2018
108	12/0	30-Sep-2018	12-Oct-2018	12		Erection work hold up due to compensation payment
109	73/0-74/0	2-Oct-2018	8-Oct-2018	6	Letter to Administration No. APD/TLC/5513B, On dated 02.10.2018	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
110	74/1-75/0	2-Oct-2018	10-Oct-2018	8		
111	74/0-74/1	2-Oct-2018	16-Oct-2018	14		
112	75/0-76/0	2-Oct-2018	21-Oct-2018	19		
113	60/0-60A/0	2-Oct-2018	26-Oct-2018	24		
114	76/0-76A/0	2-Oct-2018	26-Oct-2018	24		
115	76A/0-77/0	2-Oct-2018	8-Nov-2018	37		
116	61/0-62/0	2-Oct-2018	8-Nov-2018	37		
117	77/0-78/0	2-Oct-2018	8-Nov-2018	37		
118	78/0-79/0	2-Oct-2018	17-Nov-2018	46		
119	79/0-79/1	2-Oct-2018	19-Nov-2018	48		
120	60A/0-61/0	2-Oct-2018	25-Nov-2018	54		
121	84/0-85/0	2-Oct-2018	27-Nov-2018	56		

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
122	68/0-70/0	2-Oct-2018	25-Dec-2018	84		
123	83/0-84/0	2-Oct-2018	7-Dec-2018	66		
124	67/0-68/0	2-Oct-2018	8-Dec-2018	67		
125	66/0-67/0	2-Oct-2018	11-Dec-2018	70		
126	82/0-83/0	2-Oct-2018	25-Dec-2018	84		
127	81/0-82/0	2-Oct-2018	3-Jan-2019	93		
128	15/0-16/0	25-Oct-2018	24-Dec-2018	60	Letter to Administration No. APD/TLC/5526A, On dated 25.10.2018	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
129	16/0-17/0	25-Oct-2018	7-Jan-2019	74		
130	17/0-17/2	25-Oct-2018	10-Jan-2019	77		
131	29/0-30/0	25-Oct-2018	28-Feb-2019	126		
132	18/0-19/0	25-Oct-2018	12-Apr-2019	169		
133	22/0-23/0	25-Oct-2018	25-Nov-2019	396		
134	22/0-21/0	25-Oct-2018	15-Dec-2019	416		
135	21/0-21/1	25-Oct-2018	17-Dec-2019	418		
136	26/0	8-Dec-2018	9-Dec-2018	1	Letter to Administration On dated 08.02.2018	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
137	7/0-8/0	20-Dec-2018	1-Jan-2019	12	Letter to Administration On dated 20.12.18, 8.1.18, 23.01.2018, 18.2.18, 26.2.18, 17.4.18	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
138	6/0-7/0	20-Dec-2018	8-Jan-2019	19		
139	6/0-5/0	20-Dec-2018	1-Feb-2019	43		
140	2/0-3/0	20-Dec-2018	1-May-2019	132		
141	4/0-5/0	20-Dec-2018	1-May-2019	132		
142	3/0-4/0	20-Dec-2018	24-May-2019	155		
143	79/1	25-Dec-2018	27-Dec-2018	2	Foundation Completed on 25.12.18	Erection work hold up due to compensation payment
144	31/0-32/0	9-Jan-2019	12-Jan-2019	3	Letter to Administration (Add. Chief Sec) On dated 09.01.2019	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
145	26/0-27/0	9-Jan-2019	24-Jan-2019	15		
146	80/0-81/0	9-Jan-2019	15-Jan-2019	6		
147	83/0-83/1	9-Jan-2019	27-Jan-2019	18		
148	17/2-17/3	9-Jan-2019	25-Jan-2019	16		
149	17/3-18/0	9-Jan-2019	27-Jan-2019	18		
150	34/1	9-Jan-2019	17-Jan-2019	8		
151	79/1-79/2	9-Jan-2019	18-Feb-2019	40		
152	79/2-80/0	9-Jan-2019	17-Feb-2019	39		
153	30/0-31/0	9-Jan-2019	18-Feb-2019	40		
154	32/0-33/0	9-Jan-2019	19-Feb-2019	41		
155	24/0-26/0	9-Jan-2019	20-Feb-2019	42		
156	33/0-34/0	9-Jan-2019	27-Feb-2019	49		
157	1/0-2/0	9-Jan-2019	27-Feb-2019	49		
158	1A/0-2/0	9-Jan-2019	27-Feb-2019	49		
159	1/0-GANTRY	9-Jan-2019	6-Mar-2019	56		



SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
160	29/0-28/1	9-Jan-2019	8-Mar-2019	58		
161	1A/0-GANTRY	9-Jan-2019	9-Mar-2019	59		
162	71/0-72/0	9-Jan-2019	26-Mar-2019	76		
163	72/0-73/0	9-Jan-2019	3-Apr-2019	84		
164	70/0-71/0	9-Jan-2019	15-Apr-2019	96		
165	19/0-20/0	9-Jan-2019	21-Apr-2019	102		
166	46/5	9-Jan-2019	21-Apr-2019	102		
167	28/1-28/0	9-Jan-2019	10-May-2019	121		
168	28/0-27/0	9-Jan-2019	7-May-2019	118		
169	62/2-63/0	9-Jan-2019	15-Nov-2019	310		
170	20/0-21/0	9-Jan-2019	1-Dec-2019	326		
171	63/0-64/0	9-Jan-2019	2-Dec-2019	327		
172	23/0-24/0	9-Jan-2019	9-Dec-2019	334		
173	56A/0-57/0	9-Jan-2019	3-Jan-2020	359		
174	56A/0-56/0	9-Jan-2019	8-Jan-2020	364		
175	36/0-37/0	9-Jan-2019	2-Jan-2020	358		
176	35/0-36/0	9-Jan-2019	8-Jan-2020	364		
177	64/0-65/0	9-Jan-2019	25-Jan-2020	381		
178	50/0-51/0	9-Jan-2019	3-Feb-2020	390		
179	48/0-49/0	9-Jan-2019	12-Feb-2020	399		
180	49/0-50/0	9-Jan-2019	13-Feb-2020	400		
181	47/2-48/0	9-Jan-2019	23-Feb-2020	410		
182	55/0-55A/0	9-Jan-2019	18-Feb-2020	405		
183	55A/0-56/0	9-Jan-2019	1-Mar-2020	417		
184	40/0-40/1	5-Feb-2019	1-Apr-2019	55	Letter Administration to On dated 05.02.2019	Erection of tower has been obstructed in ground of illogical and exorbitant demand for Compensation of damage by Land owners
185	46/3	18-Feb-2019	25-Feb-2019	7	Letter Administration to On dated 18.2.19	Erection work has been stopped by Nabar Ali, S/o - Sirajuddin Ahamed, Jiyarul Haque, S/o Lt. Hazal Miya, vill - Chatrampur, Block - Tufanganj. Demanding illogical and exorbitant demand for Compensation
186	46/4	18-Feb-2019	26-Feb-2019	8		
187	21/1	15-Apr-2019	16-Apr-2019	1		Erection work stopped due to non payment of compensation
188	47/0-47/2	16-May-2019	10-Jan-2021	605	Letter Administration to On dated 16.05.19,21.05.19, 10.09.19, 17.12.19, 31.12.19, 04.01.21,	Stringing work has been obstructed by Pranab Ch. Deb, S/o Lt. Dharendra Ch. Deb, Dasarath das, S/o Lagbo Das, Faltu Das, S/o Lt Tattu Das, Jogendranath Bir, S/o

SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
189	46/0-47/0	16-May-2019	8-Jan-2021	603	11.01.21	Debendranath Bir, Nalikanta Das, S/o Lt. Naren Das, Azadhind Swachhasevek Parishad, Shailendra Ch. Deb, S/o Ganesh Ch. Deb of Vill - Chhatrampur-II, Block - Tufanganj demanding illogical and exorbitant demand for Compensation
190	51/0-52/0	10-Sep-2019	27-Jan-2020	139	Letter to Administration On dated 10.09.2019	
191	34/1-35/0	6-Nov-2019	18-Jun-2020	225	Letter to Administration On dated 06.11.19, 8.11.19, 22.11.19, 27.2.20, 19.03.20, 03.07.20, 08.05.20, 20.05.20	Stringing work has been obstructed by Santosh Roy, S/o Lt. Ananda Roy, Narayan Roy, S/o Lt. - Ananda Roy, and Kalyan Das, S/o Prafulla Das of Vill -North Ambari, Block - Coochbehar - II, Demanding illogical and exorbitant demand for Compensation
192	34/1-34/1	6-Nov-2019	18-Jun-2020	225		
193	65/0-66/0	19-Dec-2019	25-Jan-2020	37	Letter to Administration On dated 19.12.19, 20.12.19, 02.01.20,22.01.20	Stringing work has been obstructed by Muktilal Sarkar, S/o Lt. Matilal Sarkar, Jaharlal Sarkar, S/o Lt. Matilal Sarkar, Subhash Barman, S/o Lt. Harkanta Barman and others of Vill - Takowamari, Block - Tufanganj - II, Demanding illogical and exorbitant demand for Compensation
194	9/0-9A/0	24-Dec-2019	26-Nov-2020	338	Letter to Administration On dated 24.12.19	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
195	9A/0-10/0	24-Dec-2019	22-Nov-2020	334		
196	10/0-11/0	24-Dec-2019	21-Nov-2020	333		
197	11/0-12/0	24-Dec-2019	11-Nov-2020	323		
198	45/1-46/0	14-Jan-2020	1-Dec-2020	322	Letter to Administration On dated 14.01.20, 22.01.20, 27.01.20, 18.09.20, 21.09.20, 9.10.20, 21.12.20,	Stringing work has been obstructed by Sahid Hossain, S/o Lt. Umar Ali, Jiban Hari Das, S/o Lt. Jameswar Das, Antajul Hoque, S/o Kahakajal Mia, Jiyarul Hoque, S/o Lt. Hagal Ali, Sabur Miya, S/o Akbar Ali Miya, Sahidur Ali, S/o Lt. Patiuddin Ali of Vill -Chhatrampur, Block - Tufanganj demanding illogical and exorbitant demand for Compensation
199	41/0-42/0	24-Feb-2020	1-Aug-2020	159	Letter to Administration On dated 24.02.20, 29.06.20	Stringing work has been obstructed by Biren Debnath, S/o Birbhadra Debnath of Vill - Natabari, Block - Tufanganj demanding illogical and exorbitant demand for



SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
						Compensation
200	52/0-53/0	24-Feb-2020	15-Jul-2020	142	Letter to Administration On dated 24.02.20, 20.03.20, 10.06.20, 17.06.20	Stringing work has been obstructed by Paritosh Sarkar, S/o Lt. Nidhu ram sarkar of Vill - Bansraja - II, Ashim Karjee, S/o Tilakeswar Karjee, Vill - Salbari, Block - Tufanganj - II, Demanding illogical and exorbitant demand for Compensation
201	13/0-14/0	8-Jul-2020	1-Sep-2020	55	Letter to Administration On dated 8.07.20, 11.07.20, 18.8.20, 22.08.2020, 24.08.2020, 03.09.2020, 08.09.2020, 10.09.2020, 14.9.20, 15.09.20	Stringing work has been obstructed by Ajit Sen, S/o - Adhar Sen, Abhijit Sen & Binay Sen, S/o - Ajit Sen of Vill - Shibpur, Block - Coochbehar - II, Demanding illogical and exorbitant demand for Compensation
202	14/0-14/1	8-Jul-2020	7-Oct-2020	91		
203	54/0-55/0	10-Aug-2020	25-Dec-2020	137	Letter to Administration On dated 10.08.20, 17.08.20, 21.08.20, 24.08.20, 02.09.20, 04.09.20, 01.10.20, 09.10.20, 09.11.20, 12.11.20, 05.12.20, 14.12.20, 17.12.20	Stringing work has been obstructed by Ashim Karjee, S/o Lt. Tileswar Karjee, Surendranath Karjee, S/o Lt. Satish Ch. Karjee, Prasanta Karjee, S/o Surendranath Karjee of Vill -Salbari, Block - Tufanganj - II demanding illogical and exorbitant demand for Compensation
204	63/1	19-Aug-2020	22-Aug-2020	3	Letter to Administration On dated 19.8.20	Erection of tower has been obstructed by Swapan Gope, S/o Sachin Gope, Vill - Rashikbill, Block - Tufanganj - II, Demanding illogical and exorbitant demand for Compensation
205	14/1-15/0	24-Sep-2020	1-Oct-2020	7	Letter to Administration On dated 24.09.20, 28.09.20, 01.10.20	Stringing work has been obstructed by Soleman Mia, S/o Lt. Makarudin Mia, Jahirul Hoque, Vill -Patlakhawa, Block - Coochbehar - II, Demanding illogical and exorbitant demand for Compensation
206	12/0-13/0	19-Oct-2020	15-Nov-2020	27	Letter to Administration On dated 19.10.2020	Stringing work has been obstructed by Land owners for illogical and exorbitant demand for Compensation
206	108/0-109/0	15-Jan-2021	10-Feb-2021	26	Letter to SP Kokrajhar On dated 01.02.2021, 06.02.2021, 08.02.2021	Police Protection for execution works
206	64A/0-64B/0	20-Jan-2021	15-Feb-2021	26		



SI No	Loc No	ROW start date	ROW Cleared on date	Total delay (Days)	Reference	Remarks
206	84/0-85/0	25-Jan-2021	20-Feb-2021	26		

Caveat and Court cases:

(xiv) In three sections, caveats were also filed against a few influential landowners having a strong political backup, as they threatened to file a court Petition and asked to stop the work while demanding high compensation. Due to such sensitive issues, proper handling of these cases was necessary, and this led to a delay in the completion of work in these sections. A Petition was filed by an influential businessman having a strong political backup with the ruling party, in the Court of Civil Judge, Kokrajhar, for granting a temporary injunction against the highway crossing area, Serfanguri, on 09.05.2019. Due to the same, no work could be done in that section until the court case was resolved, and the verdict dated 21.1.2020 was against him .

Delay due to the Worldwide COVID-19 Pandemic:

(xv) The COVID-19 pandemic led to unforeseen/unplanned interruptions and delays. The effects of the pandemic were non-linear as associated developments were evolving rapidly. As such, a multitude of challenges were faced while navigating through largely uncharted territory with projects experiencing highly unique and mounting risks from the effects of COVID-19. The movement restriction affected the supply chain, transportation shortage, and worker absenteeism due to illness/quarantine/ migration labour shortages, which resulted in a decrease in output and delayed all country-wide ongoing projects. The lockdown imposed had complicated things further. The contractor was unable to carry out the work due to the action taken by the government to prevent the spread of the outbreak. Due to Covid-19, the work was at a standstill for almost 5-6 months and gradually resumed construction activities as per Government directives.



Delayed due to strict lockdown and travel restrictions in Bhutan due to the COVID-19 pandemic:

(xvi) The work in the Indian portion of the line was in an advanced stage of completion.

The Petitioner sought permission from the Government of Bhutan to enter Bhutan for the stringing of the Indo-Bhutan span (transmission line section on the Indo-Bhutan border) from 14.4.2020. However, due to COVID-19, the border with India remained closed, and the movement of people and vehicles inside Bhutan was restricted till further orders from the Bhutan Government.

(xvii) On 03.03.2021, a letter was written to the Ministry of Power (MoP) seeking help for the completion of the transmission line at the Bhutan end. The issue was taken up by MoP with the Ministry of External Affairs to take up the issue with Bhutan for expediting the necessary approval. Subsequently, the interconnection works in the Indo-Bhutan span were completed on 07.04.2021 after approval from the Bhutan Government. Further, due to COVID-19, strict protocol/ SOP was in place in Bhutan, preventing the engineers from entering Bhutan territory. Further, final commissioning of the line was completed by 22.06.2021 through telephonic conversation and instruction through video conferencing with the commissioning team of Jigmeling Substation, BPCL Bhutan.

(xviii) Further, the MoP vide letters dated 27.7.2020 and 12.6.2021 has also considered that the construction activities of the transmission project sites have been severely affected by the first and second wave of the COVID-19 pandemic and granted the relaxation of 5 months and 3 months respectively with respect to the completion of projects.

(xix) Though various problems occurring concurrently could have delayed the project enormously, the experience & expertise in project planning & execution by the Petitioner

curtailed the delay to 41 months. Thereafter, the Petitioner immediately completed the work on war footing and commissioned the transmission line in June 2021.

26. The respondents, Bihar State Holding Company Limited (BSPHCL) (Respondent No. 01) and North Bihar Power Distribution Company Limited (Respondent No. 07) and South Bihar Power Distribution Company Limited (Respondent No. 08) through BSPHCL vide affidavit dated 20.03.2024 have refuted the reasons submitted by the Petitioner and have submitted as under:

Response to Delay in receipt of Forest/Wildlife clearance

(i) The delay claimed of around 57 months on account of the time taken in receipt of forest/wildlife clearances is exaggerated. As per the Petitioner, the working permission was received on 06.09.2019, though final approval may have been accorded later. Further, the ROW issues raised by the forest dwellers cannot be considered as an unforeseen circumstance and cannot justify the delay. The rights of the forest dwellers should have been considered at the beginning stage by the Petitioner. As stated by the Petitioner the joint meeting was held only on 12.3.2019 (Investment Approval was accorded on 9.3.2016) and from the perusal of the said Minutes of Meetings it is apparent that the decisions adopted therein were those which were already within the existing framework like - compensation for damage of individual house hold/trees etc., as zirat as per norms of Govt. of India as per schedule rate and land compensation was continued to be stated as unacceptable under Reserved Forest Land.

(ii) The Respondents have referred to the relevant provisions regarding forest rights of forest-dwelling Scheduled Tribes and other traditional forest dwellers as contemplated by the Scheduled Tribes and Other Traditional Forest Dwellers



(Recognition of Forest Rights) Act, 2006, which was reproduced as hereunder:

“3. Forest rights of Forest dwelling Scheduled Tribes and other traditional forest dwellers. – (1) For the purposes of this Act, the following rights, which secure individual or community tenure or both, shall be the forest rights of forest dwelling Scheduled Tribes and other traditional forest dwellers on all forest lands, namely:

–

.....

(m). right to in situ rehabilitation including alternative land in cases where the Scheduled Tribes and other traditional forest dwellers have been illegally evicted or displaced from forest land of any description without receiving their legal entitlement to rehabilitation prior to the 13th day of December, 2005.”

Response to delay due to Citizenship Amendment Bill (CAA) and Law & Order Issues:

(iii) The respondents have submitted that the claims of delay on account of the Citizenship Amendment Bill and Law & Order issues are liable to be rejected. Generalized statements have been made by the Petitioner without demonstrating how the project was impacted due to the same. Additionally, reasons like remoteness of location, unavailability of skilled labour, and problems in bringing labour from other States because of the Inter Labour Permit (ILP) cannot be considered as unforeseen circumstances. The Petitioner, having experience of several decades in the field, should have contemplated such labour issues at the time of planning the project itself and should have taken steps to alleviate the possible difficulties well in advance. The alleged incidents of threatening in the adjacent location and the alleged bandh of 80 days too cannot be considered as circumstances that would unreasonably delay the project.

Response to flood and difficult terrain conditions

(iv) The Respondents have submitted that such reasons for delay are not acceptable, as they are neither unforeseen nor unanticipated. The documents annexed by the Petitioner show that the region is a flood-prone basin and heavy rains in the North-East are a normal phenomenon, which cannot be said to be unforeseen. Further, the



newspaper clippings regarding flood-like situations are from 2019 and 2020, i.e., the period after SCOD. The Petitioner, while planning for the project in this region of the country, ought to have had the necessary climatic and geographical conditions and their necessary impact on work timing, carriage of material, etc., in contemplation. Lack of preparedness in this regard is concerned with inefficiency in planning, which is a controllable factor.

Response to RoW issues

(v) Regarding ROW issues, the Respondents have submitted that in the instant Petition, it is mentioned that immediate actions were initiated with respect to the survey work of the transmission lines; further, the concerned authority was also intimated regarding the upcoming project. The Petitioner has claimed that issues were encountered from the start of transmission line work during stages of preliminary survey, line plotting, etc.; however, the said claims are without any details and supporting documents. Further, having known about the various RoW issues to be encountered, the Petitioner has not provided documentary proof regarding the remedial measures it took for the same. Out of the 206 locations tabulated by the Petitioner where RoW issues were allegedly faced by them, the majority of them (131 locations, i.e., after serial no. 75) pertain to the period after the SCOD of 15.1.2018, and the steps taken thereafter should be explained by the Petitioner. Additionally, the delay claimed on account of alleged RoW issues is exorbitant and liable to be rejected. Time being consumed for resolving RoW issues ought to be in contemplation of the Petitioner, the same being usually encountered in construction projects; as per the Petitioner itself, the issues at several locations (over 80) were resolved in under 50 days. The Petitioner should demonstrate the quantum of land affected to explain the huge delay occasioned.



Response to delay due to the COVID-19 Pandemic

(vi) The Respondents have submitted that the reliance by the Petitioner on the reason of the Covid-19 pandemic for explaining the delay is misconceived and liable to be rejected. The SCOD of the asset was 15.1.2018, and no reliance can be placed by the Petitioner on the Ministry of Power's letter dated 27.7.2020, as it was not applicable to projects whose SCOD was prior to 25.3.2020. The MOP's letter dated 12.6.2021 would also not apply as it was concerned with interstate transmission projects, which were under construction with SCOD coming after 1.4.2021. Here, the SCOD was prior to 1.4.2021, and as per the Petitioner, the interconnection work in the Indo Bhutan span was completed on 07.04.2021. Further, as per the Order dated 05.05.2020, issued by Govt. of Assam, Assam State Disaster Management Authority, as annexed by the Petitioner, all industries and their supply chain were allowed to operate in the State without the need of any specific order and all personnel working therein were allowed to commute to work at all times. All construction activities were also allowed as per this order. Further, the Petitioner has failed to demonstrate how the project in question was impacted by the COVID-19 pandemic, and the same cannot serve as a blanket justification, rather the documents brought on record by the Petitioner show that the project could not be said to be delayed on account of Covid- 19 pandemic. The Petitioner has also not brought on record any documents to support the reasons given by it for final commissioning being further delayed by over 2 months on 22.6.2021, after completion of interconnection work on 7.4.2021.

27. In response, the Petitioner has filed the rejoinder vide affidavit dated 28.3.2014 and has submitted as under:



Regarding the Delay in the receipt of Forest/Wildlife clearance

- I. The Petitioner had applied for Forest Clearance on 16.5.2016, with subsequent instructions to submit hard copies to the DFO office for further processing on 26.05.2016. DFOs were informed on 7.11.2016 to process Part-II of the forest proposal and identify Compensatory Afforestation (CA) land. Principal Approval was granted by the Addl. PCCF, MoEFCC, GOI, NER-Shillong on 18.10.2018 and 14.11.2018 after continuous persuasion, with a demand note promptly fulfilled by it, payment was made to the forest department for the diversion of 208.807 Ha of forest land, without accounting for compensation to forest dwellers.
- II. Further, the final approval for Forest Clearance was given on 15.2.2021, and the delay towards the same was for various reasons, inter alia, including the need for additional compensation negotiations with forest dwellers and bureaucratic processes. These delays, totaling approximately 57 months, affected the project timeline, and the same has been prayed to be condoned.
- III. The ROW issues arose during work commencement in forest areas, wherein intervention from BTC, Kokrajhar, was sought. A joint meeting was held on 12.3.2019, where BTC determined that forest dwellers should be compensated based on the land value rate determined by BTC. Working Permission was granted on 6.9.2019 after long persuasion, causing a delay in starting work. Final approval for forest land diversion was received on 15.02.2021. Accordingly, the forest clearance process, initiated on 16.05.2016, experienced significant delays, with final approval granted on 15.02.2021. Further, the Petitioner has submitted that the Commission has condoned delay due to forest clearance for such long periods in its various other Petitions, the details of such allowances provided are as under:



Sr. No.	Petition No.	Order dated	Delay Condoned
1.	184/TT/2016 <i>(delay due to Forest Clearance, inclusive of ROW Issues)</i>	15.12.2017	36 months
2.	62/TT/2018 <i>(delay due to Forest Clearance and other Issues)</i>	07.03.2019	49 months

Regarding delay due to Citizenship Amendment Bill (CAA) and Law & Order Issues

IV. Various news clippings and reports highlighting the situation in various districts of Assam State during the anti-CAA Protest, which has adversely affected the Project, along with various reports and posters regarding the trade union strike hitting the timeline of the project due to Bandh at various locations of Assam, including Duliajan, Rangiya, Goalpara, Kokrajhar, Doomdooma, have been submitted by the Petitioner. The same is also supported by the Annual Report issued by the Ministry of Home Affairs for different years, which provided the complex situations in various districts of North-Eastern States at different time intervals that contributed to the delay caused.

Regarding floods and difficult terrain conditions

V. The area of Assam is described as a place with lots of hills, forests, and rivers. The transmission line goes through steep hills and thick forests, making it hard to build. During the rainy season, landslides wash out the roads, making it tough to move materials and people. Also, workers can't work long hours because they have to travel far to get to their work sites. Due to heavy rains in various districts, a flood-like situation occurred in Alipurduar, Cooch, Behar, Kokrajhar, and other areas. The Petitioner has further submitted that the flood-like situation continued and affected even after 2018 (SCOD of the instant asset), wherein the instant asset was commissioned on 24.6.2021 due to a flood situation during subsequent years. Since the SCOD was delayed, the supporting documents were provided to support the said delay, and the same are

relevant for the present case.

Regarding ROW issues

VI. After receiving Investment Approval, the survey work was initiated for the transmission line, and relevant State/district authorities were informed, seeking their cooperation and support in addressing potential hindrances. As the transmission line spans through various districts in West Bengal and Assam, numerous ROW issues arose, exacerbated by the increasing number of infrastructure projects in the area. These issues included demands for high compensation, challenges in handling workers, and opposition from landowners, some of whom resorted to legal action. While verbal persuasion was attempted, assistance from district administration and police was eventually sought to address ROW issues. Resolution of these issues, which sometimes involved local authorities, required considerable time and effort.

VII. The Commission has condoned the delay due to ROW issue for such a long period in its various other Petitions, the details of such Petitions as provided is as under:

Sr. No.	Petition No.	Order dated	Delay Condoned
1.	253/TT/2015 (<i>delay due to ROW Issues</i>)	30.06.2016	50 months and 23 days
2.	55/TT/2017 (<i>delay due to ROW Issues</i>)	30.11.2017	62 months and 24 days

VIII. The resolution of the ROW issue does not depend upon the quantum of land involved.

The duration for resolving ROW constraints is dependent upon various factors such as administrative support, geography, topography of land, and the demands of affected landowners, etc. Further, a detailed chronology of actions initiated to resolve ROW constraints has been provided in the instant Petition.

Regarding the Delay due to the COVID-19 pandemic:

IX. The asset was supposed to get commissioned by 09.01.2018, but due to unforeseen circumstances, the asset was commissioned on 24.06.2021. The delay was due to



various uncontrollable factors like delays in Forest Clearance in Assam Area, RoW, Law and Order problems during the construction stage of the transmission line, litigation protests due to the CA bill, flood, and difficult terrain conditions etc. These uncontrollable factors have extended the SCOD of the subject asset till 2020, and subsequently, the Lockdown imposed due to COVID-19 disrupted the normal functioning and slowed down the overall progress of the project. Further, several ROW issues were also faced during the COVID-19 period, and both of these factors have overlapped and delayed the progress of the project. Specific issues faced by the Petitioner are as under:

- (a) **Supplier delivery issues:** Disruptions in supply chains due to COVID-19 impact project schedules.
- (b) **Worker absenteeism:** Illness or movement restrictions lead to reduced workforce availability.
- (c) **Delayed issuance of permits:** Administrative processes slowed down, affecting project timelines.
- (d) **Travel restrictions:** Limitations on movement hindered personnel and material transportation.
- (e) **Inefficiencies due to social distancing:** Necessary safety measures on job sites affected productivity.
- (f) **Lack of engineering and technical support:** Disruptions in supply chains and workforce impacted project implementations.
- (g) **Construction resumption challenges:** Uncertainty surrounding workers' return after lockdowns, extended project delays.
- (h) **Gradual resumption of activities:** Construction work halted during the lockdown, taking time to regain momentum after restrictions eased.

X. Further, strict lockdown and travel restrictions in Bhutan due to the COVID-19 pandemic delayed project completion, and the following steps were taken to mitigate the effects of the same:

- (a) Permissions for entering Bhutan for stringing of the transmission line were sought

since 14.4.2020 but were hindered by border closures and movement restrictions. On 3rd March 2021, a letter was sent to the Ministry of Power (“MoP”) seeking help for completing the transmission line in Bhutan.

(b) MoP engaged the Ministry of External Affairs to expedite necessary approvals from the Bhutan Government. Interconnection works in the Indo-Bhutan span were completed on 7.4.2021 after approval from Bhutan.

(c) Strict COVID-19 protocols in Bhutan prevented engineers from entering the territory, further delaying project completion. The final commissioning of the line was completed by 22.6.2021 through telephonic and video conferencing instructions with the commissioning team in Bhutan. The Ministry of Power granted relaxations of 5 months and 3 months, respectively, for completion of projects due to the COVID-19 waves, as evidenced in documents.

XI. The Government of Assam's Order allowed all industries and construction activities to operate, but the construction work required workers who were adversely affected by the global pandemic. Further, the Commission has condoned the delay due to Covid-19 in its various orders; the details of such Petitions are as under:

(a) NTPC Limited v. Uttar Pradesh Power Corporation Limited: Petition No. 3/GT/2021.

(b) Power Grid Corporation of India Limited v. Tamil Nadu Generation and Distribution Corporation Limited: [2022 SCC Online CERC 328]

Analysis and Decision

28. As per the IA dated 9.3.2016, the instant transmission project was scheduled to be commissioned within 22 months from the date of the IA, i.e., up to 9.1.2018, against which the Asset was put into commercial operation on 24.6.2021. The details of SCOD, COD, and Time overrun claimed by the Petitioner are as under:



Asset	Asset name	SCOD	COD	Time Over-run
Asset-01	400kV D/C (quad) Alipurduar-Jigmeling Transmission line (Indian Portion) and 02 nos 400kV line bays at Alipurduar Substation	9.1.2018	24.6.2021	41 Months 15 Days (1262 Days)

29. We have considered the submissions of the Petitioner and the Respondent and have gone through the documents placed on record to justify the time overrun.

30. The Petitioner has submitted that the delay in execution of the instant project is mainly because of various factors viz. delay in forest clearance in Assam area for transmission line, RoW vis-à-vis law and order problem during construction of Transmission lines, litigations, difficult Terrain conditions, Court cases in transmission line, ROW problems & other construction challenges in Eastern Region and North Eastern Region. The various reasons for time overrun during the construction of transmission lines/assets are discussed as under:

Delay in receipt of Forest/wildlife Clearances:

31. The Petitioner has submitted that the online Forest Clearance case for diversion of 208.807 ha of Forest area for a stretch of 45.40 km of line length construction of 400 kV D/C JATL was applied on 16.05.2016. Further, the Processing of Part-II of the Forest Proposal and the identification of Compensatory Afforestation (CA) land in degraded forest land in their respective divisions were intimated to DFOs on 7.11.2016. Accordingly, in principle approval was conveyed to the Petitioner on 18.10.2018 & 14.11.2018. However, during the start of work in the forest area, severe RoW were faced from the forest dwellers demanding land and forest tree compensation. Finally, the working permission was received from the Chief Conservator of Forest & Nodal officer on 06.09.2019 for working in the Forest portion of the line. The final approval for diversion of 208.807 ha of forest land was accorded on 15.2.2021. Therefore, the Petitioner has claimed a delay of 57 months as a large amount of Forest is involved in the route of the transmission line.

32. The Respondent has contended that the claimed delay of around 57 months on account of receipt of Forest clearance is exaggerated inasmuch as the Petitioner itself stated that the working permission was received on 06.09.2019. Also, the Respondent has stated that the ROW issues raised by the Forest Dwellers cannot be justified as the rights of forest dwellers ought to have been considered right at the beginning, and the necessary remedial/mitigation measures ought to have been taken.

33. We have observed that after online application of Forest Clearance case for diversion of 288.807 ha of Forest area for a stretch of 45.40 km of line length, construction of 400 kV D/C JATL on 16.5.2016. The 'in principle' approval accorded on 18.10.2018 with certain terms and conditions. Further, after depositing the payment by the Petitioner, the DFO of Haltugaon Division Kokrajhar, Chirang Division Kajalgaon & Kachugao Division Gossaigaon vide copy of letter dated 30.1.2019, 1.2.2019 & 1.2.2019 respectively, intimated the working permission for construction activity in the proposed diverted land with the condition that the formal transfer of forest land should not be affected till receipt of Final Approval Order from the Government of India against the project.

34. Further it is observed that in response to the Petitioner letter dated 28.2.2019 regarding obstructions and RoW issues by Forest Villagers/Dwellers, it was decided in the meeting dated 12.03.2019 that the Petitioner would make a joint survey of area which falls under construction site at an early date with the concern DFOs and Circle Officers with the Forest villagers of Forest area/revenue area/FRA and submit list of the individual along with original name and papers. Also, it was decided that the land compensation will not be acceptable under the reserved Forest Land.

35. It is observed that the Environment and Forest Department, Govt. of Assam, authorized the DFOs of Haltugaon Division, Kokrajhar, Chirang Division, Kajalgaon & Kachugao Division, Gossaigaon, to issue working permission to the Petitioner to commence



its work and cut the trees falling in the forest areas under respective forest divisions for a period of one (1) year, vide letter dated 22.08.2019 with a copy of information to the Petitioner. The same was also conveyed by the Chief Conservator of Forest & Nodal Officer (FC Act.), Assam to the respective DFOs vide letter dated 6.9.2019 with a copy of information to the Petitioner. Further, the final approval for diversion of 208.807 ha of Forest Land was accorded by MoEF vide letter dated 15.2.2021.

36. Further, it is observed that as per RoP reply submitted by the Petitioner vide affidavit dated 5.1.2024 and CPM Chart submitted vide affidavit dated 14.3.2024, the Petitioner had considered the 383 days (from 12.6.2016 to 30.6.2017) for Forest Clearance activity in the original schedule of construction.

37. Therefore, in view of the above discussion and as per the documents submitted by the Petitioner, it is found that after online application on 16.5.2016, First Stage and Final approval for diversion of 208.807 ha Forest Land for construction of the 400 kV D/C (Quad) Jigmelling -Alipurduar transmission line was accorded on dated 18.10.2018 & 15.2.2021. However, the working permission to commence their work and cut the trees falling in the forest areas under respective forest divisions for a period of one (1) year was accorded to the Petitioner vide letter dated 22.8.2019. Moreover, the 383 days (from 12.6.2016 to 30.6.2017) had already been considered by the Petitioner for Forest Clearance activity in the original schedule of construction of T/L. Therefore, considering the time period taken by the respective authority to accord the working permission in Forest area as uncontrollable factor and further time period taken by the Petitioner in original time schedule for Forest clearance activity, we are inclined to condone the time over-run of 590 days from SCOD i.e. 09.01.2018 to 22.08.2019 against the time overrun claimed by the Petitioner due to delay in Forest Clearance in Assam area.

Delay due to the Citizenship Amendment Bill (CAA)

38. The Petitioner has submitted that violent protests erupted in Assam from 4th December 2019 and continued almost till March 2020, and curfews were imposed in various parts of Assam due to the Citizenship (Amendment) Bill, 2019, passed by the Union Cabinet for introduction in the parliament. The Petitioner has further submitted that all the roads were closed and rail transportation has been blocked by the activists, thus created inconvenience in the execution of work and caused delay in transportation of the man and material at the site. In this regard, the Respondent stated that the generalized statements have been made by the Petitioner without demonstrating how the project was impacted, which route of the transmission line was blocked or whether it was under curfew.

39. We have gone through the documents placed on record and observed that the Petitioner has claimed the delay due to violent protests erupted in Assam from 4th December 2019 to March 2020, and due to various bands organized by extremist groups. However, it is observed that the Petitioner has failed to furnish any documentation substantiating the purported delay in the construction activity due to the aforementioned violent protest that erupted in Assam. Also, the Petitioner has not provided the documentary evidence for the efforts made to reduce the impact on the construction activities and the exact timelines wherein the implementation of the project was affected due to aforementioned issues. Therefore, given the lack of supporting evidence, the Commission is unable to exercise its discretion to condone the aforementioned delay on account of the CAA protest. However, the Petitioner is at liberty to approach the Commission at the time of truing up with the valid documentary evidence against the effect of CAA protest on the construction activities at a particular location of T/L, and the same will be reviewed at the time of truing up.

Delay due to Law & Order Issues

40. The Petitioner has submitted that the execution of the project was affected due to



various local bandhs, strikes, and blockades called by various organizations on different issues within the state and outside. Also, due to issues like ILP (Inter Labour Permit), etc., there were constraints in bringing the laborers to the site resulting in slow progress of work. A total of around 80 days of bandhs were encountered from the date of initial start of the construction of the project, and the Law and Order situation at certain locations was resolved with administrative support, which caused a delay in the commissioning of the transmission line. In this regard, the respondent stated that Inter Labour Permit (ILP) cannot be considered as unforeseen circumstances, as the Petitioner should have contemplated such types of issues at the time of planning the project and should have taken steps to alleviate the possible difficulties well in advance.

41. We have observed that the Petitioner has claimed the delay of around 80 days of bandhs from the date of initial start of the construction of the project. However, it is observed that the Petitioner has failed to furnish any evidentiary substantiation or documentation substantiating the purported delay in the construction activity due to the aforementioned Law and Order situation. Also, the Petitioner has not provided the documentary evidence for the efforts made to reduce the impact on the construction activities and the exact timelines wherein the implementation of the project was affected due to aforementioned issues. Therefore, given the lack of supporting evidence, the Commission is unable to exercise its discretion to condone the delay of 80 days on account of Law & Order issues. However, the Petitioner is at liberty to approach the Commission at the time of truing up with the valid documentary evidence against the effect of Law & order issues on the construction activities at a particular location of T/L, and the same will be reviewed at the time of truing up.

Delay due to Flood

42. The Petitioner has submitted that the rains as recorded are the highest for the last 20 years, and a flood-like situation occurred in Alipurduar, Cooch Behar, and Kokrajhar areas.



The sites were waterlogged and unapproachable at most locations, and work could not be commenced in full swing. The Petitioner has claimed that a total nos of 08 months in Kokrajhar, 12 months in Bongaigaon, 15 months in Chirang, 05 months in Cooch Bihar, and 06 months in Jalpaiguri were affected. In this regard, the Respondent has contended that while planning the project in this region of the country, the Petitioner ought to have considered the climate and geographical conditions and their necessary impact on working time, carriage of material, etc. Lack of preparedness in this regard is concerned with inefficiency in planning, which is a controllable factor.

43. We have observed that the Petitioner has claimed the delay due to heavy rains, as recorded as the highest for the last 20 years, resulting in flooding and waterlogged conditions in various districts. As per the 2019 Tariff Regulations, the following events are considered under Force Majeure:

- (a) *Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or*
- (b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
- (c) Industry wide strikes and labour disturbances having a nationwide impact in India; or
- (d) Delay in obtaining statutory approval for the project except where the delay is attributable to project developer

44. In support of documentary evidence, the petitioner has submitted the Annual Report of the Ministry of Home Affairs for the years 2016-17, 2017-18, 2018-19 and 2019-20. The petitioner has submitted District Rainfall in millimeters and % Dep. are the Departures of rainfall from the long-period averages of rainfall for the District Kokrajhar, Bongaigaon, Chirang, Cooch Bihar, and Jalpaiguri districts. Based on this information, we are unable to determine which aspect of the transmission line's construction is affected, specifically civil works, tower erection, and stringing. The petitioner is directed to submit the rainfall data of



100 years and the activities impacted on account of floods along with the time period at the time of truing-up, and the same will be reviewed at the time of truing-up.

Delay due to Difficult terrain conditions

45. The Petitioner has submitted that the locations are at hill tops in Assam, and most of the lines pass through steep hilly terrain and dense forest areas. During the advent of monsoon season, the approach roads to these locations get washed away due to landslides, interrupting communication and movement of manpower and material, and due to deteriorated conditions of the left-out portion, it is nearly impossible to carry the material. Due to the unfavorable conditions of the site's location, the daily working hours are limited.

46. Regarding terrain conditions, we are of the view that the Petitioner should have planned better to address issues arising due to the difficult terrain conditions of the State of Assam and accounted for the same while deciding the implementation time of the project. Therefore, in our view, delay on this count was not beyond the control of the Petitioner and hence not condoned.

Delay due to Severe Right-of-Way Issues

47. The Petitioner has submitted that the said transmission line is traversing through various districts of West Bengal and Assam state, and the off late due to increased infra projects, an increasing number of severe ROW issues were encountered right from the onset of transmission line works including during the stage of preliminary survey, line plotting and land scheduling. The ROW issues involved the demand of an exorbitant amount of crop compensation, land compensation, manhandling of gang workers, etc. In the forest area in the North Eastern region portion, even after obtaining Forest Clearance, the forest villagers obstructed/stopped all construction activities, demanding compensation against the land. In three sections, caveats were also filed against a few influential landowners having strong political backing, as they have threatened to file a court Petition and asked to stop the work,



demanding high baseless compensation. Due to such sensitive issues, proper handling of these cases was necessary, and this led to a delay in the completion of work in these sections. The Petitioner has also submitted that a Petition was filed by an influential businessman having a strong political backup with the ruling party, in the Court of Civil Judge, Kokrajhar, for granting a temporary injunction against the highway crossing area, Serfanguri on 9.5.2019. As a result, no work could be done in that section until and unless the court case was resolved.

48. Per contra, the Respondent has submitted that, having known about the various RoW issues to be encountered, the Petitioner has not stated about and given documentary proof regarding the mitigation or remedial measures it took at the outset. The delay claimed on account of RoW issues is exorbitant and liable to be rejected

49. We have observed that the Petitioner addressed the severe RoW issues and has taken up the matter at various local & higher administration authorities such as Block Development Officer, Pradhan, Local Police In-charge, Superintending of Police, Addl. Chief Secretary, etc., and requested to intervene to resolve the RoW issues at various construction locations. As per the documentary evidence submitted by the Petitioner, the RoW issues were encountered due to the demand for higher compensation for land and court cases. However, it is observed that in many cases, the Petitioner had just made a single correspondence with the local administration to intimate the occurrence of RoW issues and not effectively take up the matter to resolve the said RoW issues. Also, the Petitioner has not provided any documentary evidence regarding r/o total time taken to resolve the severe RoW issues and how these RoW issues were resolved at different locations. Moreover, the delay due to RoW issues up to 22.8.2019 is subsumed in the period of delay already condoned in r/o Forest Clearance. Therefore, in view of the above discussion, we are not inclined to condone the entire time overrun delay up to 20.2.2021 claimed by the Petitioner due to severe



RoW issues.

50. The Petitioner has submitted that the RoW issues started from 9.6.2016 and continued on till 20.2.2021. As the delay on account of forest clearance has already been condoned till 6.9.2019, the Petitioner is required to submit the status of the asset as on 6.9.2019 and submit locations impacted due to RoW problems faced at the time of truing-up. Accordingly, time overrun on account of RoW problems will be reviewed at the time of truing up based on the submission of the Petitioner with the valid documentary evidence against the impact of severe RoW issues on the construction activities at the particular location of T/L after 22.8.2019.

Delay due to the Worldwide COVID-19 Pandemic

51. The Petitioner has submitted that the lack of engineering and technical support and supply chain disruptions are the major factors impacting project schedule and implementations due to COVID-19. The movement restrictions affect the supplier chain, transportation shortage, worker absenteeism, and travel restrictions, which in turn result in a decrease in output and delay the ongoing projects. The Petitioner also relied on the MoP's letters dated 27.7.2020 and 12.6.2021, vide which the MoP granted the relaxation of 5 months and 3 months respectively due to the impact of the 1st & 2nd waves of COVID-19 with respect to the completion of projects.

52. It is observed that the Ministry of Power (MoP) vide letters dated 27.7.2020 & 12.6.2021 has extended the SCOD of the inter-State transmission projects by 5 months & 3 months respectively due to the COVID-19 pandemic. The relevant portion of the letters 27.7.2020 and 12.6.2021 is as follows.

Dated 27.07.2020

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects – reg.

Sir,



I am directed to state that transmission utilities have pointed out that construction activity at various transmission projects sites have been severely affected by the nationalised lockdown measures announced since 25th March 2020 to contain outbreak of COVID -19 have requested for extension of Scheduled Commercial Operation Date (SCOD) for to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. it has been therefore decided that;

- All inter-state transmission projects, which were under construction as on date of lockdown i.e. 25th March 2020, shall get an extension of five months in respect of their SCOD;*
- This order shall not apply to those projects, whose SCOD dates was prior to 25th March 2020.*

Dated 12.06.2021

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects – reg.

Sir,

I am directed to state that transmission utilities have approached this Ministry stating that construction activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by State/UT Governments to contain the pandemic; such as night curfew, imposition of section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) for the undergoing Transmission projects to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;

i. All inter-state transmission projects, which are under construction with SCOD coming after 01 April 2021 shall get an extension of three (3) months in respect of their SCOD;

ii. The commencement date of Long Term Access (LTA) to a generator by CTU based on completion of a transmission line, whose SCOD is extended by three (3) months due to COVID19 as mentioned above at point(i), shall also be extended by three (3) months.

3. This issue with the approval of Competent Authority."

53. It is observed that the IA of instant asset was accorded on 9.3.2016 with the SCOD on 9.1.2018, i.e., prior to 25.3.2020, and hence the extension of 05 months as per the MoP letter dated 27.7.2020 is not applicable. Similarly, the SCOD is not coming after 1.4.2021, and thus, extension of 3 months as per the MoP letter dated 12.6.2021 is also not applicable to the transmission project considered in the instant project.

Delayed due to strict lockdown and travel restrictions in Bhutan due to COVID-19 pandemic.

54. The Petitioner has submitted that the matter for permission for entering Bhutan for



stringing of the Indo-Bhutan span (Transmission line section on the Indo-Bhutan border) was taken up by the Petitioner since 14.4.2020. However, due to COVID-19, the border with India remained closed, and movement of people and material was restricted. Further, after intervening in the MoP as well as the Ministry of External Affairs, the interconnection works in the Indo-Bhutan span were completed on 7.4.2021 after approval from the Bhutan Government. The Petitioner has submitted that due to strict COVID-19 protocol, the final commissioning of the line was completed on 22.6.2021 through telephonic conversations, and video conferencing with the commissioning team of Jigmeling substation, BPCL Bhutan

55. We observe that the Petitioner has taken up the matter with the MoP vide letter dated 3.3.2021 to intervene and request expediting the approvals for stringing of the Indo-Bhutan span (Transmission line section on the Indo-Bhutan border), and accordingly, MoP took up the matter with the Ministry of External Affairs on 4.3.2021. However, the Petitioner has failed to furnish any documents substantiating how effectively the matter was taken up with the Govt. of Bhutan, by the Petitioner since 14.4.2020 to 3.3.2021, and on what reasons the Govt. of Bhutan denied the permission for the aforementioned works. Therefore, in the absence of documentation evidence, we are not inclined to condone the delay of 323 days (from 14.4.2020 to 3.3.2021) due to strict lockdown and travel restrictions in Bhutan due to the COVID-19 pandemic.

56. However, after intervening in the MoP vide letter dated 4.3.2021, the interconnection works in the Indo-Bhutan span was completed on 7.4.2021 after approval from the Bhutan Government and subsequently the final commissioning of the line was completed on 22.6.2021 through telephonic conversions and video conferencing with the commissioning team of Jigmeling substation, BPCL Bhutan. Therefore, we are of the view that the final commissioning work due to COVID-19 restrictions imposed by the Bhutan Government is beyond the control of the Petitioner, and thus the time delay of 110 days from 4.3.2021 to

22.6.2021 is hereby condoned.

57. The summary of Time overrun and delayed condoned, considering the time overlapping between different issues faced by the Petitioner, is as follows.:

Asset	SCOD	COD	Time overrun claimed	Time overrun condoned	Time overrun not condoned
400kV D/C (quad) Alipurduar-Jigmeling Transmission line (Indian Portion) and 02 nos 400 kV line bays at Alipurduar Substation	9.1.2018	24.6.2021	1262 days	690 days	572 days

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

58. The Petitioner has claimed IDC of the transmission asset covered in the instant Petition and has submitted the statement showing IDC claim, discharge of IDC liability as on COD, and thereafter as follows:

(₹ in lakhs)			
IDC as per Auditor Certificate	IDC discharged up to COD	IDC discharged during 2021-22	IDC discharged during 2022-23
9496.36	8887.10	601.21	8.06

59. We have considered the submissions of the Petitioner. As discussed above, the time overrun in the commissioning of the transmission asset has been partially condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the Statement showing the discharge of IDC and Form-9C for the transmission asset. 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 its revision at the time of truing up, is as follows:

(₹ in lakhs)

IDC as per the Auditor Certificate	IDC disallowed due to time over-run not condoned	Total IDC Allowed	IDC Discharged up to COD	IDC discharge d during 2021-22	IDC discharged during 2022-23
9496.36	4390.91	5105.45	5105.45	0.00	0.00

60. Further, the Petitioner has claimed IEDC for the transmission asset as per the Auditor Certificate. The Petitioner has further submitted that the entire amount of IEDC for the transmission asset has been discharged up to COD. As the time overrun for the transmission asset has been partially condoned, there is partial disallowance of IEDC. The IDC claimed, as per the Auditor's Certificate, IEDC considered and discharged up to COD is as follows:

(₹ in lakhs)

IEDC claimed as per Auditor Certificate (A)	IEDC disallowed due to time overrun not condoned (B)	IEDC Allowed (C)=(A-B)
5707.50	1688.92	4018.58

Initial Spares

61. The Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)

Particular	Plant and Machinery cost	Initial spares claimed		Ceiling limit as per 2019 Tariff Regulations (%)
		Amount (₹)	Percentage (%)	
Substation (Brown Field)	1198.79	16.39	1.39	6.00
Transmission Line	74659.46	770.38	1.04	1.00
PLCC	277.70	10.52	3.94	3.50

62. Regulation 23(d) of the 2019 Tariff Regulations provides that the Initial Spares shall be capitalised as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

“(d) Transmission System

- (i) Transmission line- 1.00%
- (ii) Transmission sub-station
 - Green Field- 4.00%
 - 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%”

63. The Petitioner in Form 13 has submitted the initial spares discharge details as follows:

(₹ in lakhs)

Asset No.	Particulars	Total spares Claimed	Expenditure on initial Spares Up to COD	Expenditure on initial spares in 2021-22 (Add Cap)	Expenditure on initial spares in 2022-23 (Add Cap)	Expenditure on initial spares in 2023-24 (Add Cap)
Asset-1	Transmission Line	770.38	770.38	0.00	0.00	0.00
	S/S (Brown field)	16.39	16.39	0.00	0.00	0.00
	Communication System	10.52	10.52	0.00	0.00	0.00

64. We have considered the submission of the Petitioner. The Initial Spares allowed as per Regulation 23(d) of the 2019 Tariff Regulations are as follows:

(₹ in lakhs)

Particular	Plant and Machinery cost	Initial Spares claimed	Norm as per the 2019 Tariff Regulations (in %)	Initial Spares allowable	Initial Spares disallowed as on COD	Allowable Initial Spares
	A	B	C	$D=(A-B)*C/(100-C)$	E=B-D	
Substation (Brown Field)	1198.79	16.39	6.00	75.47	0.00	16.39
Transmission Line	74659.46	770.38	1.00	746.35	24.03	746.35

PLCC/Communication System	277.70	10.52	3.50	9.69	0.83	9.69
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65. The capital cost allowed as on COD is as follows:

(₹ in lakhs)

Capital cost claimed as on COD	IDC disallowed	IEDC disallowed	Initial Spares disallowed	Capital Cost considered as on COD
85992.80	4390.91	1688.92	24.86	79888.11

Additional Capital Expenditure (ACE)

66. The Petitioner has claimed that the ACE incurred/ projected to be incurred is mainly on account of balance/ retention payments, and the same is claimed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations as follows:

(₹ in lakhs)

Apportioned approved cost (FR)	Apportioned approved cost (RCE)	Cost as on COD	Projected ACE 2019-24			Capital Cost as on 31.3.2024
			2021-22	2022-23	2023-24	
80863.00	92290.00	85992.80	1902.20	2035.26	1499.87	91430.13

67. The Petitioner has further submitted the liability flow statement as follows:

(₹ in lakhs)

Asset	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on COD/31.3.2019	Discharge (under Reg. 24 (1)(a) of the 2019 Tariff Regulations)			Outstanding Liability as on 31.3.2024
					2021-22	2022-23	2023-24	
Asset-I	M/s BHEL (Onshore supply Services F&I)	Substation	2021-22 (24.6.2021)	3.67	3.49	0.18	-	-
	M/s ABB AB (offshore supply & Service Installation)	Substation	2021-22 (24.6.2021)	41.55	39.47	2.08	-	-
	AM CONSTRUCTION	Building & Civil Work	2021-22 (24.6.2021)	-	-	-	-	-
	M/s Krishna Chandra Dey & MISC site packages	Building & Civil Work	2021-22 (24.6.2021)	1.29	1.29	-	-	-
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	7.78	-	-	7.78	-
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	4.95	-	-	4.95	-

Asset	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstand ing Liability as on COD/31.3 .2019	Discharge (under Reg. 24 (1)(a) of the 2019 Tariff Regulations)			Outstanding Liability as on 31.3.2024
					2021-22	2022-23	2023-24	
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	95.41	-	-	95.41	-
	Skipper	Transmission Line	2021-22 (24.6.2021)	36.78	-	36.78	-	-
	Skipper	Transmission Line	2021-22 (24.6.2021)	-	-	-	-	-
	Skipper	Transmission Line	2021-22 (24.6.2021)	159.92	-	159.92	-	-
	M/s Geo Foundations & Structures (P) Ltd.	Transmission Line	2021-22 (24.6.2021)	15.69	15.69	-	-	-
	Kaishab Moni Basumatary	Transmission Line	2021-22 (24.6.2021)	8.32	-	8.32	-	-
	Manas Tiger Conservaton Foundation	Transmission Line	2021-22 (24.6.2021)	-	-	-	-	-
	Achinta Narzary	Transmission Line	2021-22 (24.6.2021)	15.45	-	15.45	-	-
	Anawar Hossain Miah	Transmission Line	2021-22 (24.6.2021)	4.52	4.52	-	-	-
	M/s Nitu Basumatary	Transmission Line	2021-22 (24.6.2021)	2.34	-	2.34	-	-
	M/S Y NOT	Transmission Line	2021-22 (24.6.2021)	0.08	0.08	-	-	-
	DURGAPUR CARGO MOVERS	Transmission Line	2021-22 (24.6.2021)	0.44	0.44	-	-	-
	Crop Compensation	Transmission Line	2021-22 (24.6.2021)	-	-	-	-	-
	C&C Construction	PLCC	2021-22 (24.6.2021)	25.02	-	-	25.02	-
	Skipper	PLCC	2021-22 (24.6.2021)	0.93	-	0.93	-	-
	M/S Tata	Transmission Line	2021-22(24.6.2021)	800	350	450`	-	-
	Total			1224.14	414.98	676.00	133.16	-

Asset	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 31.3.2024	Work differed for execution during the year (under Reg. 24 (1)(b) of the 2019 Tariff Regulations)		
					2021-22	2022-23	2023-24
Asset-I	M/s BHEL (Onshore supply Services F&I)	Substation	2021-22 (24.6.2021)	-	-	-	-
	M/s ABB AB (offshore supply & Service Installation)	Substation	2021-22 (24.6.2021)	-	-	-	-
	AM CONSTRUCTION	Building & Civil Work	2021-22 (24.6.2021)	-	25.54	6.38	-
	M/s Krishna Chandra Dey & MISC site packages	Building & Civil Work	2021-22 (24.6.2021)	-	7.03	-	-
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	-	-	-	4.71
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	-	-	-	0.09
	C&C Construction	Transmission Line	2021-22 (24.6.2021)	-	-	-	9.04
	Skipper	Transmission Line	2021-22 (24.6.2021)	-	812.46	-	-
	Skipper	Transmission Line	2021-22 (24.6.2021)	-	0.47	-	-
	Skipper	Transmission Line	2021-22 (24.6.2021)	-	574.7	-	-
	M/s Geo Foundations & Structures (P) Ltd.	Transmission Line	2021-22 (24.6.2021)	-	25.58	-	-
	Kaishab Moni Basumatary	Transmission Line	2021-22 (24.6.2021)	-	1.79	-	-
	Manas Tiger Conservaton Foundation	Transmission Line	2021-22 (24.6.2021)	-	12.86	-	-
	Achinta Narzary	Transmission Line	2021-22 (24.6.2021)	-	1.79	-	-
	Anawar Hossain Miah	Transmission Line	2021-22 (24.6.2021)	-	-	-	-
	M/s Nitu Basumatary	Transmission Line	2021-22 (24.6.2021)	-	-	-	-
	M/S Y NOT	Transmission Line	2021-22 (24.6.2021)	-	-	-	-
	DURGAPUR CARGO MOVERS	Transmission Line	2021-22 (24.6.2021)	-	-	-	-
	Crop Compensation	Transmission Line	2021-22 (24.6.2021)	-	25	1352.88	1352.87
	C&C Construction	PLCC	2021-22 (24.6.2021)	-	-	-	-

Asset	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 31.3.2024	Work differed for execution during the year (under Reg. 24 (1)(b) of the 2019 Tariff Regulations)		
					2021-22	2022-23	2023-24
	Skipper	PLCC	2021-22 (24.6.2021)	-	-	-	-
	M/S Tata	Transmission Line	2021-22(24.6.2021)	-	-	-	-
	Total			-	1487.22	1359.26	1366.71

68. Regulation 24 of the 2019 Tariff Regulations provides as follows:

“24. Additional Capitalisation within the original scope and up to the cut-off date

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

- Undischarged liabilities recognized to be payable at a future date;
- Works deferred for execution;
- Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- 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;
- Change in law or compliance of any existing law; and
- 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.”

69. We have considered the submissions of the Petitioner. The Projected ACE claimed by the petitioner for FY 2021-22, FY 2022-23 and FY 2023-24 is towards unexecuted work and balance/retention payments and discharge liability is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations.

Particulars	(₹ in lakhs)		
	2021-22	2022-23	2023-24
ACE as allowed under Regulation 24 (1) (a) towards undischarged liabilities recognised to be payable at a future date	414.98	676.00	133.16

ACE as allowed under Regulation 24 (1) (b) towards works deferred for execution	1487.22	1359.26	1366.71
Add: IDC Discharged	0.00	0.00	0.00
ACE allowed in the instant order	1902.20	2035.26	1499.87

70. Accordingly, the actual/ projected ACE allowed is subject to truing up in respect of the transmission asset, and the same is as follows:

Expenditure Up to COD	Projected ACE 2019-24			(₹ in lakhs)
	2021-22	2022-23	2023-24	Capital Cost as on 31.3.2024
79888.11	1902.20	2035.26	1499.87	85325.44

Debt-Equity ratio

71. 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:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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.”

72. The debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period for the transmission asset is as follows:

Particulars	Capital cost as on COD (₹ in lakhs)	(in %)	ACE during 2019-24 (₹ in lakhs)	(in %)	Capital cost as on 31.3.2024 (₹ in lakhs)	(in %)
Debt	55921.68	70.00	3806.13	70.00	59727.81	70.00
Equity	23966.43	30.00	1631.20	30.00	25597.63	30.00
Total	79888.11	100.00	5437.33	100.00	85325.44	100.00

Depreciation

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

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating

station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

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

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

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

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

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

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

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

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

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

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

74. We have considered the submissions of the Petitioner. The depreciation has been worked out considering the admitted capital expenditure as on the COD and thereafter up to 31.3.2024. The Weighted Average Rate of Depreciation (WAROD) has been worked out and placed as Annexure-I for the transmission assets, as per the rates of depreciation specified in the 2019 Tariff Regulations. Depreciation allowed in respect of the transmission assets for the 2019-24 tariff period is as follows:

(₹ in lakhs)				
	Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
A	Opening Gross Block	79888.11	81790.31	83825.57
B	Addition during the year 2019-24 due to projected ACE	1902.20	2035.26	1499.87
C	Closing Gross Block (A+B)	81790.31	83825.57	85325.44
D	Average Gross Block (A+C)/2	80839.21	82807.94	84575.51
E	Average Gross Block (90% depreciable assets)	80839.21	82807.94	84575.51
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	72755.29	74527.15	76117.96
H	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	72755.29	74527.15	76117.96
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28%	5.28%	5.28%
K	Lapsed useful life at the beginning of the year (Year)	0	0	1
L	Balance useful life at the beginning of the year (Year)	35	35	34
M	Depreciation during the year (D*J)	3288.27	4374.80	4468.21
N	Cumulative Depreciation at the end of the year	3288.27	7663.07	12131.28

○	Remaining Aggregate Depreciable Value at the end of the year(I-N)	69467.02	66864.07	63986.68
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Interest on Loan (IoL)

75. 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.”

76. The weighted average rate of IoL has been considered as claimed by the Petitioner. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted.

Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up.

77. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the transmission asset is as follows:

(₹ in lakhs)				
	Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
A	Gross Normative Loan	55921.68	57253.22	58677.90
B	Cumulative Repayments up to the Previous Year	0.00	3288.27	7663.07
C	Net Loan-Opening (A-B)	55921.68	53964.95	51014.83
D	Additions due to ACE	1331.54	1424.68	1049.91
E	Repayment during the year	3288.27	4374.80	4468.21
F	Net Loan-Closing (C+D-E)	53964.95	51014.83	47596.53
G	Average Loan (C+F)/2	54943.31	52489.89	49305.68
H	Weighted Average Rate of Interest on Loan (in %)	5.170	5.147	5.185
I	Interest on Loan (G*H)	2186.93	2701.71	2556.71

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

- respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
 - iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

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

Illustration-

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

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

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

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is ₹ 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."

79. The Petitioner has submitted that the 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 the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission asset to be as follows:

(₹ in lakhs)				
	Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
A	Opening Equity	23966.43	24537.09	25147.67
B	Additions	570.66	610.58	449.96
C	Closing Equity (A+B)	24537.09	25147.67	25597.63
D	Average Equity (A+C)/2	24251.76	24842.38	25372.65
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782
H	Return on Equity (D*G)	3506.70	4665.90	4765.49

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakhs)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Jigmeling-Alipurduar 400kV D/C (Quad) lines					
Line Length in km.	-	-	163.36	163.36	163.36



Norms for Double Circuit (Bundled conductor with four or more sub-conductors)	-	-	1.416	1.466	1.517
O&M Expenses	-	-	178.08	239.49	247.82
400 kV AIS Bays					
No. of Bays	-	-	2	2	2
Norms	-	-	34.45	35.66	36.91
O&M Expenses	-	-	68.90	71.32	73.82
Total O&M Expenses					
	-	-	231.13	310.81	321.64

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

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433

Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (₹ Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (₹ Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (₹ Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (₹ Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (₹ Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- (i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- (ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- (iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- (iv) the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- (v) the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- (vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

(b) The total allowable operation and maintenance expenses for the transmission

system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.”

82. We have considered the submissions of the Petitioner. The O&M Expenses are allowed as per the norms specified in the 2019 Tariff Regulations and are as follows:

(₹ in lakhs)			
Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
Jigmeling-Alipurduar 400kV D/C (Quad) lines			
Double Circuit (Bundled conductor with four or more sub-conductors)	163.36	163.36	163.36
Norms (₹ lakh/km)	1.416	1.466	1.517
O&M Expenses (A)	178.08	239.49	247.82
400 kV AIS Bays			
No. of Bays	2	2	2
Norms (₹ lakh/Bay)	34.45	35.66	36.91
O&M Expenses (B)	53.04	71.32	73.82
Total O&M Expenses (A)+(B)	231.13	310.81	321.64

Interest on Working Capital (IWC)

83. Regulations 34(1)(c), 34(3), 34(4) and 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 1st April of the year during the tariff

period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

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

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

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

84. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) on working capital considered is 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 and 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points). The components of the working capital and interest allowed thereon for the transmission asset are as follows:

(₹ in lakhs)				
	Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	25.02	25.90	26.80
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	45.03	46.62	48.25
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1495.66	1506.45	1512.61
D	Total Working Capital	1565.71	1578.97	1587.66
E	Rate of Interest (in %)	10.50	10.50	12.00
F	Interest on Working Capital (D*E)	126.57	165.79	190.52

Annual Fixed Charges for the 2019-24 Tariff Period

85. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakhs)

	Particulars	2021-22 (pro-rata for 281 days)	2022-23	2023-24
A	Depreciation	3288.27	4374.80	4468.21
B	Interest on Loan	2186.93	2701.71	2556.71
C	Return on Equity	3506.70	4665.90	4765.49
D	O & M Expenses	231.13	310.81	321.64
E	Interest on Working Capital	126.57	165.79	190.52
F	Total	9339.59	12219.01	12302.57

Filing Fee and the Publication Expenses

86. The Petitioner has sought reimbursement of the fee paid by it for filing the Petition and publication expenses.

87. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present Petition, directly from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licensee Fee & RLDC Fees and Charges

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

Goods and Services Tax

89. The Petitioner has submitted that the transmission charges claimed herein are exclusive of GST, and in case GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same will be borne and additionally paid by the Respondents and be charged and billed separately by the Petitioner. It is also prayed that additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, and that the Commission may allow the same to



be recovered from the beneficiaries.

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

Security Expenses

91. The Petitioner has submitted that security expenses in respect of transmission assets are not claimed in the instant Petition, and it will file a separate Petition for claiming the overall security expenses and the consequential IWC as per Regulation 35 (c) of the 2019 Tariff Regulations.

92. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. The security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. 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

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

94. The Petitioner has prayed that the transmission charges for the 2019-24 period may be recovered on a monthly basis in accordance with Regulation 57 of Central

Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from to time.

95. We have considered the submissions of the Petitioner. With effect from 1.11.2020, the sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020. Therefore, the sharing of the transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of the transmission charges approved in this order shall be governed by the provisions of the applicable 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

96. To summarise, the AFC approved for the 2019-24 tariff period are as follows:

(₹ in lakhs)			
AFC	2021-22 (pro-rata for 281 days)	2022-23	2023-24
Claimed	9992.05	13095.86	13140.41
Allowed	9339.60	12219.01	12302.57

97. The Annexure to this order forms part of the order.

98. This order disposes of Petition No. 45/TT/2023 in terms of the above findings and discussions.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V)
Member

sd/-
(Jishnu Barua)
Chairperson



ANNEXURE

2019-24	Admitted Capital Cost as on COD (₹ in lakhs)	Projected ACE (₹ in lakhs)				Admitted Capital Cost as on 31.3.2024 (₹ in lakhs)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakhs)		
Capital Expenditure		2021-22	2022-23	2023-24	Total			2021-22	2022-23	2023-24
Building Civil Works & Colony	49.93	33.86	6.38	0.00	40.24	90.17	3.34%	2.23	2.91	3.01
Transmission Line	78016.27	1825.38	2025.69	1474.85	5325.92	83342.19	5.28%	4167.45	4269.12	4361.53
Sub Station	1419.37	42.96	2.26	0.00	45.22	1464.59	5.28%	76.08	77.27	77.33
PLCC	402.53	0.00	0.93	25.02	25.95	428.48	6.33%	25.48	25.51	26.33
Total	79888.11	1902.20	2035.26	1499.87	5437.33	85325.44		4271.24	4374.80	4468.21
							Average Gross Block (₹ in lakhs)	80839.21	82807.94	84575.51
							Weighted Average Rate of Depreciation%	5.28	5.28	5.28