CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.462/TT/2020

Coram:

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

Date of Order: 04 .02.2021

In the matter of

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission tariff from COD to 31.3.2019 for **Asset-I:** LILO of 400 kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 1 no. 400/220 kV 500 MVA ICT (1st) and associated bays along with 4 nos. 220kV line bays at Rajarhat GIS, **Asset-II:** 2 nos. 400 kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) along with associated bays at 400kV Purnea S/S, **Asset-III:** 125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS and **Asset-IV:** 125 MVAR Bus Reactor (2nd) and associated bay at Rajarhat GIS under "Eastern Region Strengthening Scheme V (ERSS-V)" in Eastern Region.

And in the matter of

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

.... Petitioner

Versus

- Bihar State Power (Holding) Company Ltd., Vidyut Bhawan, Bailey Road, Patna - 800 00I
- West Bengal State Electricity Distribution Company Ltd. Vidyut Bhawan, Bidhan Nagar Block- DJ, Sector-II, Salt Lake City Kolkata - 700 091
- Grid Corporation of Orissa Ltd. Shahid Nagar, Bhubaneswar - 751 007
- 4. Damodar valley Corporation, DVC Tower, Maniktala, Civic Centre VIP Road, Kolkata - 700 054

5. Power Department, Govt. of Sikkim, Gangtok - 737 101

 Jharkhand State Electricity Board, In Front of Main Secretariat, Doranda, Ranchi – 834002

7. West Bengal State Electricity Transmission Company Ltd. Bidyut Bhawan, Bidhan Nagar Block DJ, Sector-II, Salt Lake City

Calcutta - 700 091

...Respondents

Parties present:

For Petitioner: Shri S. S. Raju, PGCIL

Shri Zafrul Hasan, PGCIL Shri A. K. Verma, PGCIL Shri V. P. Rastogi, PGCIL Shri B. Dash, PGCIL

For Respondent: Shri Navin Prakash, Advocate, BSP(H)CL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") for determination of Transmission tariff from COD to 31.3.2019under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") in respect of the following assets under "Eastern Region Strengthening Scheme V (ERSS-V)" in Eastern Region (hereinafter referred as "the transmission project"):

Asset-I: LILO of 400 kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 1 no. 400/220 kV 500 MVA ICT (1st) and associated bays along with 4 nos. 220kV line bays at Rajarhat GIS;

Asset-II: 2 nos. 400 kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) along with associated bays at 400kV Purnea S/S;

Asset-III: 125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS;

Asset-IV: 125 MVAR Bus Reactor (2nd) and associated bay at Rajarhat GIS;

- 2. The Petitioner has made the following prayers:
 - "1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para-7.2 above.
 - 2) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.
 - 3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
 - 4) Tariff may be allowed on the estimated completion cost, since few elements of the project are yet to be completed, the completion cost for the assets covered under instant Petition are within the overall project cost.
 - 5) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff Regulations, 2014.
 - 6) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
 - 7) Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
 - 9) Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
 - 10) Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries."
- 3. The Petitioner has submitted that on account of increase in load demand in Kolkata, particularly in Jeerat/ Subhashgram/ Laxmikantpur area due to growth of housing, commercial and industrial complexes, power supply arrangements in these areas are being strengthened to meet the present and future demand. WBSETCL has added one more 315 MVA, 400/220 kV ICT at Jeerat. However, severe constraints have been faced in expansion of Subhashgram sub-station mainly because of the

serious problem of Right of Way. In the Northern part of West Bengal, severe system constraints are experienced in the Farakka-Malda 400 kV section when low hydro scenario occurs in Eastern Region grid. In view of these problems, detailed system studies considering peak condition in Eastern Region and low hydro scenarios in North-Eastern Region/Bhutan were carried out wherein it was noted that there is a need to establish a high capacity interconnection between the northern and southern part of West Bengal. The study result showed that establishment of a new sub-station at Rajarhat in the southern part of West Bengal and a new 400 kV link from Rajarhat to Purnea in northern part of Bihar would provide a good technical solution to the above problem meeting the system requirement as a whole in the Malda-Farakka-Jeerat-Subhasgram corridor. In addition, LILO of the existing 400 kV Jeerat-Subhasgram S/C line at Rajarhat would provide an interconnection among the 400 kV Jeerat, Subhasgram and Rajarhat sub-stations which in turn would improve the reliability of power supply in the adjoining areas.

- 4. The Petitioner has submitted that keeping in view the RoW problems in West Bengal, triple snowbird conductor line with higher power carrying capacity in comparison to twin moose conductor in the 400 kV Rajarhat-Purnea D/C line has been considered which would enable it to meet the long-term system requirement. Further, in view of the severe land acquisition problem, the sub-station at Rajarhat has been planned as GIS Sub-station.
- 5. The above system strengthening scheme in ER (Eastern Region) was discussed and agreed by CEA and beneficiaries of ER to be implemented by the Petitioner as a regional strengthening scheme (ERSS-V) during SCM (Standing Committee Meeting) on power system planning of ER held on 20.09.2010 and 28.12.2010 and subsequently

during 16th ERPC (Eastern Regional Power Committee) and 17th ERPC meeting held on 18.12.2010 and 17.03.2011, respectively.

- 6. The Investment Approval (IA) for the transmission project was accorded by Board of Directors of the Petitioner company in its 292nd meeting held on 23.10.2013 at an estimated cost of ₹136452 lakh including IDC of ₹5911 lakh based on August 2013 price level (notified vide Memorandum Ref no. C/CP/ERSS-V dated 31.10.2013).
- 7. The Revised Cost Estimate (RCE) for the transmission project was accorded by Board of Directors of the Petitioner company in its 339th meeting held on 29.3.2017 at an estimated cost of ₹189141 lakh including IDC of ₹13969 lakh based on December 2016 price level (notified vide Memorandum Ref no. C/CP/PA 1617-03-0AC-RCE017 dated 30.3.2017).
- 8. The scope of the transmission project is as follows:

Transmission Line

- (i) Rajarhat Purnea 400 kV D/C line (with triple snowbird conductor) with LILO of one circuit at Gokarna (WBSETCL) and other circuit at Farakka (NTPC).
- (ii) LILO of Subhashgram Jeerat 400kV S/C line at Rajarhat.

Sub-stations

- (i) Establishment of new 400/220 kV, 2x500MVA Gas insulated sub-station at Rajarhat in West Bengal.
- (ii) Extension of 400/220 kV Purnea (POWERGRID) Sub-station
- (iii) Extension of 400 kV Gokarna (WBSETCL), Farakka (NTPC) and Chaibasa (POWERGRID) Sub-stations.

Reactive Compensation

S.N.	Transmission Line	From End	To End
1	Rajarhat– Farakka S/C line	1x80 MVAr	1x80 MVAr
		(Switchable)	(Switchable)
2	Rajarhat – Gokarna S/C	1x80 MVAr	0
		(Switchable)	

S.N.	Transmission Line	From End	To End
3	Purnea – Gokarna S/C	1x80 MVAr	0
		(Switchable)	
4	Purnea-Farakka S/C	1x80 MVAr	0
		(Switchable)	

Bus Reactor

- (i) 2x125 MVAr at Rajarhat;
- (ii) 1x80 MVAr at Gokarna
- 9. The details of petitions filed by the Petitioner under the transmission project are as under:

S.N.	Name of Asset	COD	Remarks
1	Farakka-Gokarna Portion of 400 kV D/C Rajarhat- Purnea Line including LILO at Farakka and Gokarna and associated line bays	31.3.2017	
2	1X80 MVAR bus reactor along with associated bays at Gokarna Sub-stationand1X80 MVAR Switchable line reactor along with associated bays at Farakka Sub-station	30.4.2017	Covered under petition no. 44/TT/2017.
3	2 Nos. of 400 kV Line bays for termination of LILO of 2 nd Circuit of Jamshedpur Rourkela 400 kV Line at Chaibasa S/S	22.11.2016	
4	Asset-I: LILO of 400 kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 01 no. 400/220kV 500 MVA ICT (1st) and associated bays along with 04 nos. 220kV line bays* at Rajarhat GIS	3.2.2019 (claimed)	Covered under instant
5	Asset-II: 2 nos. 400kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) along with associated bays at 400kV Purnea S/S#	1.11.2018 (claimed)	petition (earlier filed in Petition
6	Asset-III: 125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS	24.3.2019 (claimed)	No. 44/TT/2017).
7	Asset-IV: 125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	31.3.2019 (claimed)	
8	Balance scope: Balance portion of 400kV D/C Rajarhat - Purnea transmission line, 400/220kV 500 MVA ICT (2 nd) and associated bays along with 2 nos. 220kV line bays at Rajarhat GIS	Yet to be completed	To be filed subsequently

10. The tariff for instant assets was claimed earlier under Petition No. 44/TT/2017 with anticipated CODs of the assets. The Commission vide order dated 23.7.2018 disposed of the petition, inter alia, considering the fact that the instant assets were not

commissioned at that time and directed the Petitioner to file a fresh petition after commissioning of the assets. The Petitioner has submitted that the instant assets have now been commissioned and put under commercial operation between 1.11.2018 to 31.3.2019. Accordingly, the Petitioner has filed the subject petition for claiming tariff for the instant assets based on actual CODs.

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

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Depreciation	114.78	66.72	2.02	0.25
Interest on Loan	126.93	70.63	2.08	0.26
Return on Equity	149.37	74.45	2.25	0.28
Interest on Working Capital	11.38	10.10	0.20	0.02
O&M Expenses	65.59	114.52	1.29	0.16
Total	468.05	336.42	7.84	0.97

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

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata)	(Pro-rata)	(Pro-rata)	(Pro-rata)
Maintenance Spares	63.00	41.23	8.83	8.93
O&M Expenses	35.00	22.90	4.91	4.96
Receivables	499.53	134.57	59.59	60.41
Total	597.53	198.70	73.33	74.30
Rate of Interest	12.20%	12.20%	12.20%	12.20%
Interest on working Capital	11.38	10.10	0.20	0.02

- 13. The Respondents are the distribution companies and transmission licensees, which are procuring transmission services from the Petitioner and are mainly beneficiaries of the Eastern Region.
- 14. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in newspapers in accordance with Section 64 of the

Electricity Act, 2003.No suggestions and objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Notice dated 8.6.2020directing the beneficiaries/ Respondents to file reply in the matter was also published on the Commission's website. Bihar State Power (Holding) Company Ltd. (BSPHCL) i.e. the Respondent No.1 has filed its reply *vide* affidavit dated 18.8.2020 and has raised issues like improper justification and lack of supporting documents in time overrun and consequential cost overrun and sought to disallow the time and cost overrun. The Petitioner has not filed its rejoinder to the reply filed by BSPHCL.

- 15. The hearing in this matter was held on 13.7.2020 and the order was reserved. The Petitioner was directed to submit certain information and the same was furnished by the Petitioner *vide* affidavit dated 11.8.2020.
- 16. This order is issued considering the submissions made by the Petitioner in the petition dated 9.10.2019, reply submitted by the Petitioner *vide* affidavit dated 11.8.2020 and reply filed by BSPHCL *vide* affidavit dated 18.8.2020.
- 17. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.

Date of Commercial Operation (COD)

18. The Petitioner has claimed the actual COD for the instant assets, as per the following details:

S. N.	Name of Asset	Claimed COD
1	Asset-I: LILO of 400kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 01 no.	3.2.2019
	400/220kV 500 MVA ICT (1st) and associated bays along with 04 nos. 220kV line bays at Rajarhat GIS	

2	Asset-II: 02 nos. 400kV 80 MVAR Switchable Line Reactors	1.11.2018
	(charged as Bus Reactors) along with associated bays at	
	400kV Purnea S/S	
3	Asset-III: 125 MVAR Bus Reactor (1st) and associated bay at	24.3.2019
	Rajarhat GIS	
4	Asset-IV: 125 MVAR Bus Reactor (2 nd) and associated bay	31.3.2019
	at Rajarhat GIS	

19. In support of COD of instant assets, the Petitioner has submitted CEA Energization Certificates under Regulation 43 of CEA (measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Certificates and CMD Certificates as required under Grid Code as under:

S. N.	Name of Asset	CEA	RLDC
		Certificate(s)	Certificate(s)
1	Asset-I: LILO of 400kV S/C Subhasgram	5.2.2019,	1.3.2019
	 Jeerat transmission line and associated 	30.1.2019	(2 nos.) and
	bays at Rajarhat, 1 no. 400/220kV 500		18.3.2019
	MVA ICT (1st) and associated bays along		(5 Nos.)
	with 4 nos. 220kV line bays at Rajarhat		
	GIS		
2	Asset-II: 2 nos. 400kV 80 MVAR	8.6.2018	10.1.2019
	Switchable Line Reactors (charged as		
	Bus Reactors) along with associated bays		
	at 400kV Purnea S/S		
3	Asset-III: 125 MVAR Bus Reactor (1st)	15.3.2019	11.4.2019
	and associated bay at Rajarhat GIS		
4	Asset-IV: 125 MVAR Bus Reactor (2 nd)	15.3.2019	11.4.2019
	and associated bay at Rajarhat GIS		

20. The Petitioner has submitted the following in regard to power flow and utilization of bays covered under Asset-I and Asset-II:

a) Asset-I (Downstream Connectivity):

Asset-I consists of 4 nos. 220kV line bays for connectivity with the downstream system of WBSETCL. The total requirement for system strengthening at Rajarhat (PG) sub-station has provision for 6 nos. 220 kV line bays (including the 4 nos. 220 kV line bays i.e. Asset-I) for downstream connectivity of WBSETCL as under:

(i) 4 nos. of 220 kV line bays: (a) 2 nos. for 220 kV D/C Line from Rajarhat to New town Line AA-III and (b) 2 nos. 220kV D/C line from Rajarhat to Jeerat of WBSETCL. On these line bays, power flow commenced on COD (3.2.2019).

(ii) 2 nos. of 220 kV line bays are corresponding to 220 kV D/C Line from Rajarhat to New town Line AA-II. These are yet to be commissioned.

b) Asset-II:

As per the original scheme of the transmission project, these 2 nos. 80 MVAR Switchable Line Reactors (SLR) were to be commissioned along with 400kV D/C Rajarhat–Purnea transmission line. However, completion of this associated transmission line was getting delayed and simultaneously frequent overvoltage problem (above desirable limits) was being faced at 400/220kV Purnea substation especially during lean period of hydel power. It was, therefore, deliberated and agreed in the 149th OCC (Operational Coordination Committee) meeting of Eastern Region held on 24.09.2018, that 2x80 MVAR SLRs were ready at Purnea substation and if these SLRs are charged as bus reactors, they would help in controlling the overvoltage at 400/220kV Purnea Sub-station. Accordingly, these 2 numbers of 80 MVAR SLR were charged as bus reactors and put under commercial operation w.e.f. 1.11.2018. Subsequently, this was also deliberated and ratified in the 39th ERPC meeting held on 17.11.2018.

21. Taking into consideration the CEA Energisation Certificates, RLDC Certificates and CMD Certificates, COD for instant assets are approved as follows:

S. N.	Name of Asset	Approved COD
1	Asset-I: LILO of 400kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 01 no. 400/220kV 500 MVA ICT (1st) and associated bays alongwith 04 nos. 220kV line bays at Rajarhat GIS	3.2.2019
2	Asset-II: 02 nos. 400kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) along with associated bays at 400kV Purnea S/S	1.11.2018
3	Asset-III: 125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS	24.3.2019
4	Asset-IV: 125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	31.3.2019

Capital Cost

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

- "(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects"
- (2) The Capital Cost of a new project shall include the following:
- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Increase in cost in contract packages as approved by the Commission;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- (e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- (h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD."
- 23. The Petitioner has submitted the details of the capital cost incurred up to COD, ACE up to 31.3.2019 and estimated ACEduring2019-2020 and 2020-21 *vide* Auditor's Certificates dated 31.7.2019, 13.7.2019, 31.7.2019 and 31.7.2019 for Assets-I, II, III and IV, respectively. The details of FR apportioned approved cost, RCE apportioned approved cost, capital cost as on COD and ACE thereon, as claimed by the Petitioner for the instant assets, are as under:

(₹ in lakh)

Asset	Apportioned	Apportioned	Expenditure	Estimated	ure for FY	Estimated	
	Approved	Approved	up to COD	2018-19	2019-20	2020-21	Completion
	Cost (FR)	Cost (RCE)					Cost
	16857.93	18667.49	16262.80	553.75	733.93	490.00	18040.48
II	2276.70	3822.94	2967.31	188.91	100.00	50.00	3306.22
III	1332.35	2175.23	1797.54	0.00	107.22	70.00	1974.76
IV	1332.35	2174.29	1799.23	0.00	106.39	70.00	1975.62
Total	21799.33	26839.95	22826.88	742.66	1047.54	680.00	25297.08

Cost Overrun

- 24. The Petitioner has submitted as under:
 - a) The estimated completion cost of the instant assets based on the Auditor's Certificate works out to ₹25297.08 lakh including IEDC & IDC which

exceeds the approved apportioned FR cost of ₹21799.33 lakh by ₹3497.75 lakh, whereas the same is within approved apportioned RCE cost of ₹26839.95lakh.

- b) The cost overrun against the FR apportioned cost is about ₹3500lakh. Major part of this increment has been mainly due to increase in actual compensation paid (₹1300 lakh), increase in IDC (₹1803 lakh) due to swelled up project time cycle owing to unforeseen reasons, and due to FERV impact (₹253 lakh). In addition to these reasons, the variation has been due to impact of market forces leading to price variation and due to quantity variations based on actual site conditions.
- c) The Petitioner has submitted asset-wise price variation information under corresponding Form-5 of the petition and has also submitted the following reasons of cost variation:

(1) Price Variation (PV):

- (i) The contracts for various packages under the transmission project were awarded to the lowest evaluated and responsive bidder, on basis of global/domestic competitive bidding, after publication of NITs in leading newspapers. Thus, the award prices represent the lowest prices available at the time of bidding of various packages.
- (ii) During the period from October 2013 (first *Opening of Bid Document* under the project) to August 2016 (period of major supplies), there has been inflationary trend in the prices of various input items for the project as indicated by the indices given below:

Name Of Indices	September 2013 (one month prior to first OBD)	March 2014	March 2015	August 2016	% Increase from first OBD
Tower Steel (Blooms 150x150mm)	35002	35186	35549	35549	1.56%
HG Zinc	153700	159200	155600	173300	12.75%
EC Grade Al	157050	143883	151833	125998	(-) 19.77%
CRGO	176924	194009	226050	226050	27.77%
LME Copper	474975	422611	393972	338382	(-) 28.76%
WPI	180.7	178.9	176.1	183.1	1.33%
WPI for Ferrous metals	153.5	156.3	151.4	135.6	(-)11.66%

Name Of Indices	September 2013 (one month prior to first OBD)	March 2014	March 2015	August 2016	% Increase from first OBD
WPI for Fuel & Power	210.6	212.6	187.3	182.2	(-)13.49%
CPI	238	238	254	280	17.65%

(iii) Thus, the price variation is attributable to the inflationary trend prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages.

(2) Variation in Quantities of Approved Items:

(i) The line length for Asset-I has increased from 4km (as envisaged in FR) to 4.15km (as per actual execution). This has resulted in slight increase of quantity of few associated equipment i.e. hardware fittings, auxiliary accessories, etc.

(3) Land and Compensation:

(i) Based on approved cost, there was a provision on normative basis for land and compensation. However, based on actual/anticipated expenditure, an amount in excess of envisaged amount has been incurred. The land and compensation for subject Asset-I has been apportioned out of total land and compensation cost of the transmission project. Increase in cost of transmission project as a whole for land and compensation component is as follows:

(₹ in lakh)

Description	As per DPR	As per RCE	Remarks
i) Land for SS and R&R Compensation.	1038	1968	Based on actual payments. Details of Land area: As per DPR: 10.00 acre As per RCE: 13.44 acre
ii) Compensation towards Crop, Tree and PTCC.	2505	9012	Based on actual/ anticipated payments.
towards Forest. payments. Forest Area: 8.00		Based on actual/ anticipated payments. Forest Area: 8.00 Ha As per RCE: 3.77 Ha	
iv) Compensation towards diminution of land value towards RoW	0	16854	In line with RoW compensation Guidelines issued by MoP. Tentative

Description	As per DPR	As per RCE	Remarks
(85% of land cost of tower footing and 15% land cost of corridor)		-	estimate of RoW compensation for payments in adoption of MoP guidelines dated 15.10.2015 by respective State Govt.
TOTAL	3649	27914	

(ii) Out of total increase in compensation for the entire project (till date), approximately₹1300lakh has been part of instant Asset-I.

(4) Foreign Exchange Rate Variation:

(i) The project involves funding from the World Bank wherein, there is increase in liability on account of FERV for Asset-I. The details of exchange rates considered are as follows:

Equivalent foreign exchange (in INR)		
Foreign Currency	Approved DPR (August, 2013 Price Level)	RCE
1 USD	62.14	71.69 (at the time of deployment of Asset-I)

(ii) The foreign loan (IBRD-V) allocated is USD 26.539 lakh. This has resulted in the net increase in cost of ₹253 lakh.

(5)Increase in IDC:

- (i) Interest during Construction (IDC) for Asset-las per approved DPR cost was estimated at ₹952 lakh whereas based on the actual and anticipated funds flow, IDC for the project in RCE works out to ₹2755 lakh. Thus, there is an increase of ₹1803 lakh in IDC.
- (ii) The main reason for increase in IDC is due to increase in estimated completion cost of the project, increase in Project Time Cycle due to unforeseen delays and decrease in funding from the World Bank (Rol @7.0 %) from about 57% of total estimated cost of project in DPR to 9%.

(6) Decrease in IEDC:



- (i) As per the investment approval, IEDC including contingencies for the transmission project was estimated on normative basis whereas in RCE, IEDC under the project has been worked out based on actual/anticipated expenditure resulting in a decrease of IEDC.
- (ii) The cost variation was mainly due to actual site conditions, awarded rate and other associated factors which were beyond the control of the Petitioner.
- 25. The Respondent, BSPHCL, in reply to the Petition has, vide affidavit dated 18.8.2020, submitted as under:
 - a) The reasons cited by the Petitioner for the cost overrun do not qualify for the uncontrollable factor in terms of regulation 12 of the 2014 Tariff Regulations.
 - b) Also as per Regulation 11A(2) of the 2014 Tariff Regulations, IDC beyond SCOD is allowed if the delay is beyond the control of Petitioner. The excerpt of the regulation is as follows:

"In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:

Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence 41 Tariff Regulations 2014-19 check:

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds."

- c) The component of cost overrun on account of delay ought to be disallowed from the tariff determination.
- 26. We have considered the submissions of Petitioner and Respondent BSPHCL. The estimated completion cost of ₹25297.08 lakh is beyond Apportioned Approved Cost (FR) of ₹21799.33 lakh. However, the estimated completion cost of ₹25297.08 lakh is within the apportioned approved cost (RCE) of ₹26839.95 lakh. Since the estimated completion cost of the instant assets is within the respective apportioned

approved cost as per RCE, there is no cost overrun. Accordingly, the cost variation of individual items is allowed.

27. Accordingly, the capital cost allowed as on COD is as follows:

(₹ in lakh)

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Expenditure up to COD	Capital Cost Allowed as on COD
I	16857.93	18667.49	16262.80	16262.80
II	2276.70	3822.94	2967.31	2967.31
III	1332.35	2175.23	1797.54	1797.54
IV	1332.35	2174.29	1799.23	1799.23
Total	21799.33	26839.95	22826.88	22826.88

Time over-run

28. As per the Investment Approval dated 23.10.2013, the scheduled commissioning date of the transmission project was30 months. Accordingly, the scheduled commercial operation date of the assets of the transmission project was 23.4.2016 against which Assets-I, Asset-II, Asset-III and Asset-IV were put into commercial operation with delay as follows:

Assets	Scheduled Date of Completion	COD	Delay
	(SCOD)	(Actual)	(in days)
I		3.2.2019	1016
II	23.4.2016	1.11.2018	922
III	23.4.2010	24.3.2019	1065
IV		31.3.2019	1072

29. The Petitioner has submitted that the main reason for delay of Asset-I has been severe law & order issues in and around Rajarhat sub-station due to which the bus reactors as well as LILO covered under Asset-I got delayed. Further, the main reason for delay of Asset-II has been severe ROW issues plaguing the completion of 400kV D/C Rajarhat—Purnea transmission line which was not completed by then owing to such issues.

- 30. As regards Assets-I, III and IV, the Petitioner has submitted the detailed reasons of time overrun as under:
 - a) Salient milestones regarding Rajarhat sub-station site are as follows:

(i) Date of Investment approval: October 2013

(ii) Land Acquisition request: July2012

(iii) Land Acquisition complete: February 2014(iv) LOA of LILO line (Asset-I): March 2014

- b) The land acquisition process for 13.44 acres was started in July 2012 by the Petitioner, i.e. much before the date for Investment approval, in order to complete the project in a time bound manner. After the completion of all required compliances and processes, possession of land was given by the Government of West Bengal in February 2014.
- c) Implementation works of transmission lines and sub-station covered under the scope of the transmission project were started soon after investment approval. After 2-3 months of construction work, ROW (Right of Way) problems started creeping in various sections of the LILO line and law &order issues began at Rajarhat sub-station. Many such issues were initially handled and managed by the officials of the Petitioner company. Gradually, such ROW issues started flaring up frequently and in larger proportions, wherein the local villagers nearby Rajarhat S/S and in other districts vehemently opposed the construction work and stopped the work several times demanding exorbitant amount for compensation.
- d) To resolve this, the Petitioner sought help from local authorities and State administration. A series of letters were written to State authorities to resolve the issues and to help in resuming the construction activities at site. In some cases, land-owners demanded diversion of transmission line from their land. In order to resolve this, the Petitioner conducted several meetings with village Pradhan/land-owners and tried to convince them that diversion of transmission line was not possible on account of technical issues.
- e) Further, anti-socials mixing with the villagers threatened officials of the Petitioner and in some cases manhandled them also. The matter was raised with district administration and State Government authorities.
- f) After intervention of administration through police and constant persuasion by the Petitioner, work could resume at Rajarhat GIS.

- g) However, during construction of boundary wall, stiff resistance was faced from some villagers/ land-owners wherein miscreants threw some crude bombs in front of the main gate with intention to intimidate the construction workers and sabotage the work. The matter was reported to police and request for protection was applied.
- h) In May 2016, anti-social elements again came inside the sub-station site and threatened the construction workers to stop the work and to vacate the site immediately. Next day, some bombs were exploded by them at the site and thereby all workers panicked and left the site. Site activity was completely stopped after that. Also, a group of local people started spreading false rumours by distributing leaflets in the adjacent villages that livelihood of villagers will be destroyed if this sub-station is constructed. All these matters were reported to District and State authorities and their help was sought to overcome the crisis.
- i) After a lot of deliberations and persuasions by various administration officers at different levels and by officials of the Petitioner company, construction work was resumed again.
- j) The chronology of related important events associated with ROW issues at Rajarhat GIS associated with delay of Assets-I, III and IV is tabulated as below:

Date	Remarks
19.05.2014	Mobilization of man and material on Sub-station. Threat and obstruction from local villagers for carrying out construction works.
19.06.2014	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming Sub-station and further requesting him to take action against miscreants.
16.08.2014	Letter (reminder) from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming Sub-station and further requesting him to take action against miscreants.
10.11.2014	Issue related to obstruction of boundary wall construction by villagers is resolved.
15.11.2014	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, acknowledging their support in resolving the ROW issue (temporarily) of boundary wall.
01.12.2014	Boundary wall construction work against disrupted by land owners and brought to complete halt.

Date	Remarks
14.01.2015	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary (especially from owners of land adjacent to eastern and western side of site) wall for upcoming Sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
24.02.2015	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers against construction of boundary wall for upcoming Sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
12.11.2015	Handmade bombs thrown at site by miscreants at Sub-station site.
14.11.2015	Letter from POWERGRID to Officer in charge (OIC), Police Station, South 24 Pargana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw handmade bombs at site and created panic among workers.
16.11.2015	Letter from POWERGRID to DM, South 24 Pargana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw handmade bombs at site and created panic among workers.
04.05.2016	Letter from POWERGRID to SP, Alipur, intimating him to take action regarding worsening Law & Order problem near Rajarhat GIS.
04.05.2016	Letter from POWERGRID to Officer in charge (OIC), Police Station, Kashipur, intimating him to take action regarding worsening Law & Order problem near Rajarhat GIS.
06.05.2016	Letter from POWERGRID to OIC, Police Station, Kashipur-II, intimating about blasting of homemade bombs in Rajarhat GIS premises and requested to initiate necessary action.
09.05.2016	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers and local journalists against construction works for upcoming Sub-station and further requesting him to take action against miscreants as valuable time is getting lost.
14.05.2016	Letter from POWERGRID to OIC, Kashipur, requesting him for his king assistance in shipment of Sub-station equipment in the area affected by Law & Order situation.
14.05.2016	Letter from POWERGRID to OIC, Rajarhat, requesting him for his king assistance in shipment of Sub-station equipment in the area affected by Law & Order situation.
18.05.2016	Letter from POWERGRID, to SP, Alipore, intimating him about the anti-POWERGRID propaganda taking place near the substation to deter the related construction work.

Date	Remarks
24.10.2016	Advisory by Govt. Of West Bengal, Chief Secretary Office to furnish comments and agenda regarding ROW hindrances to be taken up in "Cabinet Committee on Investment" to be held on 08.11.2016.
02.12.2016	Villagers with support of Local MLA demonstrated in front of SDO (Baraipur) Office alleging that no or very marginal compensation has been paid.
10.12.2016	Letter from POWERGRID to Block Development Officer (BDO), South 24 Parganas, Kolkata, intimating him about obstruction caused by local villagers who gathered in large numbers (around 2000) against construction works for upcoming Substation and further requesting him to take action against miscreants as valuable time is getting lost.
12.12.2016	Letter from POWERGRID to Officer in charge (OIC), Police Station, Kashipur, intimating him to take action regarding worsening Law & Order problem near Rajarhat GIS.
19.12.2016	Letter from POWERGRID to SP, Kashipur, intimating him to take action regarding worsening Law & Order problem near Rajarhat GIS where few handmade bombs exploded.
06.01.2017 & 07.01.2017	Labourers manhandled by local villagers
07.01.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
07.01.2017	Letter from POWERGRID to DM, South 24 Pargana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
07.01.2017	Letter from POWERGRID to SP, South 24 Pargana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.
13.01.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter.
18.01.2017	Letter from POWERGRID to DGP, Govt. Of West Bengal, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter. The work forced to be stopped completely since first week of Jan'2017.
19.01.2017	Letter from POWERGRID- CMD to Ministry of Power, Govt. Of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of CISF or necessary security through Ministry of Home Affairs.
20.01.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous

Date	Remarks
	disruption, manhandling of workers and requesting necessary help to resolve the matter.
23.01.2017	Letter from POWERGRID to SP, South 24 Pargana, intimating about continuous disruption of work, manhandling of workers and requesting necessary help to resolve the matter.
03.02.2017	Letter from POWERGRID to SP, South 24 Pargana, intimating about continuous disruption of work, manhandling of workers and requesting necessary help to resolve the matter.
04.02.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
27.02.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, theft and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
04.03.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, theft and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
17.05.2017	Letter from POWERGRID to DM, South 24 Pargana, intimating about continuous disruption, and requesting necessary cooperation with villagers or land owners by calling a meeting to resolve the matter.
18.05.2017	Office Memorandum from Ministry of Home Affairs, Govt. of India asking Ministry of Power to demand adequate security from Govt. of West Bengal.
23.05.2017	Letter from Deputy SP, CID, West Bengal to POWERGRID seeking status of site conditions and clarifications for compliance.
25.05.2017	Letter from POWERGRID to Deputy SP, CID, West Bengal, intimating about continuous disruption, and requesting necessary cooperation with villagers and providing clarifications as sought from him.
12.06.2017	Meeting of PMG (Project Monitoring Group under aegis of Central Govt. Cabinet Secretariat), with the Chief Secretary, Govt. of West Bengal, wherein one of the critical agendas included the severe ROW issue plaguing the ERSS-V project.
14.06.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
14.06.2017	Letter from POWERGRID to SP, Kashipur, South 24 Pargana, intimating about continuous disruption, theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.

Date	Remarks
05.07.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
12.07.2017	Meeting of PMG (Project Monitoring Group under aegis of Central Govt. Cabinet Secretariat), with the Chief Secretary, Govt. of West Bengal, wherein one of the critical agendas included the severe ROW issue plaguing the ERSS-V project.
10.08.2017	Letter from POWERGRID to Member (Power System -CEA), Kashipur, South 24 Pargana, intimating about continuous disruption, and requesting necessary help and cooperation through forthcoming Standing Committee Meeting of ER regarding no further construction of line around Rajarhat Substation.
25.08.2017	Letter from Secretary, Ministry of Power (MOP), to Chief Secretary, Govt. of West Bengal intimating about continuous disruption, and requesting necessary help and cooperation through Govt. of West Bengal.
22.11.2017	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
22.11.2017	Letter from POWERGRID to SP Kashipur, South 24 Pargana, intimating about continuous disruption, assessment of theft, burning of equipment and manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
27.11.2017	Letter from POWERGRID- CMD to Secretary, MOP, Govt. Of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of CISP or necessary security through Ministry of Home Affairs.
29.11.2017	Letter from to Secretary, MOP to Secretary (Home), Govt. Of India, intimating about continuous disruption, manhandling of workers and requesting necessary help to resolve the matter through deployment of CISF or necessary security through Ministry of Home Affairs with expenditure to be undertaken by POWERGRID.
29.11.2017	Agenda of Rajarhat Sub-station in Central PMG (Prime Minister Monitoring Group) meeting for resolving the ROW issue.
01.12.2017	Letter from POWERGRID to SP, Baraipur, South 24 Pargana, intimating about continuous disruption, assessment of theft, manhandling of workers and requesting necessary help and deployment of police to resolve the matter.
28.06.2018	Letter from POWERGRID to Officer-in-charge, Police station, Kashipur, South 24 Pargana, intimating about continuous disruption, assessment of theft, burning of equipment and

Date	Remarks	
	manhandling of workers and requesting necessary help and deployment of police to resolve the matter. (reference in letter dated 02.07.2018)	
02.07.2018	Letter from Officer-in-charge, Police station, Kashipur, South 24 Pargana to POWERGRID intimating about reluctance of land owners/ villagers and asking if the matter may be taken by POWERGRID though NGT (National Green Tribunal).	
11.08.2018	Agreement to solve the problem of construction of regional substation in Bhangra (Rajarhat Area)	
Due to incessant violent agitations by local villagers/land owners, the balance works of the transmission line and Rajarhat Sub-station in the district of South Pargana & South Pargana had to be suspended from January 2017 onwards.		
The matter had been taken up at the highest level involving Government of India, Ministry of Home Affairs, MOP, and also with higher authority of Govt. of West Bengal. Finally, after lot of persuasions an agreement was signed with State Government Administration (WB) and "Jomi Jivika Bastutantra O Parivesh"		

31. The Petitioner has submitted documentary evidence in support of the above contentions in respect of Assets-I, III and IV. In brief, the first such reporting of law &order situation issues dates back to 19.05.2014 and the last being an agreement with "Jomi Jivika Bastutantra O Parivesh Raksha Committee" for resuming works at Rajarhat S/S w.e.f. 14.08.2018. Thus, there was a delay of around 51 months on account of law &order situation affecting the completion of Rajarhat GIS.

Raksha Committee" for resuming works at Rajarhat S/S w.e.f. 14.08.2018

32. Asset-II was scheduled to be commissioned along with 400kV D/C Rajarhat – Purnea line. However, as per the Petitioner, completion of 400kV D/C Rajarhat – Purnea line was delayed due to severe ROW issues. The chronology of related important events associated with ROW issues of 400kV D/C Rajarhat – Purnea TL is tabulated as follows:

Date	Remarks
30.05.2015	Letter from POWERGRID to Sabhadhipati (president –Zila Parishad), North Pgs., intimating of ROW issue at Loc. Nos 15A/0 – 17/0, 20/1 to 25/1, 36A/0 and 33/0 and further requesting him to intervene in the matter to resolve the issue
01.07.2015	Letter from POWERGRID to OIC (Officer – in – Charge), Habra Police Station (PS), North Pgs., intimating him of ROW issue at

Date	Remarks
	Loc. No. AP-14/0) and requesting him to take action against people obstructing the foundation work.
01.07.2015	Letter from POWERGRID to OIC (Officer – in – Charge), Degnaga Police Station (PS), North Pgs., intimating him of ROW issue and requesting him to take action against people obstructing the foundation work.
06.07.2015	Letter from POWERGRID to DM (District Magistrate), Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at Loc. No. AP 79/0 in the concerned area.
06.07.2015	Letter from POWERGRID to SDM, North Pgs., requesting him to take action against miscreants hampering the foundation works at Loc. 54/3, 54/4, & 54/5.
08.09.2015	Letter from POWERGRID to BDO (Block Development Officer), Bhuinagar, South Pargana, requesting action against locals obstructing construction work at Loc. AP-14/0.
14.09.2015	Letter from POWERGRID to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at Loc. No. 86/3, 85/0, 87/0 & 87/1 in the concerned area.
16.11.2015	Letter from POWERGRID to DM, South 24 Pargana, Kolkata, requesting him to take action against miscreants hampering the construction works who threw handmade bombs at site and created panic among workers.
04.12.2015	Letter from POWERGRID to BDO (Block Development Officer), North Pgs., intimating him of ROW issue at Loc. No. AP-14/0) and requesting him to take action against people obstructing the foundation work.
10.12.2015	Letter from POWERGRID to DM, North Pgs., requesting him to take action against people obstructing the foundation works at various Loc.
22.12.2015	Letter from POWERGRID to SDM, North Pgs., requesting him to take action against people obstructing the foundation works at Loc. 7B/1.
13.01.2016	Office order from SDM, North Pgs., requesting villagers, land owners, DSP, SDO, BDO, OIC(PS), Gram Panchayat to attend a meeting for amicable resolution to ROW issue.
14.01.2016	Letter from POWERGRID to SDM, North Pgs., requesting him to take action against people obstructing the foundation works at Loc. 54/5.
09.02.2016	Letter from POWERGRID to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at few locations in the concerned area as no outcome has been there pursuant to previous meetings of local administration.
10.02.2016	Letter from POWERGRID to IIC (Inspector in-charge), Farakka, West Bengal, requesting to resolve ROW at Loc. 7/3 and 8/0.
10.02.2016	Letter from POWERGRID to DM, Nadia, requesting him to resolve the issue under Section 16 of Telegraph Act at few locations in the concerned area.

Date	Remarks
11.02.2016	Letter from POWERGRID to SDM, North Pgs., requesting him to take action against miscreants hampering the construction works at Loc. 54/3, 54/4, & 54/5.
11.03.2016	Letters from POWERGRID to OIC (officer in-charge), Hiranpur, police station, Jharkhand, requesting to resolve ROW at Loc.17/0.
24.04.2016	Letter from POWERGRID to OIC, Khargram Police Station, West Bengal, requesting to resolve ROW at Loc. 145/0.
29.04.2016	Letter from POWERGRID to DM, North Pgs., intimating him of ROW issues and requesting him to take action against people obstructing the work.
31.05.2016	Letter from POWERGRID to OIC, Khargram Police Station, West Bengal, requesting to resolve ROW at Loc. 145/1.
09.06.2016	Office order from SDM, North Pgs., requesting villagers, land owners, POWERGRID officials, BDO, OIC(PS), Gram Panchayat to attend a meeting on 15.06.2016 for amicable resolution to ROW issue.
10.06.2016	Letter from POWERGRID to Home Secretary, Govt. of West Bengal, intimating him of re-occurring ROW issue during construction of Rajarhat-Purnea TL and requesting him to take up the matter with the concerned authorities for aiding in expediting the construction work.
14.06.2016	Letter from POWERGRID to DM, South Pgs., requesting his intervention to resolve ROW issue at Loc. 1/0, 4/0, 5/0, 5A/0 & 5/2, 5/3.
14.06.2016	Letter from POWERGRID to DM, Nadia, requesting his intervention to resolve ROW issue at Loc. 80/0, 81/0, 86/3, 86/4, 87/0, 84B/0 & 85/0.
20.06.2016	Meeting was convened by SDO (Baruipur) with presence of local villagers and their leaders & representatives wherein the locals were persuaded to be in favour of the construction of this project.
21.06.2016	Letter from POWERGRID to SDO, Musrhidabad, West Bengal, requesting to resolve ROW at Loc. 4/0 and 6/1.
24.06.2016	Letter from Deputy Secretary, Govt. of West Bengal to DG & IG, Police, West Bengal requesting on behalf of POWERGRID for taking necessary action in the related matter.
07.07.2016	Letter from POWERGRID to OIC, Khargram Police Station, West Bengal, requesting to resolve ROW at Loc. 145/1.
15.07.2016	Letter from POWERGRID to DM, North Pgs., intimating him of ROW issues and requesting him to provide assistance in completion of work and take action against people obstructing the work at various locations.
15.07.2016	Office order from BDO, Deganga block, requesting villagers, land owners, local Hon'ble MLAs, POWERGRID, OIC(PS), Gram Panchayat to attend a meeting for amicable resolution to ROW issue.
22.07.2016	Letter from POWERGRID to Block Land & Land Reforms Officer, North Pargana, West Bengal, intimating the office about constructing of illegal structure in ROW of line and further requesting to resolve the issue through necessary action.

Date	Remarks
02.08.2016	Letter from POWERGRID to DM, North Parganas, West Bengal, requesting to resolve ROW at various locations.
12.08.2016	Letter from POWERGRID to Additional Secretary (POWER), Govt. of West Bengal requesting his kind intervention to resolve Row issue in the concerned construction area.
17.08.2016	Meeting of POWERGRID officials with Principal Secretary, POWER, Govt. of West Bengal highlighting the concern regarding ROW and worsening Law & Order.
22.08.2016	Meeting with Additional Secretary (POWER), Govt. of West Bengal seeking his help in timely completion of project already plagued by ROW issues.
23.08.2016	Letter from POWERGRID to Additional Secretary (POWER), Govt. of West Bengal requesting his kind intervention for early completion of this transmission project.
01.09.2016	Letter from Joint Secretary, Govt. of West Bengal to DM, Nadia/Parganas/ Murshidabad asking them to take necessary action for timely completion of the transmission project of POWERGRID.
07.09.2016	Letter from POWERGRID to DM, South Pgs., requesting his intervention for smooth completion of balance works of this transmission project.
07.09.2016	Letter from POWERGRID to Superintendent of Police, South Pgs., requesting his intervention for smooth completion of balance works of this transmission project.
07.09.2016	Letter from POWERGRID to Deputy Superintendent of Police (Crime), South Pgs., requesting his intervention for smooth completion of balance works of this transmission project.
10.09.2016	Letter from POWERGRID to IIC, Farakka Police station, West Bengal, requesting to resolve ROW at Loc. 4/0, 5/0, 5A/0, 6/0, 7/0, 7/3, 7/1 and 8/0.
10.09.2016	Letter from POWERGRID to Superintendent of Police, South Pgs., requesting his intervention for smooth completion of 10% balance works of this transmission project.
10.09.2016	Letter from POWERGRID to DM, South Pgs., requesting his intervention for smooth completion of 10% balance works of this transmission project.
14.09.2016	Letter from POWERGRID to BDO, South 24 Pargana, Kolkata, requesting him to take action against miscreants hampering the construction works who manhandled the workers.
27.09.2016	Letter from ADM, Nadia to SDO, Nadia intimating him of communication dated 1.9.2016 of Joint Secretary, Govt. of WB, asking to get the Row issue resolved soon.
17.10.2016	Letter from POWERGRID to DM, South Pgs., requesting his intervention for smooth completion of balance works of this transmission project in line with meeting/ hearing held in office of BDO, South Parganas on 05.10.2016.
20.10.2016	Office order from District Planning Officer, North Parganas intimating about next upcoming District Level Monitoring

Date	Remarks				
	Committee Meeting to be held on 24.10.2016 for resolving the ROW issue related to Rajarhat line project.				
24.10.2016	Advisory by Govt. Of West Bengal, Chief Secretary Office to furnish comments and agenda regarding ROW hindrances to be taken up in "Cabinet Committee on Investment" to be held on 08.11.2016.				
02.11.2016	Letter from Joint Secretary, Govt. of West Bengal to DM, Nadia/Parganas/ Murshidabad asking them to take necessary action for timely completion of the transmission project of POWERGRID.				
08.11.2016	Meeting held between POWERGRID with Chief Secretary, Govt. of West Bengal.				
02.12.2016	Letter from POWERGRID to OIC, Deganga Police station, requesting to resolve ROW at Loc. 20/0 as also advised by DM to resume works from 03.12.2016.				
09.12.2016	Letter from POWERGRID to Land owners at Loc. No. 257/0 to 258/0, requesting him to cooperate regarding tree feeling for line corridor.				
10.12.2016	Letter from POWERGRID to DM, South Parganas, requesting to resolve ROW wherein land owners have forcibly stopped the works.				
19.12.2016	Letter from POWERGRID to SP, South Pargana, intimating about continuous disruption in TL construction by means of crude bomb blasts nearby construction site and misguiding by antisocial by way of leaflet distribution among locals and further requesting him to investigated the matter and take suitable action promptly.				
06.01.2017	Letter from POWERGRID to IIC, Farakka Police station, West Bengal, requesting to resolve ROW at Loc. 3/0.				
07.01.2017	Letter from POWERGRID to SP, South 24 Pargana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.				
07.01.2017	Letter from POWERGRID to DM, South 24 Pargana, intimating about continuous disruption, manhandling of workers and throwing of handmade bombs and requesting necessary help to resolve the matter.				
10.01.2017	Letter from POWERGRID to DM, Katihar, Bihar requesting to resolve ROW wherein land owners have forcibly stopped the works at Loc. No. 252/4.				
12.01.2017	Letter from POWERGRID to DC, Godda, Jharkhand, requesting to resolve ROW wherein land owners have forcibly stopped the works at Loc. No. 224A/1, 226/1 and 226/4.				
11.03.2017	Letter from POWERGRID to DM, Purnea, Bihar requesting to resolve ROW wherein land owners have forcibly stopped the works at Loc. No. 280/0.				
The matter had been taken up with higher authority of Government of West					
_	e administration took several steps to mitigate agitation and took				
proactive act	ion for resolving the stalemate such that the balance work could be				



Date	Remarks						
completed a	t the earliest. However, aggrieved by the slow pace of progress,						
POWERGRI	POWERGRID had to request Central Government for intervention in the same.						
11.06.2017	Letter from POWERGRID to DC, Godda, Jharkhand, requesting						
	to resolve ROW on Lohsigna village.						
08.07.2017	Letter from POWERGRID to SDM, Godda, Jharkhand, requesting						
	to resolve ROW wherein land owners have forcibly stopped the						
	works at Loc. No. 222/0 and 221B/0.						
12.07.2017	Meeting of PMG (Project Monitoring Group under aegis of Central						
	Government, Cabinet Secretariat), with the Chief Secretary, Govt.						
	of West Bengal, wherein one of the critical agendas included the severe ROW issue plaguing the ERSS-V project.						
09.08.2017	Meeting Notice issued by Under Secretary, Govt. of India (GOI),						
03.00.2017	requesting Chief Secretary of various states including West						
	Bengal for review of critical and severely affected power projects.						
10.08.2017	Letter from POWERGRID to Member (Power System - CEA),						
	Kashipur, South 24 Pargana, intimating about continuous						
	disruption, and requesting necessary help and cooperation						
	through forthcoming Standing Committee Meeting of ER regarding						
05.00.0047	no further construction of line around Rajarhat Sub-station.						
05.09.2017	Letter from POWERGRID to BDO, Hoogly, West Bengal,						
	intimating that compensation has been duly paid as per norms and that absurd claims of compensation may not be settled without						
	meeting.						
07.09.2017	Letter from POWERGRID to DM, North 24 Pargana, intimating						
	about continuous disruption and standstill status of project due to						
	severe ROW and that necessary help may be extended to						
	POWERGRID.						
06.11.2017	Meeting notice from DM, North 24 Pargana, intimating meeting						
00 44 0047	scheduled for 07.11.2017 in order to resolve the ROW issue.						
29.11.2017	Meeting notice issued from PMO, PMG group to State of West Bengal regarding review of pending power projects to be held on						
	08.12.2017.						
01.12.2018	Letter from POWERGRID to DM, Katihar, Bihar requesting to						
	resolve ROW wherein land owners have forcibly stopped stringing						
	works.						
25.01.2018	Meeting held between POWERGRID, land owners, villagers and						
	chamber of Savapati Gaighata Panchayat Samiti regarding						
40.00.0040	resolving the ROW issue.						
13.03.2018	Letter from POWERGRID to DC, Godda, Jharkhand, requesting						
	to resolve ROW wherein land owners have forcibly stopped the works at Loc. No. 222/0 and 221B/0.						
23.04.2018	Letter from POWERGRID to DC, Godda, Jharkhand, requesting						
20.07.2010	to resolve ROW wherein land owners have forcibly stopped the						
	works at Loc. No. 222/0, 221/0, 221A/0 and 221B/0.						
12.06.2018	Letter from POWERGRID to SP, Katihar, Bihar requesting to						
	resolve ROW wherein land owners have forcibly stopped stringing						
	works at Loc. No. 241/3.						
18.06.2018	Meeting notice from DM, North 24 Pargana, intimating meeting						
	scheduled for 21.06.2018 in order to resolve the ROW issue.						



Date	Remarks
27.07.2018	Letter from POWERGRID to IIC, Balagarh Police station, West Bengal, requesting to resolve ROW between Locs. 96B/2 where villagers are demanding absurd amount of compensation.
07.08.2018	Notice from BDO, Balagarh, asking villagers to let POWERGRID do work smoothly and avoid claim of absurd compensation.
23.08.2018	Letter from POWERGRID to DM, North 24 Pargana, requesting to resolve ROW between Locs. 33/0 where villagers are demanding absurd amount of compensation.
23.09.2018	Letter from POWERGRID to BDO, North 24 Pargana, requesting to resolve ROW where villagers are demanding absurd amount of compensation.
05.09.2018	Letter from POWERGRID to Village samiti members requesting to acknowledging the amount of compensation and cooperate in the completion transmission line.
04.10.2018	Letter from POWERGRID to DM, North 24 Pargana, requesting to resolve ROW matter as no fruitful result has been yield from meeting held on 25.01.2018 and 18.01.2018.
12.10.2018	Letter from POWERGRID to DM, North 24 Pargana, requesting to resolve ROW matter as no fruitful result has been yield from meeting held on 25.01.2018 and 18.01.2018.
17.01.2019	Letter from POWERGRID to Sr. SP, North 24 Pargana, requesting to resolve ROW matter and provide adequate police protection.
22.01.2019	Letter from POWERGRID to DM, North 24 Pargana, requesting to resolve ROW plaguing the stringing works.
23.01.2019	Letter from POWERGRID to the Hon'ble Minister-in Charge, Govt. of Bengal intimating of the severe ROW issue and requesting to provide necessary assistance.

- 33. The first such letter reporting ROW issues related to Asset-II dates back to 30.05.2015. There are multiple letters for the interim period reporting ROW issues that affected the construction of the asset under the scope of the transmission project. The ROW issue had plagued this line for a long time incessantly which was not resolved at various locations till the time of filing of the instant petition.
- 34. As per the original scheme of subject project, the 2 nos. 80 MVAR Switchable Line Reactors (SLR) were to be commissioned along with 400kV D/C Rajarhat-Purnea transmission line. However, completion of this associated transmission line was getting delayed and simultaneously frequent overvoltage problem (above desirable limits) was

being faced at 400/220kV Purnea sub-station especially during lean period of hydel power.

- 35. The Petitioner has submitted that it was, therefore, deliberated and agreed in the 149th OCC (Operational Coordination Committee) meeting of Eastern Region held on 24.09.2018, that 2x80 MVAR SLRs were ready at Purnea sub-station and if these SLRs are charged as bus reactors, they would help in controlling the overvoltage at 400/220kV Purnea sub-station. Accordingly, these 2 numbers of 80 MVAR SLR were charged as bus reactors and put under commercial operation w.e.f. 1.11.2018. Subsequently, this was also deliberated and ratified in the 39th ERPC meeting held on 17.11.2018.
- 36. The Commission vide RoP of hearing dated 13.7.2020 directed the Petitioner to submit the details of time over-run with correspondence exchanged, if any, and chronology of the time over-run along with documents. In response, the Petitioner vide affidavit dated 11.8.2020 has submitted the details of time over-run and chronology of activities along with documentary evidence as follows w.r.t Assets-I, III and IV:

A additional	Period of activity				Time over- run (in	Reason (s)	
Activity	Planned		Achieved		month (s) or	for Time over-run	
	From	То	From To		day(s)		
Land Acquisition	July 2013	March 2014	July 2013	March 2014	No delay	NA. Land for Rajarhat GIS was obtained timely.	
LOA (Asset-I)	21.11.2013	21.11.2013	05.03.2014	05.03.2014	LOA awarded within3 months of Schedule	-	
LOA (Asset-III & IV)	28.01.2014	28.01.2014	04.12.2014	04.12.2014	LOA award was on hold	Due to severe Law & Order situation prevailing at Rajarhat GIS since May2014	
Supplies (Structures, equipment, etc.) (Asset-I)	February 2014	December 2015	August 2014	September 2015	Supplies completed before the schedule date of December 2015	-	

	Period of activity				Time over- run (in	Reason (s)		
Activity	Planned		Achieved		month (s) or	for Time over-run		
	From	То	From	То	day(s)			
Supplies (Structures, equipment, etc.) (Asset-III & IV)	September 2014	October 2015	August 2015	October 2018	Supplies were affected beyond schedule	Start of supplies were affected by due to holding up of LOA and the supplies completion was affected due to severe Law & Order situation at Rajarhat GIS		
Civil works & Erection /Tower erection/ Stringing (Asset-I)	March 2014	March 2016	August 2014	January 2017 (LILO) / December 2018 (Bays)	It is submitted that the implementation of this asset was taken up with completion schedule of 30 months. The works were initiated timely upon Loa issuance. Further, the working gangs were timely mobilized to achieve the scheduled completion target. The LILO line was right on schedule during execution, however, the delay was there in completion of its bays at Rajarhat			
Civil works & Erection (Asset-III & IV)	March 2014	February 2016	September 2015	December 2018				
Testing & commission ing (Asset-I)	March 2016	April 2016	January 2019	03.02.2019 (February 19)	GIS which was incessantly affected be Severe Law & Order situation at Rajarha GIS. Further, proactive actions involving various adaptive and mitigatory step were taken to overcome the hurdles such as severe ROW and Law & Order situation associated with construction of Rajarhat GIS in a compressed schedule However, in spite of the best efforts of the petitioner, due to mentioned unforesee reasons, the completion of subject asset I, III& IV got delayed and went beyond it schedule completion date. There are multiple letters for the interimperiod (from May2014 to August 2018 reporting Law & Order issues the affected the construction of Rajarhat Substation under the scope of ERSS-V. Therefore, from the above it is evident that there is a delay of around 51 months of account of Law & Order situation affecting the completion of Rajarhat GIS.			
Testing & commission ing (Asset-III & IV)	February 2016	April 2016	February 2019	24.03.2019 & 31.03.2019 i.e. March 2019				

37. With regard to Asset-II, the following details have been submitted by the Petitioner:

Activity	Period of activity				Time over-	Reason (s)	
	Planned		Achieved		run (in month (s) or	for Time over-run	
	From	То	From	То	day(s)		
Land Acquisition			NA			As per scope, there were extension works to be done at existing 400/220kV Purnea S/S.	
LOA	28.1.2014	28.1.2014	13.3.2015	13.3.2015	LOA award was on hold	Due to delay in completion of 400kV D/C Rajarhat – Purnea line owing to severe ROW issues.	
Supplies (Structures, equipment, etc.)	Septembe r 2014	October 2015	6.11.2015	13.4.2016	Supplies were affected slightly beyond schedule	Start of supplies were affected by due to holding up of LOA and the supplies completion was affected due to severe ROW issues in 400 kV D/C Rajarhat – Purnea line	
Civil works & Erection	March 2014	February 2016	3.8.2015	22.3.2018	Start of civil works were affect by delayed supply due to holding up of LOA due to ROW in associated main line	It is submitted that the subject Asset-II was supposed to be commissioned along with 400kV D/C Rajarhat – Purnea line. However, due to the noncompletion of line due to severe ROW issues at both Rajarhat and Purnea end. Further, due to frequent overvoltage instances at	
Testing & commission ing	February 2016	April 2016	22.3.2018	1.11.2018	Even after completion of works & CEA application in March 2018, the actual COD was done only after obtaining necessary OCC/ ERPC approval in October 2018	400/220kV Purnea Substation these SLRs were charged as Bus Reactor till the intended transmission line was made ready. This arrangement was concurred and agreed in the 149th OCC and 39th ERPC of Eastern Region Since, the subject asset-II was originally envisaged to be commissioned alongwith 400kV D/C Rajarhat – Purnea line, therefore the delay in commissioning of subject asset-II is as a result of severe ROW issues associated with this line.	

38. The Respondent, BSPHCL, in Reply to the Petition has, vide affidavit dated 18.8.2020, submitted that the Petitioner has sought condonation of delay of 30 to 35 months in commissioning of the assets on the ground of severe RoW and law &order issues. However, the reasons cited by the Petitioner fall within the ambit of controllable factor as stated in Regulation 12 of the 2014 Tariff Regulations. As such, the delay is

solely attributable to the Petitioner. Also, the Petitioner has also not submitted the following supporting documents as per Tariff Filing Forms (Transmission & Communication System) – for determination of Tariff:

- a. Detailed Project Report
- b. CPM Analysis
- c. PERT Chart and Bar Chart
- 39. BSPHCL has further submitted that the Petitioner without filing the above-stated statutory documents in the support of its claim, has failed in complying with provisions of the 2014 Tariff Regulations. The Commission, on its own, cannot add, substitute or delete any word of the 2014 Tariff Regulations in condoning the time overrun. In this regard, BSPHCL has referred to judgment of APTEL dated 01.07.2014 in Appeal No. 169 of 2013 (GRIDCO Limited Vs M/S Bhushan Power & Steel Ltd. & others).
- 40. We have gone through the submissions of the Petitioner and Respondent. As per the Investment Approval dated 23.10.2013, the scheduled commissioning date of the Project was 30 months. Accordingly, the scheduled commercial operation date of the Project was 23.4.2016 against which Asset-I, Asset-II, Asset-III and Asset-IV were put into commercial operation on 3.2.2019, 1.11.2018, 24.3.2019 and 31.3.2019 with a delay of 1016 days, 922 days, 1065 days and 1072 days, respectively.
- 41. With regard to Asset-I, Asset-III and Asset-IV, It is observed from the chronology of scheduled versus actual project activities that the Petitioner encountered law &order and ROW issues between 19.5.2014 to 14.8.2018 at various locations in and around Subhasgram sub-station and LILO construction, thereby taking about 1548 days. This delay of 1548 days was caused by law &order and ROW issues and thus was beyond the control of the Petitioner. Moreover, the law & order and ROW issue was resolved on 14.8.2018 which is about 843 days beyond the SCOD of 23.4.2016. After the law &order and ROW issues were resolved on 14.8.2018, the Petitioner completed the

remaining activities of Asset-I within 173 days, Asset-III within 222 days and Asset-IV within 229 days and the LILO together with Subhasgram sub-station including associated bays and bus reactors were declared under commercial operation on 3.2.2019, 24.3.2019 and 31.3.2019 for Asset-I, Asset-III and Asset-IV, respectively.

- 42. This additional time of 1548 days due to law &order and ROW issues had a cascading effect on construction of sub-station and LILO. However, the Petitioner squeezed the execution time due to which the overall delay of Asset-I, Asset-III and Asset-IV came down to 1016 days, 1065 days and 1072 days, respectively. Therefore, the time over-run of 1016 days, 1065 days & 1072 days in Asset-I, Asset-III and Asset-IV, respectively was beyond the control of the Petitioner and is condoned in line with Regulation 12(2) of 2014 Tariff Regulations.
- 43. With regard to Asset-II, it is observed from the chronology of scheduled versus actual project activities, that the Petitioner encountered law &order and ROW issues since 30.5.2015 and some are still not resolved and are continuing till date at various locations in and around Subhasgram and Purnea sub-stations and various locations of the 400 kV D/C Rajarhat-Purnea Transmission line construction. To control frequent overvoltage problem (above desirable limits) being faced at 400/220kV Purnea substation especially during lean period of hydel power, it was deliberated and agreed in the 149thOCC (Operational Coordination Committee) meeting of Eastern Region held on 24.9.2018, to charge 2x80 MVAR SLRs that were ready at Purnea sub-station as Bus Reactors. Accordingly, these 2 numbers of 80 MVAR SLR were charged as bus reactors and put under commercial operation w.e.f. 1.11.2018. Subsequently, this was also deliberated and ratified in the 39th ERPC meeting held on 17.11.2018. This delay of 884 days between 30.5.2015 to 24.9.2018 was caused by law & order and ROW issues and thus was beyond the control of the Petitioner. Immediately after approval

of 149th OCC meeting dated 24.9.2018, the Petitioner expedited the construction and completed the remaining activities within 38 days and COD of Asset-II i.e. the 2x80 MVAR SLR together with associated 2 nos. 220 kV bays at Purnea sub-station was declared on 1.11.2018 which is about 922 days beyond the SCOD of 23.4.2016.

- 44. This additional time of 1213 days due to law &order and ROW issues had a cascading effect on the execution of subject asset. However, the Petitioner squeezed the execution time due to which the overall delay comes to 922 days. Therefore, the time over-run of 922 days due to hindrance caused by law &order and ROW issues was beyond the control of the Petitioner and is condoned in line with Regulation 12(2) of the 2014 Tariff Regulations.
- 45. In view of the above deliberations, the time overrun condoned/ not condoned in respect of instant assets is summarised as below:

Asset	Asset	Total	Delay	Delay not
		Delay	condoned	condoned
		(Days)	(Days)	(Days)
I	LILO of 400kV S/C Subhasgram – Jeerat	1016	1016	0
	transmission line and associated bays at			
	Rajarhat, 01 no. 400/220kV 500 MVA ICT			
	(1st) and associated bays along with 4 nos.			
	220kV line bays at Rajarhat GIS.			
II	2 nos. 400kV 80 MVAR Switchable Line	922	922	0
	Reactors (charged as Bus Reactors) along			
	with associated bays at 400kV Purnea Sub-			
	station.			
III	125 MVAR Bus Reactor (1st) and	1065	1065	0
	associated bay at Rajarhat GIS			
IV	125 MVAR Bus Reactor (2 nd) and	1072	1072	0
	associated bay at Rajarhat GIS			

46. As regards contention of the Respondent BSPHCL that the reasons cited by the Petitioner are controllable and that the time over run should not be condoned, we note that the law & order issues and ROW issues have directly affected the execution of the assets and despite regular efforts made by the Petitioner at different levels, the issues

could not be resolved. In our view, these issues were not within control of the Petitioner.

Therefore, contention of the Respondent BSPHCL is rejected.

Interest During Construction (IDC)

- 47. The Petitioner has claimed Interest During Construction (IDC) for the instant assets and has submitted the Auditor's Certificates dated 31.07.2019 for Asset-I, Asset-III and Asset-IV and dated 13.7.2019 for Asset-II, in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.
- 48. IDC has been allowed considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.
- 49. It is observed that in case of Asset-1 wherein IBRD loan has been deployed, the Petitioner has not furnished any details such as drawl dates, rate of interest, repayments etc. In absence of such information, prudence check of IDC on IBRD loan could not made and accordingly, IDC has not been allowed on the IBRD loan. The same shall be reviewed at the time of truing up. The Petitioner is directed to furnish computation in respect of IDC claimed on IBRD loan, duly certified by the Auditor along with all details such as drawl dates, rate of interest, repayments etc. along with the true up petition. The Petitioner is also directed to furnish detailed justifications as regards lesser utilisation of IBRD loan which is 7% of the project cost as compared to 59% as per the DPR.

50. Accordingly, IDC allowed is as under:

(₹ in lakh)

Asset	IDC as per Auditor's certificate	IDC based on actual calculation	Computational difference in IDC	IDC Dis- charged as on COD	IDC Undischarged as on COD	IDC Disc	charged
Α	В	С	D=B-C	E	F=C-E	2018-19	2019-20
Asset-I	1825.19	1677.32	147.87	1289.26	388.05	0.00	388.05
Asset-II	450.56	435.78	14.78	356.32	79.46	57.45	22.01
Asset-III	238.75	236.68	2.07	172.10	64.58	0.00	64.58
Asset-IV	240.44	238.73	1.71	185.71	53.02	0.00	53.02

Incidental Expenditure During Construction (IEDC)

- 51. The Petitioner has claimed IEDC of ₹442.04 lakh, ₹16.97 lakh, ₹47.74 lakh and ₹47.74 lakh for Asset-II, Asset-III and Asset-IV, respectively and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the instant assets. Hence, IEDC claimed has been allowed.
- 52. IEDC allowed for the instant asset is subject to reconsideration in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 against the Commission's orders dated 29.7.2016 and in Petition No. 46/TT/2014 and dated 5.10.2017 in Review Petition No. 2/RP/2017 respectively, at the time of truing up. The Petitioner is directed to furnish, at the time of filing petition for true-up, the quantum of IEDC allowed by the Commission in other assets of this transmission system.

Initial Spares

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

"13. Initial Spares

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

- (d) Transmission system
- (i) Transmission line 1.00%
- (ii) Transmission Sub-station (Green Field) 4.00
- (iii) Transmission Sub-station (Brown Field) 6.00%
- (iv) Series Compensation devices and HVDC Station 4.00
- (v) Gas Insulated Sub-station (GIS)-5.00%
- (vi) Communication system-3.5%

Provided that

- (i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:
- (ii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing upv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application."
- 54. The Petitioner has claimed initial spares for the instant transmission assets and has submitted Auditor's Certificate dated 31.07.2019 for Assets-I, Asset-III and Asset-IV and that dated 13.7.2019 for Asset-II, in support of the same. The Petitioner, vide affidavit dated 11.8.2020, has submitted details of year-wise capitalisation and initial spares discharged up to COD. The Petitioner has further submitted that the expenditure incurred towards initial spares up to COD have been considered in COD cost. The amount towards balance initial spares liabilities have been considered in additional capital expenditure of the respective year and the Petitioner has prayed to allow the entire initial spares claimed under the instant petition. The details of initial spares claimed by the Petitioner is as follows:

					(₹ in iakn)
Asset	Particulars	Plant and	Initial	Ceiling	Initial
	Head	Machinery Cost	Spares	(C)	Spares
		(excluding IDC	claimed	(in %)	worked out
		and IEDC, land	(B)		as per
		cost and cost of	(₹ in lakh)		ceiling (₹ in
		civil works)			lakh)
		(A)			
		(₹ in lakh)			

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	Transmission Line	1939.75	18.00	1.00	19.41
'	Sub-station (GIS)	9981.14	426.22	5.00	502.89
II	Sub-station (brownfield)	2838.69	153.57	6.00	171.39
III	Sub-station (GIS)	1688.27	70.01	5.00	85.17
IV	Sub-station (brownfield)	1687.44	72.01	6.00	103.29

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

(₹ in lakh)

Asset	Element	Plant and Machinery Cost up to the cut-off date/31.3.2019 (excluding IDC and IEDC, land cost and cost of civil works) (₹ in lakh)	Initial spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (%)	Initial Spares worked out as per ceiling limit (₹ in lakh)	Initial spares allowed (₹ in lakh)
	Transmissio n Line	1939.75	18.00	1.00	19.41	18.00
'	Sub-station (GIS)	9981.14	426.22	5.00	502.89	426.22
II	Sub-station (brownfield)	2838.69	153.57	6.00	171.39	153.57
III	Sub-station (GIS)	1688.27	70.01	5.00	85.17	70.01
IV	Sub-station (brownfield)	1687.44	72.01	6.00	103.29	72.01

Capital cost as on COD

56. The capital cost for Asset-I as on COD as per Auditor certificate dated 31.07.2019 submitted by the Petitioner is inclusive of ERV of ₹67.51 lakhs. It is observed that the Petitioner has not furnished any details such as date of drawl, dates of repayment, if any, in respect of the IBRD loan on which the ERV has been claimed. As discussed in earlier part of this order, no IDC has been allowed on the IBRD loan in

absence of such information. In line with the decision with regard to IDC, the ERV amount of ₹67.51 lakhs claimed by the Petitioner has also not been allowed. This shall be reviewed at the time of true-up, based on the FERV computation duly certified by the Auditor, comprising details of drawl/ repayment to be furnished by the Petitioner.

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

(₹ in lakh)

Asset	Capital Cost as on COD as per		sallowed as due to	Less: Excess/ un-	Less: FERV Variation	Capital Cost considered
	Auditor's Certificate	Computa- tional difference	Un- discharged	discharged Initial Spares		as on COD
	1	2	3	4	5	6=1-2-3-4-5
I	16262.80	147.87	388.05	34.82	67.51	15624.54
II	2967.31	14.78	79.46	125.29	0.00	2747.78
III	1797.54	2.07	64.58	4.89	0.00	1726.00
IV	1799.23	1.71	53.02	3.62	0.00	1740.88
Total	22826.88	166.43	585.11	168.62	67.51	21839.20

Additional Capital Expenditure (ACE)

- 58. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:
 - "(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check
 - (i) Undischarged liabilities recognised to be payable at a future date;
 - (ii) Works deferred for execution
 - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
 - (v) Change in Law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."

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

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

60. The cut-off date as per Clause (13) of Regulation 3 of the 2014 Tariff Regulations for Asset-II is 31.3.2021 and that for Asset-I, Asset-III and Asset-IV is 31.3.2022. The Petitioner has claimed following additional capitalisation for instant assets for 2014-19 tariff period and submitted Auditor's Certificates in support of the same, as under:

(₹ in lakh)

Asset	ACE in 2018-19	Total ACE up to 31.3.2019
I	553.75	553.75
II	188.91	188.91
III	0.00	0.00
IV	0.00	0.00
Total	742.66	742.66

61. The Petitioner has submitted Form-7, wherein it has claimed ACE for 2018-19 under Regulation 14(1)(i) (Un-discharged liabilities) of the 2014 Tariff Regulations towards balance and retention payment within cut-off date. Accordingly, the allowed Additional Capital Expenditure is summarized below which is subject to true up:

(₹ in lakh)

					(* III lakii)
Particulars	Regulation	Asset-I	Asset-II	Asset-III	Asset-IV
		2018-19	2018-19	2018-19	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	553.75	188.91	0.00	0.00
Add: IDC discharged during the year after COD	14 (1)(i)	0.00	57.45	0.00	0.00
Add: Initial spares discharged during the year after COD	14 (1)(i)	22.56	0.00	0.00	0.00
Total		576.31	246.36	0.00	0.00

Capital cost for the tariff period 2014-19

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

(₹ in lakh)

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Capital Cost allowed as on COD	ACE allowed in 2018-19	Capital cost allowed as on 31.3.2019
I	16857.93	18667.49	15624.54	576.31	16200.85
II	2276.70	3822.94	2747.78	246.36	2994.14
III	1332.35	2175.23	1726.00	0.00	1726.00
IV	1332.35	2174.29	1740.88	0.00	1740.88
Total	21799.33	26839.95	21839.20	822.67	22661.87

Debt-Equity Ratio

- 63. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specify as follows:
 - "(1) For a project declared under commercial operation on or after 1.4.2014, the debt equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.
- Explanation -The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system."
- "(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."
- 64. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:-

	Capital Cost as on COD		Capital Cost as on 31.3.2019		
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
Asset-I					
Debt	10937.18	70.00	11340.60	70.00	
Equity	4687.36	30.00	4860.26	30.00	
Total	15624.54	100.00	16200.85	100.00	
Asset-II					
Debt	1923.45	70.00	2095.90	70.00	
Equity	824.33	30.00	898.24	30.00	
Total	2747.78	100.00	2994.14	100.00	
Asset-III					
Debt	1208.20	70.00	1208.20	70.00	
Equity	517.80	30.00	517.80	30.00	
Total	1726.00	100.00	1726.00	100.00	
Asset-IV					
Debt	1218.62	70.00	1218.62	70.00	
Equity	522.26	30.00	522.26	30.00	
Total	1740.88	100.00	1740.88	100.00	

Return on Equity (ROE)

- 65. Clauses (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014
- Tariff Regulations specify as under:
 - **"24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

- (i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:
- (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- (iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation



- (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
- (v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:
- (vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

"25. Tax on Return on Equity:

- (1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".
- (2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

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

- 66. The Petitioner has submitted that ROE has been calculated at the rate of 19.758% after grossing up ROE with MAT rate of 21.55% as per provisions of Regulations 24 and 25 of the 2014 Tariff Regulations and submitted Form-8. The Petitioner has further submitted that the grossed-up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.
- 67. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the

MAT rate of 21.549%, applicable during 2018-19 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25(3) of the 2014 Tariff Regulations.

68. Accordingly, ROE allowed is as follows:

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata	(Pro-rata	(Pro-rata	(Pro-rata
	57 days)	151 days)	8 days)	1 day)
Net Opening Equity	4687.36	824.33	517.80	522.26
Increase in Equity due to	172.89	73.91	0.00	0.00
addition during the year	172.09	73.91	0.00	0.00
Closing Equity	4860.26	898.24	517.80	522.26
Average Equity	4773.81	861.29	517.80	522.26
Return on Equity (Base Rate)	15.50	15 50	15 50	15.50
(%)	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	21.5488	21.5488	21.5488	21.5488
Applicable ROE Rate (%)	19.758	19.758	19.758	19.758
Return on Equity for the year	147.30	70.40	2.24	0.28

Interest on Loan (IOL)

- 69. Regulation 26 of the 2014 Tariff Regulations are provides as under:
 - "(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.
 - (3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of decapitalisation of such asset.
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."
- 70. The Petitioner has submitted that IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/adjusted over the tariff block 2014-19. We have calculated IOL on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.
- 71. We have considered the above submissions of the Petitioner. IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as follows:
 - (i) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition including additional information.
 - (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
 - (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.
 - 72. The details of IoL allowed for the instant transmission assets are as follows:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata	(Pro-rata	(Pro-rata	(Pro-rata
	57 days)	151 days)	8 days)	1 day)
Gross Normative Loan	10937.18	1923.45	1208.20	1218.62
Cumulative Repayment upto previous Year	0.00	0.00	0.00	0.00
Net Loan-Opening	10937.18	1923.45	1208.20	1218.62
Addition due to ACE	403.42	172.45	0.00	0.00

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata	(Pro-rata	(Pro-rata	(Pro-rata
	57 days)	151 days)	8 days)	1 day)
Repayment during the year	112.97	63.11	2.00	0.25
Net Loan-Closing	11227.63	2032.79	1206.20	1218.37
Average Loan	11082.41	1978.12	1207.20	1218.49
Weighted Average Rate of Interest on Loan (%)	7.2326	8.1621	7.8345	7.8226
Interest on Loan	125.17	66.79	2.07	0.26

Depreciation

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

"27. Depreciation:

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

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

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall 68 be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

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

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets."
- 74. Depreciation has been dealt with in line with Regulation 27 of 2014 Tariff Regulations. The instant assets were put under commercial operation during 2018-19. Accordingly, it will complete 12 years beyond the tariff period 2014-19. The weighted average life of the Asset-I works out as 27 years while that of Asset-II, Asset-III and Asset-IV works out as 25 years each. The Gross Block during 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2018-19 is as under:

(₹ in lakh)

				(III lakii)
Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata	(Pro-rata	(Pro-rata	(Pro-rata
	57 days)	151 days)	8 days)	1 day)
Opening Gross Block	15624.54	2747.78	1726.00	1740.88
Additional Capitalisation	576.31	246.36	0.00	0.00
Closing Gross Block	16200.85	2994.14	1726.00	1740.88
Average Gross Block	15912.70	2870.96	1726.00	1740.88
Freehold Land	1949.92	0.00	0.00	0.00
Weighted Average Rate of	4.5459	5.3140	5.2837	5.2837
Depreciation (WAROD)(%)	4.0400	3.3140	3.2037	5.2057
Balance useful life of the asset at the	27	25	25	25
beginning of the year				
Aggregated Depreciable Value	12566.50	2583.87	1553.40	1566.79
Combined Depreciation during the	112.97	63.11	2.00	0.25
Year				
Cumulative Depreciation at end of year	112.97	63.11	2.00	0.25

Operation and Maintenance Expenses (O&M Expenses)

75. The Petitioner has claimed O&M expenses for instant assets as per following details:

(₹ in lakh)

Asset	Particulars	2018-19
I		65.59
II	OPM Evnances	114.52
III	O&M Expenses	1.29
IV		0.16

- 76. The Petitioner in the instant petition has submitted that O&M expense rates for the tariff period 2014-19 had been arrived on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The Petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The Petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.
- 77. Norms for O&M expenditure for Transmission System have been specified under section 29 (4) of Tariff Regulation are as follows:

Element	2018-19
220 kV bay - (Rs. lakh/bay)	48.10
400 kV bay - (Rs. Lakh/bay)- Conventional	68.71
400 kV bay - (Rs. Lakh/bay)- GIS	58.73
Double Circuit (Two and three conductor) - (Rs. Lakh/KM)	0.806

78. We have considered the submission of Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The Petitioner has computed normative O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, the allowed O&M Expenses is given below:

(₹ in lakh)

Asset-I	Element	2018-19 (Pro-rata 57 days)
LILO of 400 kV S/C Subhasgram	4 nos. 220 kV line bays (GIS)	30.05
 Jeerat transmission line and 	1 no. 220 kV bay (GIS) for ICT	7.51
associated bays at Rajarhat, 1	1 no. 400 kV bay (GIS) for ICT	9.17
no. 400/220 kV 500 MVA ICT (1st) and associated bays along with 4 nos. 220 kV line bays at	2 nos. of 400 kV line bays (GIS) for LILO of Subhashgram-Jeerat at Rajarhat	18.34
Rajarhat GIS	LILO of 400 kV S/C Subhashgram- Jeerat at Rajarhat	0.52
Total O&M	Expenses Allowed	65.59

Asset-II	Element	2018-19 (Pro-rata 151 days)
2 nos. 400 kV 80 MVAR Switchable Line Reactors	2 no. of 400 kV bay for 80 MVAR SLR-I & SLR-II at Purnea	56.85
(charged as Bus Reactors) along with associated bays at 400 kV Purnea S/S	2 nos. of 400 kV line bays for 400 kV D/C Rajarhat-Purnea line at Purnea	56.85
Total O&M	Expenses Allowed	113.70

Asset-III	Element	2018-19 (Pro-rata 8 days)
125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS	1 no. of 400 kV bay for Bus Reactor-I bay (GIS) at Rajarhat	1.29
Total O&M	Expenses Allowed	1.29

Asset-IV	Element	2018-19 (Pro-rata 1 day)
125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	1 no. of 400 kV bay for Bus Reactor-II bay (GIS) at Rajarhat	0.16
Total O&M	Expenses Allowed	0.16

Interest on Working Capital (IWC)

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

"28. Interest on Working Capital

- (1) The working capital shall cover:
- (c) Hydro generating station including pumped storage hydroelectric generating station and transmission system including communication system:
- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

- (iii) Operation and maintenance expenses for one month"
- (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 72 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.
- "(5) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"
- 80. As per the 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:

a) Maintenance spares:

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

b) O & M expenses:

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

c) Receivables:

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

d) Rate of interest on working capital:

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

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

(₹ in lakh)

	,			(* **** ******************************
Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
	(Pro-rata	(Pro-rata	(Pro-rata	(Pro-rata 1
	57 days)	151 days)	8 days)	day)
Maintenance Spares	63.00	41.23	8.83	8.76
O&M Expenses	35.00	22.90	4.90	4.87
Receivables	493.28	130.46	59.31	59.64
Total	591.38	194.59	73.04	73.26
Rate of Interest (%)	12.20	12.20	12.20	12.20
Interest on working Capital	11.27	9.82	0.20	0.02

Annual Transmission charges



82. Accordingly, the annual transmission charges being allowed for the instant assets are as under:

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro-rata 57 days)	2018-19 (Pro-rata 151 days)	2018-19 (Pro-rata 8 days)	2018-19 (Pro-rata 1 day)
Depreciation	112.97	63.11	2.00	0.25
Interest on Loan	125.17	66.79	2.07	0.26
Return on Equity	147.30	70.40	2.24	0.28
Interest on Working Capital	11.27	9.82	0.20	0.02
O&M Expenses	65.59	113.70	1.29	0.16
Total	462.29	323.83	7.80	0.98

Filing fee and the publication expenses

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

License fee and RLDC Fees and Charges

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

Goods and Services Tax

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

Sharing of Transmission Charges

- 86. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of 2014 Tariff Regulations.
- 87. This order disposes of Petition No.462/TT/2020.

Sd/ (Arun Goyal) Member Sd/ (I. S. Jha) Member

ANNEXURE-1

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

									_		_
suc	2018-19	00.00	0.00	34.54	119.62	557.55	2.80	8.86	723.38	15912.70	4.5459%
er Regulatio	2017-18	-	-	•		-	-				-
iation as pe	2016-17	-	1		-	-	-				
Annual Depreciation as per Regulations	2015-16		ı				-			ı	-
An	2014-15	-		1		-	-				-
Rate of Depreciation as per	Regulations	0.00%	3.34%	3.34%	5.28%	5.28%	6.33%	15.00%	Total		(OD)
Admitted Capital Cost	as on 31.3.2019	1949.92	0.00	1159.89	2267.48	10715.17	49.27	59.12	576.31 16200.85	n lakh)	iation (WAR
Projected Additional Capitalisation	during tariff period 2014-19	00.00	0.00	251.50	3.73	310.91	10.06	0.10	576.31	Average Gross Block (₹ in lakh)	Weighted Average Rate of Depreciation (WAROD)
Admitted Capital Cost	as on 1.4.2014	1949.92	00.0	908.40	2263.75	10404.25	39.20	59.02	15624.54	Average G	ed Average I
Asset-I (2014-19)	Capital Expenditure	Land-Freehold	Land-Lease hold	Building, Civil Works & Colony	Transmission Line	Sub-station	PLCC	IT Equipment (Incl. Software)	Total		Weight

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

Asset-II (2014-19)	Admitted Capital Cost	Projected Additional Capitalisation	Admitted Capital Cost	Rate of Depreciation as per	An	Annual Depreciation as per Regulations	iation as pe	er Regulatio	sue
Capital Expenditure	as on 1.4.2014	during tariff period 2014-19	as on 31.3.2019	Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
Land-Freehold	00.00	00:00	00.00	0.00%		-	-	-	00.00
Land-Lease hold	0.00	0.00	0.00	3.34%	ı	ı	ı	-	00.00
Building, Civil Works & Colony	00:0	0.00	00:0	3.34%	•			-	0.00
Transmission Line	0.00	0.00	0.00	5.28%					00.00
Sub-station	2655.86	244.44	2900.30	5.28%	 -	-	_	-	146.68
PLCC	91.92	1.92	93.85	6.33%	-	-	-	-	5.88
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%					00.00
Total	2747.78	246.36	2994.14	Total			•	•	152.56
	Average G	Average Gross Block (₹ in lakh)	n lakh)			•	-	-	2870.96
Weight	ed Average	Weighted Average Rate of Depreciation (WAROD)	iation (WAF	(GO)					5.3140%

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

(2014-19)	Admitted Capital Cost	Projected Additional Capitalisation	Admitted Capital Cost	Rate of Depreciation as per	An	Annual Depreciation as per Regulations	iation as p€	r Regulatio	Su
Capital Expenditure	as on 1.4.2014	during tariff period 2014-19	as on 31.3.2019	Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
and-Freehold	0.00	00:00	00.00	%00.0			-	-	0.00
Land-Lease hold	0.00	0.00	0.00	3.34%			ı		0.00
Building, Civil Works & Colony	0.00	0.00	0.00	3.34%					0.00
Transmission Line	00.00	0.00	0.00	5.28%			1		0.00
Sub-station	1719.86	00:00	1719.86	5.28%				-	90.81
PLCC	6.14	00.00	6.14	6.33%		-	-	-	0.39
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%					0.00
Total	1726.00	0.00	1726.00	Total	•		•	•	91.20
	Average G	Average Gross Block (₹ in lakh)	n lakh)		-	-	-	-	1726.00
Weighted	Average	Weighted Average Rate of Depreciation (WAROD)	iation (WAR	(OD)	-	-	1	-	5.2837%

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

		_			_	_	_		_	_	_
Annual Depreciation as per Regulations	2018-19	00.00	0.00	0.00	0.00	91.59	0.39	0.00	91.98	1740.88	5.2837%
	2017-18	-				-	-	ı			1
	2016-17	-	ı				-	ı			1
	2015-16	1	ı		ı			ı			
	2014-15		-								•
Rate of Depreciation as per Regulations		0.00%	3.34%	3.34%	5.28%	5.28%	6.33%	15.00%	Total		(OD)
Admitted Capital Cost as on 31.3.2019		0.00	0.00	0.00	0.00	1734.70	6.19	0.00	1740.88	n lakh)	iation (WAR
Projected Additional Capitalisation during tariff period 2014-19		00.00	00:00	0.00	0.00	00:00	00.00	0.00	0.00	Average Gross Block (₹ in lakh)	Weighted Average Rate of Depreciation (WAROD)
Admitted Capital Cost as on 1.4.2014		0.00	0.00	0.00	00.00	1734.70	6.19	0.00	1740.88	Average G	ed Average
Asset-IV (2014-19)	Capital Expenditure	Land-Freehold	Land-Lease hold	Building, Civil Works & Colony	Transmission Line	Sub-station	PLCC	IT Equipment (Incl.	Total		Weight