#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 677/TT/2020

#### Coram:

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

Date of Order: 05.05.2022

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 determination and truing-up of the transmission tariff from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 02 nos. 400 kV GIS line bays alongwith 01 no. of 80 MVAR switchable line reactor (with 400 ohm NGR) along with associated bay at Kishanganj GIS Sub-station associated with 400 kV D/C (Quad) Kishanganj–Dharbhanga 400 kV D/C line (transmission line under TBCB) under "POWERGRID works associated with Transmission System Strengthening in Indian System for transfer of power from new HEPs in Bhutan" in Eastern Region.

#### And in the matter of:

Power Grid Corporation of India Limited,

"Saudamini", Plot No. 2, Sector 29, Gurgaon-122001, Haryana.

.....Petitioner

# Vs.

- Bihar State Power (Holding) Company Limited, (Formerly Bihar State Electricity Board-BSEB) Vidyut Bhawan, Bailey Road, Patna-800001.
- West Bengal State Electricity Distribution Company Limited, Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Calcutta-700 091.
- Grid Corporation of Orissa Limited, Shahid Nagar, Bhubaneswar-751 007.



4. Jharkhand State Electricity Board, In front of Main Secretariat, Doranda, Ranchi-834002. 5. Damodar Valley Corporation, DVC Tower, Maniktala, Civic Centre, VIP Road, Calcutta-700054. 6. Power Department, Government of Sikkim, Gangtok-737101. 7. Alipurduar Transmission Company Limited, Adani Corporation House, Shantigram Near Vaishno Devi Circle, Khodiya, Gandhinagar, Gujarat-382028. ....Respondent(s) For Petitioner Shri S.S. Raju, PGCIL : Shri D.K. Biswal, PGCIL Shri Ved Prakash Rastogi, PGCIL Shri Amit Yadav, PGCIL For Respondents Shri Sanjay Sen, Sr. Advocate, ATL 2 Shri Aniket Prasoon, Advocate, ATL Ms. Ruth Elwin, Advocate, ATL Shri Md. Aman Sheikh, Advocate, ATL

Shri Rishabh Bharadwaj, Advocate, ATL Shri Sunil Mittal, Advocate, ATL Shri Manish Kumar Choudhary, Advocate, BSPHCL Ms. Neha Mittal, ATL

#### ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of transmission tariff from the date of commercial operation (COD) to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of asset i.e. 2 numbers 400 kV GIS line bays along-with 01 number 80 MVAR Switchable



Line Reactor (with 400 ohm NGR) along with associated bay at Kishanganj GIS Substation associated with 400 kV Double Circuit (D/C) (Quad) Kishanganj–Dharbhanga 400 kV D/C line (line under TBCB) (hereinafter referred to as "the transmission asset") under "POWERGRID works associated with Transmission System Strengthening in Indian System for transfer of power from new HEPs in Bhutan" in Eastern Region (hereinafter referred to as "the transmission project").

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

*"1) Allow the Petitioner to approach Hon'ble Commission for claiming the transmission tariff along with truing up tariff for the period 2014-19 owing to merit of the instant special case.* 

2) Approve the Transmission Tariff –cum- Truing Up tariff for the tariff block 2014-19 block for the asset covered under this petition, as per para –8.2 above and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.2 above.

3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization projected to be incurred.

4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8.2 and 9.2 above for respective block.

5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.6 above.

8) 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.

9) 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.

10) 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.

11) 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.

12) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

13) Allow tariff as 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.

14) Allow the petitioner to bill Tariff from actual DOCO and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

15) Allow the prayer of petitioner in context of COD declaration of associated TBCB works.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

#### **Background**

- 3. The brief facts of the case are as follows:
  - (a) Investment Approval (IA) and expenditure sanction for the transmission

project was accorded by the Board of Directors of the Petitioner vide Memorandum

No. C/CP/PA 1617-03-0U-IA019 dated 20.3.2017 at an estimated cost of ₹11952.00

lakh, including IDC of ₹720.00 lakh based on October, 2016 price level.

(b) The scope of work covered under the transmission project is as follows:

Sub-station extension at Alipurduar:

• 02 numbers of 400 kV line bays at Alipurduar Sub-station for termination of Alipurduar – Siliguri 400 kV D/C (Quad) line (line under TBCB)

Sub-station extension at Siliguri:

• 02 nos 400 kV line bays at Siliguri Sub-station for termination of Alipurduar – Siliguri 400 kV D/C (Quad) line (line under TBCB)

Sub-station extension at Kishanganj:



• 02 numbers of 400 kV GIS line bays at Kishanganj Sub-station for termination of Kishanganj - Darbhanga 400 kV D/C (Quad) line (line under TBCB)

- 02 numbers of Switchable Line Reactor bay for 80 MVAR switchable line reactor (with 400 ohm NGR) on each circuit of Kishanganj Darbhanga 400 kV D/C (Quad) line at Kishanganj end.
- (c) The entire scope of work under the transmission project has not been

completed. The details of the assets covered under the transmission project are as

follows:

SI. No.	Name of Asset	Covered in Petition	
1.	02 numbers 400 kV GIS line bays alongwith 01 number 80 MVAR switchable line reactor (with 400 ohm NGR) along with associated bay at Kishanganj GIS Sub-station associated with 400 kV D/C (Quad) Kishanganj-Dharbhanga 400 kV D/C line (line under TBCB) Current Petition		
	The other end i.e. 02 numbers 400 kV GIS line bays alongwith 80 MVAR switchable line reactor (with 400 ohm NGR) alongwith associated bay on each circuit of <i>Kishanganj-Dharbhanga 400 kV D/C (Quad) line</i> at Darbhanga GIS Sub-station is being implemented through TBCB.		
	Balance scope:		
2.	01 number 80 MVAR switchable line reactor (with 400 ohm NGR) along with associated bay at Kishanganj GIS for one circuit for termination of TBCB line i.e. Kishanganj-Dharbhanga 400 kV D/C (Quad) line	To be filed subsequently as per 2019 Tariff	
	02 numbers 400 kV Line Bays at 400 kV Alipurduar Sub-station and 02 numbers 400 kV Line Bays at 400 kV Siliguri Sub-station for termination of TBCB line i.e., 400 kV D/C (Quad) Alipurduar – Siliguri line along with 02x240 MVAR Switchable Line Reactor	Regulations	

(d) The scope of works was deliberated and approved in the Standing Committee Meeting (SCM) held on 2.5.2014. The same was also deliberated in the meeting with constituents of Eastern Region in the 27<sup>th</sup> TCC of ERPC meeting held on 30<sup>th</sup> and 31<sup>st</sup> May, 2014. The scheme was further noted and agreed in the 33<sup>rd</sup> Empowered Committee Meeting held on 30.9.2014.

(e) The transmission asset was scheduled to be executed within 24 months from



the date of IA which was 10.3.2017, matching with the completion schedule of associated TBCB line. The completion date of associated TBCB line was 5.3.2019. Accordingly, the transmission project was scheduled to be declared under commercial operation by 5.3.2019.

(f) The details of scheduled date of commercial operation (SCOD), date of commercial operation (COD) and time over-run in respect of the transmission asset are as follows:

SCOD	COD	Time over-run
5.3.2019	14.3.2019	9 days

4. The Respondents are distribution licensees, power departments and transmission licensees who are procuring transmission services from the Petitioner, mainly beneficiaries of the Eastern Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Bihar State Power (Holding) Company Limited (BSPHCL), Respondent No. 1, has filed its reply vide affidavit dated 2.8.2021 and has raised issues of delay in declaration of COD, mismatch between COD of the transmission asset and TBCB line, grossing up of RoE, GST, floating rate of interest, filing fees and sharing of transmission charges. In response, the Petitioner has filed its rejoinder vide affidavit dated 11.8.2021. Further, Respondent No. 7 i.e. Alipurduar Transmission Company Ltd. (ATL) has also filed its reply vide affidavit dated 4.8.2021 and has raised the issue of delay in charging and execution of element 2. The Petitioner has not filed any rejoinder. The submissions of BSPHCL, ATL and the Petitioner have been discussed in the relevant portions of this order.



6. Hearing in this matter was held on 2.11.2021 through video conference and order was reserved. Having heard counsel for the parties and having perused the material on record, we proceed to dispose of the petition.

7. The Respondent, Kalptaru Power Transmission Limited (KPTL) submitted that KPTL is the successful bidder of Tariff Based Competitive Bidding (TBCB) line. However, the transmission line is executed by its Special Purpose Vehicle (SPV), i.e. Alipurdaur Transmission Limited (ATL). Hence, KPTL should be replaced with ATL as Respondent in the matter. Accordingly, ATL has been impleaded to the proceedings of the present matter as Respondent after procedural formalities.

8. It is observed that BSPHCL has been raising the issue of MAT rate and grossing up of RoE in various petitions despite clear findings of the Commission rejecting the contention of BSPHCL. The contentions of BSPHCL have been rejected by the Commission vide order dated 28.5.2021 in Petition No. 476/TT/2019. As BSPHCL has not challenged the findings of the same have attained finality. In view of this, the contention of BSPHCL pertaining to grossing up of RoE is rejected. The issues which are specific to the instant petition and not dealt by the Commission earlier are considered in the relevant paragraphs of this order.

9. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 28.8.2020 and 12.6.2021, reply filed by ATL vide affidavit dated 4.8.2021, additional affidavit of ATL dated 22.10.2021, reply of BSPHCL filed vide affidavit dated 2.8.2021 and the Petitioner's rejoinder affidavit dated 11.8.2021 to the reply filed by BSPHCL.

#### TRUING UP OF ANNUAL FIXED CHARGES OF 2014-19 TARIFF PERIOD

10. Details of the trued-up transmission charges claimed by the Petitioner in respect of



the transmission asset are as follows:

#### (₹ in lakh)

Particulars	2018-19 (Pro-rata for 18 days)
Depreciation	7.71
Interest on Loan	7.94
Return on Equity	8.07
Interest on working capital	0.93
O&M Expenses	8.70
Total	33.35

11. Details of the trued-up IWC claimed by the Petitioner in respect of the transmission asset are as follows:

	(₹ in lakh)
Particulars	2018-19 (Pro-rata for 18 days)
O&M Expenses	14.68
Maintenance Spares	26.43
Receivables	112.66
Total	153.77
Rate of Interest (%)	12.20
Interest on Working Capital	0.93

#### Date of Commercial Operation ("COD")

12. The Petitioner has claimed actual date of commercial operation in respect of transmission asset as 14.3.2019. The Petitioner has submitted that the transmission asset was envisaged to be executed along with the transmission line i.e. 400 kV D/C (Quad) Kishanganj (PG)-Darbhanga line which is being constructed by ATL through TBCB route. Scope of work covered under TBCB route has been deemed to be put under commercial operation w.e.f. 6.3.2019 by ATL. The transmission asset has been declared under commercial operation on 14.3.2019 after a gap of one week from the deemed COD of TBCB line. However, the power flow has started from day one (i.e. from 12.3.2019 which is the start date of trial operation).

13. The Petitioner has submitted that it has reservations about deemed declaration of the COD of the transmission line by ATL under its scope as on 6.3.2019. The Petitioner



has submitted that the PLCC and DTPC works under the scope of ATL were not completed even on 8.3.2019. The Petitioner has therefore requested the Commission to declare that the deemed COD declaration of the transmission line by ATL is wrong and contrary to the regulations and to give suitable directions in this regard.

14. ATL has made the following submissions in its reply:

a. The Petitioner cannot seek declaration of commercial operation of associated TBCB works as set out by the Petitioner in prayer No.15 of the present petition and in paragraph number 6 of the instant petition. The issue of extension of time of SCOD with reference to TBCB line is pending adjudication before the Commission in Petition No. 470/MP/2019.

b. Various correspondences were exchanged between the Petitioner and ATL which demonstrate that downstream system could not be put under commercial operation on account of non-completion of certain works by the Petitioner at Kishanganj Sub-station. The reasons for delay were beyond the control of ATL.

c. The e-mails demonstrate that DTPC and PLCC works were completed by ATL on 11.3.2019. However, the said works were not within the original scope of work of the TBCB licensee.

d. Letter dated 5.3.2019 written by ATL shows that it was ready for declaration of COD of element-2 of IPTC-Bhutan Project w.e.f. 6.3.2019. The Petitioner's e-mail dated 6.3.2019 shows that certain tests were pending and the same mail shows that the Petitioner's bays were also not ready. E-mail exchanged on 8.3.2019 shows that DTPC cabling in Kishanganj Sub-station was not complete. On the same day, through e-mail dated 8.3.2019, it was confirmed by ATL that PLCC erection was complete and request was made to the Petitioner to complete the jumpering at Kishanganj Sub-station for end to end testing. ATL through e-mail dated 8.3.2019



informed that it declared the readiness for charging of transmission line and substation bays and request was made to complete end to end work and cable termination of DTPC in CRP at Kishanganj Sub-station end of the Petitioner.

e. The scope of work shows that the Petitioner would provide 2 numbers of 400 kV line bays each at Alipurduar, Siliguri and Kishanganj (GIS) Sub-stations and 80 MVAr switchable line reactors with NGR on each circuit of Kishanganj-Darbhanga 400 kV D/C (quad) line at Kishanganj end.

f. Specific technical requirements for communication is given for Alipurduar (Powergrid)-Siliguri (Powergrid) 400 kV D/C line (2<sup>nd</sup>) with quad moose conductor and for Sub-station Extension at Darbhanga for 400 kV D/C (Quad) Line.

g. The Petitioner had not completed its scope of work including the switchable line reactors, cable termination etc. at Kishanganj Sub-station. Further, ATL's scope of work is limited to the extent mentioned in the TSA.

15. The Petitioner did not file any rejoinder to the reply of ATL.

16. We have considered the submissions of the Petitioner and ATL. In support of COD of the transmission asset, the Petitioner has submitted CEA Energisation Certificates dated 8.3.2019 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate dated 25.10.2019, self-declaration of COD letter and CMD certificate as required under the Grid Code. Taking into consideration CEA Energisation Certificate, RLDC Charging Certificate, self-declaration of COD letter and CMD Certificate, RLDC Charging Certificate, self-declaration of COD letter and CMD certificate, RLDC Charging Certificate, self-declaration of COD letter and CMD Certificate, RLDC Charging Certificate, self-declaration of COD letter and CMD Certificate, COD of transmission asset is approved as 14.3.2019.

17. The Petitioner has contended that declaration of deemed COD of the transmission line as 6.3.2019 by ATL is not in accordance with the regulations and has requested to



issue suitable directions in this regard. We note that ATL has filed Petition No.470/MP/2019, wherein one of the prayers made by ATL was for extension of SCOD of its transmission project as it was affected by *force majeure* events. The instant petition is for determination of tariff for the bays under the scope the Petitioner and therefore, we are not inclined to deal with the issue of COD of the transmission line under the scope of ATL in the instant order. The COD of the transmission lines under the scope of ATL shall be dealt in Petition No.470/MP/2019, which is pending adjudication before the Commission.

#### **Capital Cost**

18. The Petitioner in the present petition has submitted capital cost as on COD and estimated Additional Capital Expenditure (ACE) incurred or projected to be incurred in respect of the transmission asset as per Auditor's Certificate dated 20.3.2020 and the same is as follows:

			(₹ in lakh)
Approved	Capital Cost	ACE	Total Capital Cost
Apportioned Cost (FR)	as on COD	2018-19	as on 31.3 2019
7465.76	2484.52	557.12	3041.64

#### Cost Over-run

19. The Petitioner has claimed capital cost of ₹2484.52 lakh as on COD in respect of the transmission asset.

20. Total completion cost including ACE in respect of transmission asset is ₹3041.64 lakh and the approved apportioned FR cost is ₹7465.76 lakh. As compared with apportioned approved cost, the estimated completion cost is lower by ₹4424.12 lakh. As per Form-5 submitted by the Petitioner, the actual award rate towards switchgear (CT, PT, Circuit Breaker, Isolator etc.), PLCC, bus bars/ conductors/ insulators, structure for switchyard is on lower side.



21. We have considered the submissions of the Petitioner. The cost variation towards switchgear (CT, PT, Circuit Breaker, Isolator etc.), PLCC, bus bars/conductors/insulators, structure for switchyard is allowed. The completion cost in respect of the transmission asset is within the approved FR cost and, therefore, there is no cost over-run with regard to the transmission asset.

#### Time Over-run

22. As per the IA, the transmission assets were scheduled to be put under commercial operation within 24 months from the date of IA which is 10.3.2017 matching with the completion schedule of associated TBCB line. The completion date of associated TBCB line is 5.3.2019, against which the transmission asset was put into commercial operation on 14.3.2019 with time over-run of 9 days.

23. The Petitioner has submitted that it has completed its scope of works i.e. line bays and reactors at Kishanganj end prior to 5.3.2019 i.e. as per the completion schedule of IA. The Petitioner has prayed to condone the marginal time over-run of 9 days as additional time of 9 days was taken to comply with charging clearances/ approvals/ requirements/ compliances. The Petitioner has submitted that it received CEA clearance on 8.3.2019 and COD of the transmission asset was declared on 14.3.2019. The Petitioner has submitted that various documents and e-mails annexed with the petition clearly establish that time over-run was on account of TBCB licensee. The Petitioner has further submitted that CTUIL vide letter dated 19.2.2019 informed TBCB licensee about the connection details of the transmission system under the scope of works to be executed by TBCB licensee. Part of the correspondence at Annexure-III(b) under table 2(b) requires that 400 kV Kishanganj-Darbhanga D/C line for FODP (1 set) and approach cable (depends on site survey) will be provided by the TBCB licensee at both ends. The e-mail exchanged between the parties on 8.3.2019 shows that TBCB licensee had not completed DTPC cabling in Kishanganj



Sub-station. E-mail sent on 11.3.2019 by the TBCB licensee shows that end to end testing of DTPC was done and that PLCC and DTPC were ready. This email, thus, shows that TBCB licensee was not ready on 5.3.2019 and that the work under its scope was completed only on 11.3.2019 and, thereafter, the asset was put under commercial operation on 14.3.2019.

24. In response, ATL vide affidavit dated 22.10.2021 has made the following submissions:

(a) PGCIL has submitted that it has completed its scope of work i.e. line bays and reactors at Kishanganj end prior to 5.3.2019 and applied to CEA for clearance on 1.3.2019 and approval of CEA for charging the assets, i.e. 8 Numbers 400 kV GIS extension bays (Bay No. 429, Bay No. 432, Bay No. 431, Bay No. 430, Bay No. 433, Bay No. 429R and Bay No. 432R and 400 kV MVAR line reactor for Dharbhanga Line 1 at Power Grid Kishanganj Sub-station) was received on 8.3.2019. After commencement of trial operation on 12.3.2019, the COD of the transmission asset was declared on 14.3.2019. The Petitioner's claim regarding readiness of assets at Kishanganj end before 5.3.2019 is erroneous and misconceived.

(b) Obligations of ATL to undertake the completion of necessary assets/ components/equipment, requirements related thereto and the manner in which such completion is to be done, are clearly articulated in the TSA and the same cannot be stretched beyond what has been specifically articulated in the TSA.

(c) Schedule 2 of the TSA clearly provides the scope of work which is as follows:

#### "Schedule 2 Project Description and Scope of Project

1.0 Project Scope:(...)Table 1: Transmission System Strengthening in Indian System for transfer of power from



#### new HEPs in Bhutan

Sr.	Scheme/ Transmission Works	Conductor	Completi
No		Specifications/	on Target
		Configuration	on ranget
	Transmission System Strengthening in I	ndian System for transfe	er of nower
	from new HEPs in Bhutan		
	Transmission Lines:		
1.	Alipur (POWERGRID) – Siliguri	Quad Moose	38
	(POWERGRID) 400 kV D/C line (2 <sup>nd</sup> )	ACSR or	months
	with quad moose conductor	equivalent AAAC	
		Conductor	
2.	Kishanganj (POWERGRID) –	Quad Moose	
	Darbhanga (DMTCL#) 400 kV D/C	ACSR or	
	with quad moose conductor	equivalent AAAC	
	Sub-station Extn :	Conductor	
	<ul> <li>2 nos. 400 kV line bays at</li> </ul>		
	Darbhanga 400 kV D/C (quad) line		
	80 MVAr Switchable Line		
	Reactors (with 400 ohm NGR) in		
	each circuit at Darbhanga end of		
	Kishanganj – Darbhanga 400 kV D/C		
	(quad) line		
	DMTCL – Darbhanga-Motihari		
	Transmission Company Limited.		

Note

• The transmission lines shall have to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well as AAAC.

• CTU (POWERGRID) would provide 2 nos. 400 kV line bays each at Alipurduar, Siliguri and Kishanganj (GIS) Sub-stations.

• CTU (POWERGRID) would provide 80 MVAr switchable line reactors with NGR on each circuit of Kishanganj - Darbhanga 400 kV D/C (quad) line at Kishanganj end.

• Darbhanga-Motihari Transmission Company Limited (DMTCL, SPV for ERSS-VI scheme) would provide space for 2 nos. 400 kV line bays at Darbhanga Sub-station for termination of Kishanganj - Darbhanga 400 kV Die (quad) line.

• Above route lengths are tentative, actual lengths may be determined by route survey."

#### "SPECIFIC TECHNICAL REQUIREMENTS FOR COMMUNICATION

In order to meet the requirement for grid management and operation of sub-stations, Transmission Service Provider (TSP) shall conform to the following requirements:

For Kishanganj (POWERGRID)-Darbhanga (DMTCL#) 400 kV D/C line with quad moose conductor:

(i) On 400 kV Kishanganj-Darbhanga D/C (Quad Moose) transmission line at Darbhanga S/S, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of fine for grid management and sub-station operation purpose by CTU. The installation of OPGW shall be done up to gantry of 400 kV Darbhanga Sub-station and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.



(ii) All these fibres of the OPGW shall be utilized for grid management purpose. The maintenance of the OPGW shall be the responsibility of TSP."

I. SUB-STATION EXTENSION AT DARBHANGA FOR 400 kV DIC (QUAD) LINE

*i.* TSP shall provide FODP and Approach Cable (24F) at Darbhanga, which shall be connected with OPGW fibres to be installed on Kishanganj (POWERGRID)-Darbhanga line. TSP (Transmission Service Provider) shall also provide necessary Optical interfaces and/or new STM-16 SDH equipment (as required) at Darbhanga to meet the Fibre Optic communication connectivity of the station.

*ii.* TSP shall install required no. of Phaser Measurement Units (PMUs) at the Darbhanga substation for all the bays (line/feeders) of the substation and shall support latest IEEE C-37.118 protocols. These PMUs shall be integrated with the PDC (Phaser Data Concentrator) located at ERLDC (Eastern Region Load Dispatch Center).

*iii.* TSP shall integrate with existing RTU/SAS of Darbhanga Substation or install new RTU/SAS with necessary interfaces which shall be integrated with ERLDC SCADA System on IEC 60870-5-101/104 protocol.

*iv.* The maintenance of all the communication equipment, PMUs, RTU/SAS & repeater stations shall be the responsibility of TSP."

(d) The scope of work of ATL *vis-a-vis* Element 2 is very limited insofar as Kishanganj Sub-station is concerned i.e. the scope of work for ATL was to provide OPGW cables till the joint box. The detailing of scope of works for ATL includes certain additional aspects at Darbhanga Sub-station end. However, insofar as Kishanganj Sub-station is concerned, the scope of work is limited to terminating the OPGW cables to joint box.

(e) PGCIL's scope of work has also been clearly elaborated in Schedule 2 of the TSA wherein it has been, *inter alia*, provided that PGCIL will provide 2 numbers 400 kV line bays at Kishanganj Sub-station and 80 MVAr switchable line reactors with NGR on each circuit of Kishanganj-Darbhanga Line at Kishanganj end.

(f) The works undertaken till the joint box at Kishanganj Sub-station are within the scope of work of ATL and the works beyond the joint box at Kishanganj Substation end are under the scope of PGCIL and the same also includes components of works related to Digital Tele-Protection Coupler ("DTPC") and Power Line Carrier Communication ("PLCC"). Therefore, PGCIL's averments that delay in energization of Element 2 is attributable to ATL due to delay in implementation of certain



components of work associated with DTPC and PLCC at Kishanganj Sub-station

end is totally wrong and misplaced:

"6. .... Mis-match of DOCO It is submitted that the Petitioner has certain reservations regarding declaration of deemed DOCO (06.03.2019) by KPTL.

• PLCC/DTPC works under the scope of M/s KPTL was not ready

As on 08.03.2013 i.e., after deemed COD by M/s KPTL, there were balance works associated with transmission line which include:

> DTPC cabling & its subsequent end to end testing

Off line Fault Locator Test which ensures healthiness of line The line could be charged only after completion of above mentioned balance works. Thus, the deemed COD declaration by M/s KPTL w.e.f. 06.03.2019, without completion of their scope of works is ambiguous. ...."

(g) The aforesaid components related to DTPC and PLCC at Kishanganj Substation are beyond the Joint Box and, therefore, execution of works related to the same was/is not an obligation of ATL. ATL has implemented the same gratuitously, without having any legal liability to undertake the same in terms of Clause 1.0 of Schedule 2 of the TSA read with Technical Specifications provided in Clause 1.2 of Schedule 2 of the TSA. However, in no way, can the liability of any delay be imposed on ATL when it is clear that the works related to DTPC and PLCC were not the obligation of ATL.

(h) The contents of approval of charging received by the Petitioner on 8.3.2019 from CEA clearly the assets covered in the Petitioner's scope at Kishanganj Substation. These assets include 400 kV GIS extension bays (Bay No. 429, Bay No. 432, Bay No. 431, Bay No. 430, Bay No. 433, Bay No. 429R and Bay No. 432R) and 400 kV MVAR line reactor for Dharbhanga Line 1 at Power Grid Kishanganj Substation. In contrast, the approval for charging received by ATL does not set out details of assets/equipment etc. in the context of Kishanganj Sub-station. There are two approvals received by ATL from CEA on 21.2.2019 i.e. the first one refers to the



energization of new 400 kV Darbhanga (DMTCL)-Kishanganj (PGCIL) D/C transmission line (209 km) of Kalpataru Power Limited, the second approval refers to energization of new 400 kV GIS extension bays (Bay Nos. 412, 413, 414) and 400 kV, 80 MVAR Shunt Reactors (as per application) at DMTCL Darbhanga Substation.

(i) From the review of approvals received from CEA, it is apparent that the scope of works for ATL was fairly limited insofar as Kishanganj Sub-station is concerned. This reinforces ATL's submission that it was not responsible for undertaking works beyond the Joint Box at Kishanganj Sub-station. Therefore, ATL could not be held responsible for any delay in completion of DTPC and PLCC works at Kishanganj Sub-station end as it was not at all the obligation of ATL.

(j) The FTC related forms and formats are for the components at Darbhanga Sub-station and not with respect to components at Kishanganj Sub-station. This show that it was not ATL's obligation to complete any works at Kishanganj Substation end other than terminating OPGW cables in the Joint Box. If ATL was responsible to complete significant components at Kishanganj Sub-station, then it would not have been allowed to do so even without making FTC related applications or seeking other relevant approvals with respect to such components from CEA. This aspect needs to be seen in the context of the charging clearances given by CEA to ATL and PGCIL respectively.

(k) While PGCIL has been alleging that ATL had failed to complete its scope of works in terms of the TSA and ought not to have declared deemed COD w.e.f. 6.3.2019 as it was still required to complete pending works related to DTPC and PLCC. It is significant to highlight here that PGCIL itself has failed to complete its scope of works which is an admitted position by it. As per schedule 2 of the TSA as mentioned above, CTU (POWERGRID) was required to provide 80 MVAr switchable



line reactors with NGR on each circuit of Kishanganj-Darbhanga 400 kV D/C (quad) line at Kishanganj end.

(I) The Switchable Line Reactors (SLR) are required to be installed for each circuit of any transmission line of more than 200 km to control voltage so that there is no tripping. Accordingly, Schedule 2 of the TSA stipulated the installation of SLR on each circuit. However, the Petitioner had only set up a single 80 MVAr switchable line reactors/SLR with NGR for one circuit (being Circuit-I) of 400 kV Darbhanga (DMTCL)-Kishanganj (PGCIL) D/C transmission line/ Element 2.

(m) In Petition No. 113/TT/2021, the Petitioner has submitted that it had put the 1x80 MVAR Switchable Line Reactor (SLR with 400-ohm NGR) along-with associate bays at Kishanganj GIS for Circuit-II of Kishanganj- Darbhanga line into COD on 22.6.2020 against its scheduled completion on 5.3.2019 (i.e. after delay of 109 days), wherein PGCIL submitted that the said time over-run was due to unsatisfactory mobilization by the contractor(s) of PGCIL at Kishanganj Sub-station.

(n) The Petitioner could not have energised the said 400 kV Darbhanga (DMTCL)-Kishanganj (PGCIL) D/C line which is of 209 km without installing SLR on each circuit. However, PGCIL bypassed the said requirement at Kishanganj Substation end with respect to Circuit-II and only installed one SLR for Circuit I.

(o) The work under the Petitioner's scope viz. Element 2 was not completed on time and even on 11.3.2019 when Circuit II was charged, the entire scope of work associated with Element 2 was not completed by the Petitioner. Despite this, the Petitioner has been claiming that it was ready and had completed all the works within its scope on 5.3.2019. Thus, the Petitioner's submission regarding its readiness in all aspects may be rejected.

(p) The Petitioner for the purpose of highlighting that it was ready with its scope of works at Kishanganj Sub-station is primarily relying on the approval of charging

received by it from CEA as late as on 8.3.2019. By this logic, ATL had received the said charging approvals from CEA on 21.2.2019 and, therefore, it ought to be considered that ATL was ready prior to the Petitioner insofar as its scope of works under the TSA is concerned.

(q) Further, Eastern Regional Load Despatch Centre ("ERLDC") has highlighted pendency for provision of requisite data from PGCIL with respect to First Time Charging of Kishanganj Sub-station. Moreover, e-mail dated 8.3.2019 issued by ERLDC reads as follows:

"Sir,

In connection to first time charging of 400 kV Darbhanga - Kisenganj - D/C, following documents are still pending:

1. CTU charging instruction

2. SCADA data availability from Kisenganj.

3. Dummy meter data at Kisenganj End.

4. B2 & B5 format from Kisenganj side.

Concerned agencies are requested to submit above before charging of 400 kV Darbhanga - Kisenganj - D/C."

(r) The e-mail exchanged between ERLDC and RTAMC of the Petitioner shows that even on 11.3.2019, Circuit-I of Kishanganj-Darbhanga Line was not ready for charging due to incomplete work at Kishanganj end and as a result, ERLDC on 11.3.2019 could give charging instruction for Circuit-II of 400 kV Darbhanga (DMTCL)-Kishanganj (PGCIL) D/C transmission line and not for Circuit-I of the said line.

(s) The Petitioner has been projecting that the entire delay has taken place on account of ATL not completing its scope of works related to DTPC and PLCC at the Kishanganj Sub-station end. If this were the position, then pursuant to completion of such works by ATL on 10.3.2019 (which was conveyed to the Petitioner by it on 11.3.2019 at 10.22 am), there should have been no delay in charging of Circuit-I of Element 2. However, it is apparent that the same was delayed despite ATL having

completed DTPC and PLCC works on gratuitous basis. Therefore, it is clear that the Petitioner was not ready before 5.3.2019, rather, even on 11.3.2019, it was not ready with respect to Circuit-I due to which the same was charged on 12.3.2019.

(t) Further, PGCIL itself is claiming transmission charges from 14.3.2019 and not from 8.3.2019.

25. The Petitioner has not filed rejoinder to the reply filed by ATL.

26. BSPHCL has submitted that the Petitioner has not given cogent and sufficient reasons for condonation of delay. BSPHCL has further submitted that despite approval being granted by CEA, the trial run operation was done on 12.3.2019 and no explanation has been offered for this delay. The CMD certificate given by the Petitioner is undated and no inference can be drawn as to what date it was issued. BSPHCL has objected to the prayer of condonation of delay of nine days.

27. In response, the Petitioner has reiterated its submissions as mentioned above in paragraph 23.

28. We have considered the submissions of the Petitioner, ATL and BSPHCL and have perused the record.

29. As per the IA dated 10.3.2017 (conveyed vide letter dated, 20.3.2017), the transmission assets were scheduled to be put under commercial operation within 24 months matching with respective TBCB lines, i.e. 5.3.2019, for line bays associated with Alipurduar-Siliguri 400 kV D/C (quad) line, and line bays associated with Kishanganj-Darbhanga 400 kV D/C (quad) line. There is a time over-run of nine days in declaration of COD of the transmission asset as against the scheduled COD of 5.3.2019 as per IA. The Petitioner's case is that it had completed its scope of work i.e. line bays and reactors at



Kishanganj Sub-station prior to 5.3.3029. The Petitioner has also submitted that it applied to CEA for clearance on 1.3.2019, approval of charging was received by it on 8.3.2019, trial operation commenced on 12.3.2019 and finally transmission asset was declared under commercial operation on 14.3.2019.

30. Per contra, ATL has contended that it declared deemed COD of 400 kV D/C (Quad) Kishanganj-Dharbhanga 400 kV D/C line along with associated bays at Dharbhanga w.e.f. 6.3.2019. ATL has refuted the contention of the Petitioner that deemed COD of the asset on 6.3.2019 under the scope of work of ATL was without completion of PLCC and DTPC works. ATL has contended that as per schedule 2 of the TSA, the scope of work of ATL vis-à-vis Element 2 is limited insofar as Kishanganj Sub-station is concerned. In other words, the scope of work of ATL was to provide OPGW cables till the joint box. ATL has further contended that the Petitioner's scope of work has also been defined in Schedule 2 of the TSA which requires it to provide 2 numbers of 400 kV line bays at Kishangaj Substation and 80 MVAR switchable line reactors with NGR on each circuit of Kishanganj end. ATL has emphasized that the scope of work beyond joint box at Kishanganj Sub-station is under the scope of the Petitioner which also includes components of works related to DTPC and PLCC and as such contention of the Petitioner is incorrect and misplaced. ATL has contended that it was not legally bound to execute the works of DTPC and PLCC at Kishanganj Sub-station beyond the joint box and ATL executed works of DTPC and PLCC at Kishanganj Sub-station beyond joint box gratuitously as the same has not been defined anywhere in Clause 1.0 of Schedule 2 of the TSA read with Technical Specification provided in Clause 1.2 of Schedule 2 of TSA. ATL has further contended that scope of work has to flow from the TSA and liability of a TBCB licensee has to be restricted to TSA.

31. The Petitioner has not filed rejoinder to the reply of ATL.



32. ATL in its reply has raised the issue that works of DTPC and PLCC at Kishanganj Sub-station were under the scope of work of the Petitioner and ATL did the same gratuitously. ATL has contended that it was not legally bound to do the works of DTPC and PLCC at Kishanganj Sub-station. We observe that the Petitioner vide letter dated 19.2.2019 had conveyed the connection details of transmission system under ATL to the Inter-State Transmission Grid and had requested to sign the "Connection Agreement" with ATL. As per Annexure-III(b) to the said letter, ATL is required to provide OPGW, Approach Cable & FODP. The relevant portion of the Annexure-III(b) is extracted hereunder:

SI. No Name of Equipment N	os. Ratings
2(b) OPGW, Approach Two Cable and FODP FOL appr Cab. requ per s surv	set of Applicant to provide: P and <b>1. For 400 kV Alipurduar-</b> bach Siliguri D/C line Pred as FODP and Approach cable at both ends shall be provided by POWERGRID. Therefore, these are not in scope of M/S ATL. <b>2. For 400 kV Kishanganj-</b> Darbhanga D/C line FODP (1 set) and Approach cable (Depends on site survey) shall be provided by applicant at both ends.

33. The Connection Agreement was signed between the Petitioner and ATL on

27.2.2019, which provides as follows:

"1.2 The following documents and their schedules which have been initiated by the parties and annexed herewith shall be deemed to form an integral part of this Agreement in the order of precedence listed below:

(a) Additional information for signing Connection Agreement (details submitted by ATL as per format CON-4)

(b) Connection Offer letter (Issued to ATL by CTU vide letter dated 19.2.2019)

(c) This Agreement"

34. From the above, it is clear that DTPC and PLCC at Kishanganj Sub-station are

under the scope of ATL.



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35. ATL has filed Petition No.470/MP/2019, wherein one of the prayers made by ATL was for extension of SCOD of its transmission project as it was affected by *force majeure* events and it is pending adjudication before the Commission. The issues with respect to DTPC and PLCC at Kishanganj Sub-station will be dealt with in Petition No.470/MP/2019.

36. We observe that the Petitioner applied for CEA energization of the transmission asset on 1.3.2019 and the SCOD was 5.3.2019. However, CEA energization certificate was issued on 8.3.2019. The DTPC and PLCC works were completed by ATL on 11.3.2019 and thereafter transmission asset was put under commercial operation on 14.3.2019 with a time over-run of 9 days. It is observed that there was a time over-run of 3 days from SCOD till the issue of energization certificate on 8.3.2019. The line could not be energized as DTPC and PLCC works were completed only on 11.3.2019 and 2 days were taken for charging of the bays. As we have observed in paragraph 35 above, extension of SCOD and COD of the transmission line of ATL will be decided in the Petition No.470/MP/2019. Therefore, we are not inclined to take any decision on the time over-run of the transmission assets of the Petitioner at this stage in the present petition. The same will be decided at the time of truing up of the tariff of the 2019-24 tariff period, considering the decisions in Petition No.470/MP/2019 after its disposal.

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

37. The Petitioner has claimed IDC in respect of the transmission asset and has submitted Auditor's Certificates dated 20.3.2020 in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.

38. The allowable IDC has been worked out considering the information submitted by the Petitioner in respect of the transmission asset separately on cash basis. Loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheet have been



considered for the purpose of IDC calculation on cash basis and on accrued basis. Undischarged IDC as on COD has been considered as ACE during the year in which it has been discharged. Further, as stated in paragraph 36 above, IDC for the period of time over-run from 5.3.2019 to 14.3.2019 is not allowed in this order and the same will be considered at the time of truing up of the tariff of the 2019-24 tariff period.

39. Accordingly, based on the information furnished by the Petitioner, IDC considered in respect of the transmission asset is as follows:

					(₹	in lakh)	
IDC as per Auditor's Certificate	IDC Admissible	IDC Discharged as on COD	IDC Disallowed due to time	C IDC IDC owed Undischarged time as on COD		Discharge Puring	
Α	В	С	D	E=(B-C)	2018-19	2019-20	
17.33	15.28	14.37	2.05	0.91	-	0.91	

40. The Petitioner has claimed IEDC of ₹42.18 lakh for the transmission asset and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission asset.

41. IEDC amounting to ₹0.52 lakh has been disallowed due to time over-run in respect of transmission asset in the instant order. Accordingly, IEDC of ₹41.66 lakh is allowed in respect of the transmission asset. Further, as stated in paragraph 36 above, IEDC for the period of time over-run from 5.3.2019 to 14.3.2019 is not allowed in this order and the same will be considered at the time of truing up of the tariff of the 2019-24 tariff period.

#### Initial Spares

42. Initial Spares are provided in Regulation 13(d) of the 2014 Tariff Regulations subject to the following ceiling norms:

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



43. The Petitioner has claimed following Initial Spares in respect of the transmission asset:

					(₹ in lakh)
Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling (%) (C)	Initial Spares Worked Out D = [(A-B) *C/(100-C)]	Excess Initial Spares
Sub- station (GIS)	3998.96	141.96	5.00	203.00	-

44. We have considered the submission of the Petitioner. The Initial Spares claimed by the Petitioner towards GIS Sub-station in case of the transmission asset is within ceiling as per under Regulation 13(d) of the 2014 Tariff Regulations. It is observed that the Petitioner has not submitted details with regard to discharge of Initial Spares. Therefore, it is assumed that entire spares are discharged on as on COD. The Petitioner is directed to clarify the discharge of Initial Spares at the time of truing-up of 2019-24 period.

45. Accordingly, the details of the Initial Spares allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

					(₹ in lakh)
Plant & Machinery cost considered as on cut-off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares as on COD
3998.96	141.96	5.00	203.00	141.96	141.96

# Capital Cost allowed as on COD

46. Accordingly, capital cost allowed as on COD in respect of the transmission asset is as follows:

					(₹ in lakh)
Canital Cost as	Less: IDC as o	on COD due to	Less:	Less:	Capital Cost as
on COD as per Auditor's Certificate	IDC Disallowed due to time over-run	Un-discharged IDC	Disallowed IEDC due to time over-run	Excess Initial Spares disallowed	on COD (on cash basis)
2484.52	2.05	0.91	0.52	0.00	2481.05



# Additional Capital Expenditure (ACE)

47. The Petitioner has claimed ACE of ₹557.12 lakh in year 2018-19 in respect of and transmission asset has submitted Auditor's Certificate dated 20.3.2020 in support of the same. The Petitioner has submitted that ACE in 2014-19 has been claimed under Regulations 14(1)(i) of the 2014 Tariff Regulations and the same is within the cut-off date.

48. We have considered the submissions of Petitioner. The un-discharged IDC as on COD has been allowed as ACE during the year of its discharge. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations which pertain to balance and retention payment. Accordingly, ACE allowed in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)

	(< 111 Iakii)
Particulars	ACE Allowed
Falticulars	2018-19
Balance & Retention Payment for liabilities	557.12
Work deferred for execution	-
IDC Discharged after COD	-

49. The capital cost allowed as on 31.3.2019 after inclusion of ACE in respect of the transmission asset is as follows:

			(₹ in lakh)
Particulars	Capital cost as on COD on cash basis	2018-19	Total capital cost Including ACE as on 31.3.2019
Claimed by the Petitioner in the instant petition	2484.52	557.12	3041.64
Allowed after truing up in this order	2481.05	557.12	3038.17

#### **Debt-Equity Ratio**

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

31.3.2019 are as follows:



Particulars	Amount as on COD (₹ in lakh)	(In %)	Amount as on 31.3.2019 (₹ in lakh)	(In %)
Debt	1736.73	70.00	2126.72	70.00
Equity	744.31	30.00	911.45	30.00
Total	2481.05	100.00	3038.17	100.00

# **Depreciation**

51. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on COD and approved ACE during 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given at Annexure-I. WAROD has been worked out after taking into account depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 tariff period is as follows:

		(₹ in lakh)
	Particulars	2018-19
		(Pro-rata for 18 days)
	Depreciation	
А	Opening Gross Block	2481.04
В	ACE	557.12
С	Closing Gross Block (A+B)	3038.16
D	Average Gross Block [(A+C)/2]	2759.60
Е	Average Gross Block (90% depreciable assets)	2659.85
F	Average Gross Block (100% depreciable assets)	99.76
G	Depreciable value (excluding IT equipment and software) (E*90%)	2393.86
Н	Depreciable value of IT equipment and software	89.78
1	Total Depreciable Value (G+H)	2483.64
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.31
Κ	Elapsed useful life at the beginning of the year (Year)	0.00
L	Balance useful life at the beginning of the year (Year)	24.00
М	Depreciation during the year (D*J)	7.23
Ν	Aggregate Cumulative Depreciation at the end of the year	7.23
0	Remaining Aggregate Depreciable Value at the end of the year(I-N)	2476.41

52. The details of the depreciation claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:



	(₹ in lakh)	
Particulars	2018-19	
	(Pro-rata for 18 days)	
Claimed by the Petitioner in the instant petition	7.71	
Approved after true-up in this order	7.23	

#### Interest on Loan (IoL)

53. The Petitioner has claimed the Weighted Average Rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed in respect of the transmission asset are as follows:

		(₹ in lakh)
	Particulars	2018-19 (Pro_rata for 18 days)
<u> </u>		(FIO-TALATOT TO UAYS)
А	Gross Normative Loan	1736.73
В	Cumulative Repayments up to Previous Year	0.00
С	Net Loan-Opening (A-B)	1736.73
D	Addition due to Additional Capitalization	389.98
Е	Repayment during the year	7.23
F	Net Loan-Closing (C+D-E)	2119.48
G	Average Loan [(A+F)/2]	1928.11
Н	Weighted Average Rate of Interest on Loan (in %)	8.350
Ι	Interest on Loan (GxH)	7.94

54. BSPHCL has submitted that the 2014 Tariff Regulations do not permit the Petitioner to claim floating rate of interest.

55. In response, the Petitioner has submitted that for 2019-24 tariff period IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019 for loans. The Petitioner has further submitted that change in interest rate due to floating rate of interest applicable, if any, for the transmission project needs to be claimed/adjusted over the tariff period of 5 years directly from/with the beneficiaries.

56. We have considered the submissions of the Petitioner and BSPHCL. The details of IoL in respect of the transmission asset claimed by the Petitioner in the instant petition and trued up in this order are as follows:



	(₹ in lakh)
Particulars	2018-19 (Pro-rata for 18 days)
Claimed by the Petitioner in the instant petition	7.94
Approved after true-up in this order	7.94

# Return on Equity (RoE)

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

Year	Claimed effective tax (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

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

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

59. The MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations are considered in the instant case which are as follows:



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

60. Accordingly, RoE allowed in respect of the transmission asset is as follows:

		(₹ in lakh)
	Particulars	2018-19
		(Pro-rata for 18 days)
А	Opening Equity	744.31
В	Additions	167.14
С	Closing Equity (A-B)	911.45
D	Average Equity [(A+B)/2]	827.88
Е	Return on Equity (Base Rate) (in %)	15.500
F	MAT Rate for respective year (in %)	21.549
G	Rate of Return on Equity	19.758
Н	Return on Equity (DxG)	8.07

61. The details of RoE claimed in respect of the transmission asset by the Petitioner in

the instant petition and trued up in the instant order are as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata for 18 days)
Claimed by the Petitioner in the instant petition	8.07
Approved after true-up in this order	8.07

# **Operation & Maintenance Expenses (O&M Expenses)**

62. The details of the O&M Expenses claimed by the Petitioner in respect of the transmission asset and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

_		₹in lakh)
SI. No.	400 kV GIS Sub-station bay	
1	Kisanganj: Dharbhanga-I Bay	
2	Kisanganj: Dharbhanga-II Bay	
3	Kisanganj: Dharbhanga-I_80 MVAR SLR-I	
	O&M Expenses	



SI. No.	400 kV GIS Sub-station bay							
2014-15 2015-16 2016-17 2017-18 2018-19								
Sub-station	Sub-station							
400 kV GIS								
Number of bay	Number of bays					3		
Total O&M Ex	Total O&M Expense (₹ in lakh) 8.69							

63. Regulation 29(3) of the 2014 Tariff Regulations specifies norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission asset are as follows:

Element	UoM	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
400 kV GIS Sub-station	₹ lakh/bay	51.54	53.25	55.02	56.84	58.73

64. We have considered the submissions of the Petitioner. The O&M Expenses approved in respect of transmission asset under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

	(₹ in lakh)
Particulars	2018-19 (Pro-rata for 18 days)
3 Numbers of 400 kV GIS Sub-station bays at Kisanganj Substation	8.69
Total	8.69

65. The details of O&M Expenses in respect of the transmission asset claimed by the

Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order

are as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata for 18 days)
Claimed by the Petitioner in the instant petition	8.69
Approved after true-up in this order	8.69

# Interest on Working Capital (IWC)

66. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff

Regulations. The IWC is worked out as follows:



# i. Working Capital for Maintenance Spares:

Working Capital for Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

# ii. Working Capital for O & M Expenses:

Working Capital for O&M Expenses have been worked out as one month of the allowed O&M Expenses.

# iii. Working Capital for Receivables:

Working Capital for receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

# iv. Rate of Interest on Working Capital:

Rate of interest on working capital is considered on normative basis in accordance

with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

# 67. The trued up IWC allowed in respect of the transmission asset is as follows:

		(₹ in lakh)
	Particulars	2018-19
		(Pro-rata for 18 days)
А	Working Capital for O&M Expenses (1 month of O&M Expenses)	14.68
В	Working Capital for Maintenance Spares @15% of O&M Expenses	26.43
С	Working Capital for Receivables ( equivalent to 2 months of annual fixed cost)	110.99
D	Total Working Capital (A+B+C)	152.10
Е	Rate of Interest (in %)	12.20
F	Interest on Working Capital (DxE)	0.92

68. The details of IWC claimed in respect of the transmission asset by the Petitioner and trued up IWC allowed in the instant order are as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata for 18 days)
Claimed by the Petitioner in the instant petition	0.93
Approved after true-up in this order	0.92



# Approved Annual Fixed Charges for 2014-19 Tariff Period

69. The trued up Annual Fixed Charges (AFC) allowed in respect of the transmission

asset for 2014-19 tariff period are as follows:

	(₹ in lakh <u>)</u>
	2018-19
Particulars	(Pro-rata for 18 days)
Depreciation	7.23
Interest on Loan	7.94
Return on Equity	8.07
Operation and Maintenance	8.69
Interest on Working Capital	0.92
Total	32.84

70. Accordingly, AFC claimed in respect of the transmission asset in the present petition

by the Petitioner and trued up AFC approved in the instant order are as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata for 18 days)
Claimed by the Petitioner in the instant petition	33.35
Approved after true-up in this order	32.84

# **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD**

71. The details of the transmission charges as claimed by the Petitioner in respect of

the transmission asset for 2019-24 tariff period are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	195.29	231.49	246.14	247.92	247.92
Interest on Loan	190.78	208.43	203.98	185.66	165.34
Return on Equity	194.67	231.14	245.97	247.80	247.80
Interest on Working Capital	11.77	13.26	13.74	13.63	13.41
O&M Expenses	69.61	71.98	74.44	76.96	79.60
Total	662.12	756.30	784.27	771.97	754.07

72. The Petitioner has claimed the following IWC in respect of the transmission asset for

the 2019-24 tariff period:

					(₹ in lakh
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.80	6.00	6.20	6.41	6.63
Maintenance Spares	10.44	10.80	11.17	11.54	11.94



Receivables	81.41	93.24	96.69	95.17	92.71
Total Working Capital	97.65	110.04	114.06	113.12	111.28
Rate of interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
Interest on working Capital	11.77	13.26	13.74	13.63	13.41

# **Capital Cost**

73. Regulation 19 of the 2019 Tariff Regulations provides as follows:

**"19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

(1) The Capital Cost of a new project shall include the following:

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(*h*) Adjustment of revenue earned by the transmission licensee by using the Assetbefore the date of commercial operation;

*(i)* Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(*k*) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(*I*) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(*m*) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(2) The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by



excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."

(3) The capital cost in case of existing or new hydro generating station shall also include:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(4) The following shall be excluded from the capital cost of the existing and new projects:

(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;

(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and

(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

74. The Petitioner has claimed capital cost as on 31.3.2019 of ₹3041.64 lakh in respect

of the transmission asset. The capital cost worked out by the Commission as on 31.3.2019

is ₹3038.16 lakh and the same has been considered as the opening capital cost as on



1.4.2019 for determination of tariff for 2019-24 period in accordance with Regulation 19 of

the 2019 Tariff Regulations.

# Additional Capital Expenditure (ACE)

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

#### *"24. Additional Capitalization within the original scope and up to the cut-off date:*

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

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

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

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

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

(1) The ACE incurred or projected to be incurred in respect of an existing project or a

new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check:

a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
b) Change in law or compliance of any existing law;

c) Deferred works relating to ash pond or ash handling system in the original scope of work;

d) Liability for works executed prior to the cut-off date;

e) Force Majeure events;

f) Liability for works admitted by the Commission after the cut-off date to the extent



of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

76. The Petitioner has projected ACE for 2019-24 period on account of balance and

retention payments due to undischarged liability projected for works executed within the

cut-off date and unexecuted works within cuff-off date. The details of the projected ACE for

2019-24 period in respect of the transmission asset are as follows:

						(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total ACE
ACE	832.54	461.79	64.88	0.00	0.00	1359.21

77. We have considered the submissions of the Petitioner. The projected ACE on account of balance and retention payments and deferred works is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations subject to truing-up. The ACE allowed is subject to true-up and the same is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Discharge of IDC	0.91	-	-	-	-
Deferred Work	829.57	461.79	64.88	0.00	0.00

#### Capital Cost for 2019-24 Tariff Period

78. Capital cost of the transmission asset considered for 2019-24 tariff period is as follows:



						(₹ in lakh)
Capital Cost		A	Admitted ACE			Capital Cost
as on 1.4.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.3.2024
3038.16	830.48	461.79	64.88	0.00	0.00	4395.32

# Debt-Equity Ratio

79. Regulation 18 of the 2019 Tariff Regulations provides as follows:

**"18. Debt-Equity Ratio:** (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

*i.* where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

*ii.* the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

*iii.* any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

**Explanation.-**The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and



renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

80. The details of debt-equity considered for the purpose of computation of tariff for

2019-24 period in respect of the transmission asset are as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	2126.71	70.00	3076.73	70.00
Equity	911.45	30.00	1318.59	30.00
Total	3038.16	100.00	4395.32	100.00

#### **Depreciation**

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

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the Assetadmitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis."

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

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

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

Provided also that the capital cost of the assets of the hydro generating station for the



purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the Asset-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 asset

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

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

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

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

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

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has



#### completed its useful life."

82. We have considered the submissions of the Petitioner. WAROD has been worked out and placed as Annexure-II after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset is as follows:

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
А	Opening Gross Block	3038.16	3868.65	4330.44	4395.32	4395.32
В	ACE	830.48	461.79	64.88	0.00	0.00
С	Closing Gross Block (A+B)	3868.65	4330.44	4395.32	4395.32	4395.32
D	Average Gross Block [(A+C)/2]	3453.40	4099.54	4362.88	4395.32	4395.32
Е	Average Gross Block (90% depreciable assets)	3330.31	3956.49	4213.21	4245.00	4245.00
F	Average Gross Block (100% depreciable assets)	123.09	143.05	149.66	150.32	150.32
G	Depreciable value (excluding IT equipment and software) (E*90%)	2997.27	3560.84	3791.89	3820.50	3820.50
Н	Depreciable value of IT equipment and software	123.10	143.05	149.66	150.32	150.32
I	Total Depreciable Value (G+H)	3120.37	3703.89	3941.55	3970.82	3970.82
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.65	5.64	5.64	5.64	5.64
К	Elapsed useful life at the beginning of the year (Year)	0	1	2	3	4
L	Balance useful life at the beginning of the year (Year)	24	23	22	21	20
М	<b>Depreciation during the year</b> (D*J)	195.20	231.35	245.99	247.78	247.78
Ν	Aggregate Cumulative Depreciation at the end of the year	202.43	433.78	679.77	927.54	1175.32
0	Remaining Aggregate Depreciable Value at the end of the year(I-N)	2917.94	3270.11	3261.79	3043.27	2795.50

#### Interest on Loan (IoL)

83. Regulation 32 of the 2019 Tariff Regulations provides as follows:

**"32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross



normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

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

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing".

84. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

						(₹ in iakn)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
А	Gross Normative Loan	2126.71	2708.05	3031.30	3076.72	3076.72
В	Cumulative Repayments upto Previous Year	7.23	202.43	433.78	679.77	927.54
С	Net Loan-Opening (A-B)	2119.48	2505.62	2597.53	2396.95	2149.18



/I in lakh)

D	Additions	581.34	323.25	45.42	0.00	0.00
Е	Repayment during the year	195.20	231.35	245.99	247.78	247.78
F	Net Loan-Closing (C+D-E)	2505.62	2597.53	2396.95	2149.18	1901.40
G	Average Loan [(A+F)/2]	2312.55	2551.57	2497.24	2273.06	2025.29
Н	Weighted Average Rate of Interest on Loan (in %)	8.248	8.165	8.165	8.165	8.161
_	Interest on Loan (GxH)	190.74	208.33	203.90	185.59	165.29

# Return on Equity (RoE)

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

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

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

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

#### Provided further that:

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

*ii. in* case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

(3) The return on equity in respect of additional capitalization on account of emission control



system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;"

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

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below: Rate of pre-tax return on equity = Base rate / (1-t)

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

#### Illustration-

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

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

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

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore
- (d) = 24%) Rate of return on equity = 15.50/(1-0.24) = 20.395%.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on year-to-year basis."



86. The Petitioner has submitted that MAT rate is applicable to it. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission asset is as follows:

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
А	Opening Equity	911.45	1160.59	1299.13	1318.60	1318.59
В	Additions	249.14	138.54	19.46	0.00	0.00
С	Closing Equity (A-B)	1160.59	1299.13	1318.59	1318.59	1318.59
D	Average Equity [(A+B)/2]	1036.02	1229.86	1308.86	1318.59	1318.59
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (DxG)	194.59	230.99	245.83	247.66	247.66

# **Operation & Maintenance Expenses (O&M Expenses)**

87. The O&M Expenses claimed by the Petitioner in respect of the transmission asset are as follows:

						(₹ in lakh)				
SI. No.	SI. No. 400 kV GIS Sub-station bay									
1	Kishanganj: Dhark	phanga-I Ba	У							
2	Kishanganj: Dhark	bhanga-II Ba	ay							
3	Kishanganj: Dhark	ohanga-l_80	MVAR SLR	R-1						
		O&M E	xpenses							
	2019-20 2020-21 2021-22 2022-23 2023-24									
Sub-station										
400 kV GIS										
Number of ba	Number of bays         3         3         3         3         3									
PLCC	PLCC									
Original Proje	Original Project Cost (₹ in lakh)         104.08         104.08         104.08         104.08         104.08									
Total O&M E	xpense (₹ in lakh)	69.60	71.97	74.43	76.97	79.59				

88. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Norms for sub-station Bays (₹ Lakh per bay)							
765 kV	45.01	46.60	48.23	49.93	51.68		



400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per	MVA)				
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lal	kh per km)				
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub- conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:



*i.* the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;

*ii.* the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;

iii. the O&M expenses of  $\pm$ 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm$ 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of  $\pm 800 \text{ kV}$  Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800 \text{ kV}$ , Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

(4) **Communication system:** The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."

89. We have considered the submissions of the Petitioner. The Petitioner has claimed

O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations

@2% of its original project cost in the instant petition. The Petitioner has made similar

claim in other petitions as well. Though PLCC is a communication system, it has been

considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff

Regulations and the norms for sub-station have been specified accordingly. Accordingly,



the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

90. We have considered the submissions of the Petitioner. The O&M expenses have been worked out in respect of the transmission asset as per the norms specified in the 2019 Tariff Regulations and the same is as follows:

(	₹	in	lakh)	١
	•		Iuni	,

					( • … • •
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
3 Numbers of 400 kV GIS Sub-station bays at Kishanganj	67.52	69.89	72.35	74.89	77.51

#### Interest on Working Capital (IWC)

91. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the2019 Tariff Regulations provide as follows:

"34. Interest on Working Capital: (1) The working capital shall cover:

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month."

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

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

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



from any outside agency."

"3. Definition - In these regulations, unless the context otherwise requires:-

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

92. The Petitioner has submitted that it has computed IWC for 2019-24 tariff period considering SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon in respect of the transmission asset are as follows:

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (Equivalent to annualized O&M Expenses for 1 month)	5.63	5.82	6.03	6.24	6.46
В	Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	10.13	10.48	10.85	11.23	11.63
С	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	81.11	92.82	96.16	94.65	92.19
D	Total Working Capital (A+B+C)	96.87	109.12	113.04	112.12	110.28
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on Working Capital (DxE)	11.67	12.28	11.87	11.77	11.58

# Annual Fixed Charges for 2019-24 Tariff Period

93. The transmission charges allowed in respect of the transmission asset for 2019-24

tariff period are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	195.20	231.35	245.99	247.78	247.78
Interest on Loan	190.74	208.33	203.90	185.59	165.29
Return on Equity	194.59	230.99	245.83	247.66	247.66
Operation and Maintenance	67.52	69.89	72.35	74.89	77.51



Interest on Working Capital	11.67	12.28	11.87	11.77	11.58
Total	659.71	752.84	779.93	767.69	749.81

#### Filing Fee and Publication Expenses

94. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations. BSPHCL has submitted that grant of filing fee and expenses incurred is the discretion of the Commission and need not necessarily be allowed in all cases. In response, the Petitioner has submitted that it has requested for reimbursement of expenditure towards petition filing fee and publication expense in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Commission vide order dated 28.3.2016 in Petition No. 137/TT/2015 allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro rata basis.

95. We have considered the submissions of the Petitioner and BSPHCL. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication expenses paid by the Petitioner. Accordingly, 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 Regulation 70(1) of the 2019 Tariff Regulations.

#### License Fee and RLDC Fees and Charges

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



# **Goods and Services Tax**

97. BSPHCL has submitted that Petitioner's prayer to bill and receive GST and other statutory charges on transmission charges separately from the Respondents is pre-mature.

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

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

#### Security Expenses

100. The Petitioner has submitted that security expenses in respect of transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

101. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission asset owned by it on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.



#### **Capital Spares**

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

#### Sharing of Transmission Charges

103. BSPHCL has submitted that the present consumers of the beneficiaries cannot be burdened with past charges.

104. We have considered the submissions of the Petitioner and BSPHCL. The instant petition is for truing up of the tariff of the 2014-19 tariff period, besides determination of tariff for the 2019-24 tariff period, and the Petitioner has filed the same in accordance with the 2019 Tariff Regulations. Moreover, there is no burdening of the consumers of the beneficiaries with the past charges as contended by BSPHCL as tariff of the 2014-19 tariff period is being trued up as provided under Regulation 12 of the 2019 Tariff Regulations.

105. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations

106. To summarise,

(a) The trued-up AFC allowed in respect of the transmission asset for 2014-19



tariff period are as follows:

(₹ in lakh)

Particulars	2018-19 (Pro-rata for 18 days)			
Annual Fixed Charges	32.84			

(b) AFC allowed in respect of the transmission asset for 2019-24 tariff period in

the instant order are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed					
Charge	659.71	752.84	779.93	767.69	749.81

107. Annexure-I and Annexure-II given hereinafter form part of the order.

108. This order disposes of Petition No. 677/TT/2020 in terms of the above discussions and findings.

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



Petition No.:	677/TT/2020
Period	2014-19 Tariff

Asset

#### ACE Admitted 2014-19 Annual Depreciation as per Regulations (₹ in lakh) Admitted Capital **Capital Cost** Rate of Cost as on COD Depreciation as on 2014-15 2015-16 2016-17 2017-18 2018-19 Capital Expenditure (₹ inlakh) (%) 31.3.2019 2018-19 (₹ in lakh) as on COD (₹ in lakh) Sub-station 2305.11 538.43 2843.54 5.28 135.92 PLCC 85.52 6.33 0.00 85.52 5.41 IT Equipment & 90.41 18.69 109.10 5.28 5.27 Software TOTAL 557.12 3038.16 2481.04 146.60 \_ --\_ Average Gross Block 2759.60 --(₹ in lakh) Weighted Average Rate of 5.31 \_ -Depreciation (%)

Annexure – I

Petition No.:	677/TT/2020
Period	2019-24 Tariff

Annexure – II

Asset											
2019-24	Admitted Capital Cost	ACE		Admitted Rate of Capital Depreciation	Annual Depreciation as per Regulations						
Capital Expenditure as on 1.4.2019	as on 1.4.2019 (₹ in lakh)	2019-20	2020-21	2021-22	Cost as on 31.3.2019 (₹ in lakh)	(%)	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Sub-station	2843.54	802.47	433.11	61.89	4141.01	5.28	171.32	203.94	217.01	218.65	218.65
PLCC	85.52	0.03	16.76	1.68	103.99	6.33	5.41	5.95	6.53	6.58	6.58
IT Equipment & Software	109.10	27.98	11.92	1.31	150.32	15.00	18.46	21.46	22.45	22.55	22.55
TOTAL	3038.16	830.48	461.79	64.88	4395.32		195.20	231.35	245.99	247.78	247.78
				Average Gros (₹ in lakh)	s Block	3453.40	4099.54	4362.88	4395.32	4395.32	
Weighted Average Depreciation (%)					erage Rate of (%)	5.65	5.64	5.64	5.64	5.64	