

**CENTRAL ELECTRICITY REGULATORY COMMISSION
New Delhi**

Petition No. 324/TT/2023

Coram:

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

Date of Order: 31st May, 2025

In the matter of:

Petition under Section 62 read with Section 79 of the Electricity Act, 2003 along with Regulations 111-113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, for determination of the transmission tariff of the deemed inter-State transmission lines owned by West Bengal State Electricity Transmission Company Limited with the transmission system operated by Central Transmission Utility of India Limited, for inclusion in PoC transmission charges for the period FY 2019-20 to FY 2023-24 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

And in the matter of:

West Bengal State Electricity Transmission Company Limited,
Vidyut Bhavan, Bidhannagar,
Block- DJ, Sector- II,
Kolkata-700091.

...Petitioner

Vs.

1. **Central Transmission Utility of India Limited,**
B-9, Qutab Institutional Area Road,
NRPC Colony, Block B,
Katwaria Sarai,
New Delhi-110019.
2. **Power Grid Corporation of India Limited,**
B-9, Qutab Institutional Area
Katwaria Sarai, South Delhi,
Delhi-110016.

...Respondents

Parties present : Ms. Molshree Bhatnagar, Advocate, WBSETCL
Shri Nimesh Jha, Advocate, WBSETCL
Ms. Shaida Das, Advocate, WBSETCL
Ms. Kavya Bharadwaj, CTUIL
Shri Ishrat Ali, CTUIL



ORDER

The Petitioner, West Bengal State Electricity Transmission Company Limited (WBSETCL), has filed the present Petition for the determination of the transmission tariff of the deemed inter-State transmission lines owned by the Petitioner with the transmission system operated by the Central Transmission Utility of India Limited (CTUIL) in terms of the Commission's order dated 5.9.2018 in Petition No. 07/Suo-Motu/2017 for inclusion in the PoC transmission charges for FY 2019-20 to FY 2023-24 in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

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

- “(a) Allow the present petition and condone the delay, if any, in approaching this Hon'ble Commission for seeking determination of tariff of the subject Transmission Assets owned by the Petitioner with the transmission system operated by Central Transmission Utility of India Limited for inclusion in PoC transmission charges for the period FY 2019-20 to FY 2023-24 in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019;*
- (b) Approve the Transmission Tariff for the tariff block 2019-2024 for the assets covered under this Petition, in terms of the tariff filings annexed as ANNEXURE P/11 – ANNEXURE P/15;*
- (c) 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 as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before this Hon'ble Commission as provided under Clause 25 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019;*
- (d) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, expenditure on publishing of notices in newspapers in terms of Regulation 70 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and other expenditures (if any) in relation to the filing of the petition;*
- (e) Allow the petition to bill and recover Licensee Fee and RLDC Fee and charges separately from the DICs / beneficiaries in terms of the Regulation 70 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019;*
- (f) Allow the Petitioner to bill and recover the Service Tax on Transmission Charges separately from the DICs/beneficiaries, if at any time service tax on transmission is*



withdrawn from negative list in future. Further, any taxes and duties including cess etc. imposed by any statutory / government/ municipal authorities;

- (g) *Pass such other order(s) / further order(s) that this Hon'ble Commission may deem fit in the interest of justice, equity and facts and circumstances of the present case."*

Background

3. The brief facts of the case are as follows:

- (a) The Commission vide order dated 14.3.2012 in Petition No. 15/SM/2012 gave the following directions:

"5. It has come to the notice of the Central Commission that the some of the owners/developers of the inter-State transmission lines of 132 kV and above in North Eastern Region and 220 kV and above in Northern, Eastern, Western and Southern regions as mentioned in the Annexure to this order have approached the Implementing Agency for including their transmission assets in computation of Point of Connection transmission charges and losses under the Central Electricity Regulatory Commission (Sharing of inter State Transmission Charges and Losses) Regulations, 2010 (hereinafter "Sharing Regulations").

6. As a first step towards inclusion of non-ISTS lines in the POC transmission charges, the Commission proposes to include the transmission lines connecting two States, for computation of POC transmission charges and losses. However, for the disbursement of transmission charges, tariff for such assets needs to be approved by the Commission in accordance with the provisions of Sharing Regulations. Accordingly, we direct the owners of these inter-State lines to file appropriate application before the Commission for determination of tariff for facilitating disbursement.

7. We direct the respondents to ensure that the tariff petitions for determination of tariff is filed by the developers/owners of the transmission line or by State Transmission Utilities where the transmission lines are owned by them in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, by 20.4.2012."

- (b) In compliance with the Commission's direction dated 14.3.2012 in Petition No.15/SM/2012, the Petitioner filed Petition No. 259/TT/2013 for the determination of the tariff for the 2009-14 period. The Commission, vide order dated 8.6.2015 and 29.6.2015 in Petition No. 259/TT/2013, granted transmission tariff from 1.4.2011 to 31.3.2014 for the following transmission lines on the basis of the line length in Ckt km and the ARR approved by the State Commission for the years 2011-12, 2012-13 and 2013-14:



Sl. No.	Name of the Asset	Length of the Lines (Ckm)	COD
1	400 kV S/C Kolaghat-Baripada transmission line.	128.615	16.3.1992
2	220 kV S/C Santaldih-Chandil transmission line.	73.90	1.4.1987

- (c) LILO of the 400 kV Kolaghat-Baripada S/C transmission line was loaded at Kharagpur 400 kV Sub-station on 28.4.2012. The LILO portion of the 400 kV Kolaghat-Baripada S/C transmission line was not included for the purpose of annual revenue requirement for the period from 1.4.2011 to 31.3.2014 in the tariff Petition filed on 3.10.2013, however, vide affidavit dated 26.12.2014 in Petition No. 259/TT/2013, the Petitioner informed regarding the actual date of loading of the LILO portion.
- (d) Due to the calculation errors regarding the YTC of each configuration of the transmission lines in the order dated 8.6.2015 in Petition No. 259/TT/2013, the Commission revised the said order vide order dated 29.6.2015 in Petition No. 259/TT/2013 and approved the YTC of ₹1865.81 lakh, ₹2782.21 lakh and ₹3204.84 lakh for FYs 2011-12 (9 months taken from 1.7.2011 to 31.3.2012), 2012-13 and 2013-14, respectively, for 400 kV S/C Kolaghat-Baripada Transmission Line (portion owned by WBSETCL) and 220 kV S/C Santaldih-Chandil Transmission Line (portion owned by WBSETCL) on the basis of the line length in Ckt km and the ARR approved by the State Commission for the FYs 2011-12, 2012-13, and 2013-14 and PoC cost data for the respective years. In the revised order, except for the rectification in calculation, all other terms of the original order remained unchanged.
- (e) The Commission, in its order dated 12.5.2017 in Petition No. 07/SM/2017, directed the owners/developers of the natural ISTS transmission lines, to (a)

file the petition for determination of tariff for FY 2014-2019 in accordance with 2014 Tariff Regulation and (b) provide further information with respect to said ISTS lines by way of an affidavit.

- (f) As per the decision of the 3rd Validation Committee bearing No.Engg/Tr.Pricing/Validation/L-1/44/2013/CERC dated 30.9.2019, the instant transmission assets were excluded from the computation of PoC Charges & Losses on 29.8.2019.
- (g) Afterwards, the Central Transmission Utility of India Limited (CTUIL) vide its letter dated 1.7.2022, sought a refund of the excess transmission charges collected by the Petitioner through the Point of Connection (PoC) mechanism, for the transmission assets of the Petitioner. In the said letter, CTUIL submitted that, since, the Petitioner has not filed any specific tariff determination Petition before the Commission for the 2014-19 tariff period as per the 2014 Tariff Regulation, therefore, the transmission charges from 1.4.2014 disbursed to the Petitioner became redundant and the excess transmission charges are required to be refunded immediately.
- (h) Aggrieved with the CTUIL's aforementioned decision, the Petitioner filed an Interlocutory Application being IA No. 87/2023 in Petition No. 309/TT/2023 and sought stay of the demand letters dated 1.7.2022 and 16.8.2022, wherein, the CTUIL has sought a refund of the excess transmission charges collected through the PoC mechanism by the Petitioner for its Deemed ISTS lines, in the absence of approved tariff for the 2014-19 period.
- (i) Accordingly, the Petitioner vide its letter dated 23.8.2022 approached the Commission and sought clarification on the affidavit dated 12.6.2017 and the manner in which it has been dealt with by the Commission for the purpose of



computation of YTC and subsequent inclusion of the same in the PoC Charges & Losses. The Petitioner expressed the view that before receiving the letter dated 1.7.2022 from the CTUIL, the Petitioner was under the impression that the affidavit dated 12.6.2017 had been considered as prayed for, akin to a Petition, and accordingly, the YTC has been approved under the 2014 Tariff Regulation. During a meeting, the Petitioner was informed that the affidavit had not been considered by the Commission and that a tariff Petition ought to be filed under Section 62 for the determination of the tariff of the transmission assets.

- (j) Accordingly, the Petitioner had filed the Petition No. 309/TT/2023 before the Commission for the determination of tariff for the 2014-19 tariff period along with IA No. 87/2023 (for a stay of CTUIL's letter dated 1.7.2022 and 16.8.2022).
- (k) The Commission vide order dated 29.5.2025 in Petition No. 309/TT/2023 has determined the tariff for the 2014-19 period and rejected the prayers sought in the IA No. 87/2023 for the stay of CTUIL's letters dated 1.7.2022 and 16.8.2022.
- (l) The Petitioner has filed the instant Petition for the determination of the transmission charges in respect of the transmission assets for the 2019-24 tariff period.
- (m) The Petitioner has submitted the following details of the Annual Revenue Requirement (ARR) from 1.4.2019 to 31.3.2024, for the transmission assets:

(₹ in lakh)			
Period	YTC for 400 kV Kolaghat-Baripada	YTC for 220 kV Santalidih-Chandil	Total
2019-20	172.39	47.57	219.96
2020-21	172.10	47.67	219.77
2021-22	171.80	48.61	220.41



2022-23	171.64	44.55	216.19
2023-24	171.61	43.60	215.21

4. The Petitioner has served a copy of the Petition on the Respondent, and notice regarding the filing of this Petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (the Act). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner.

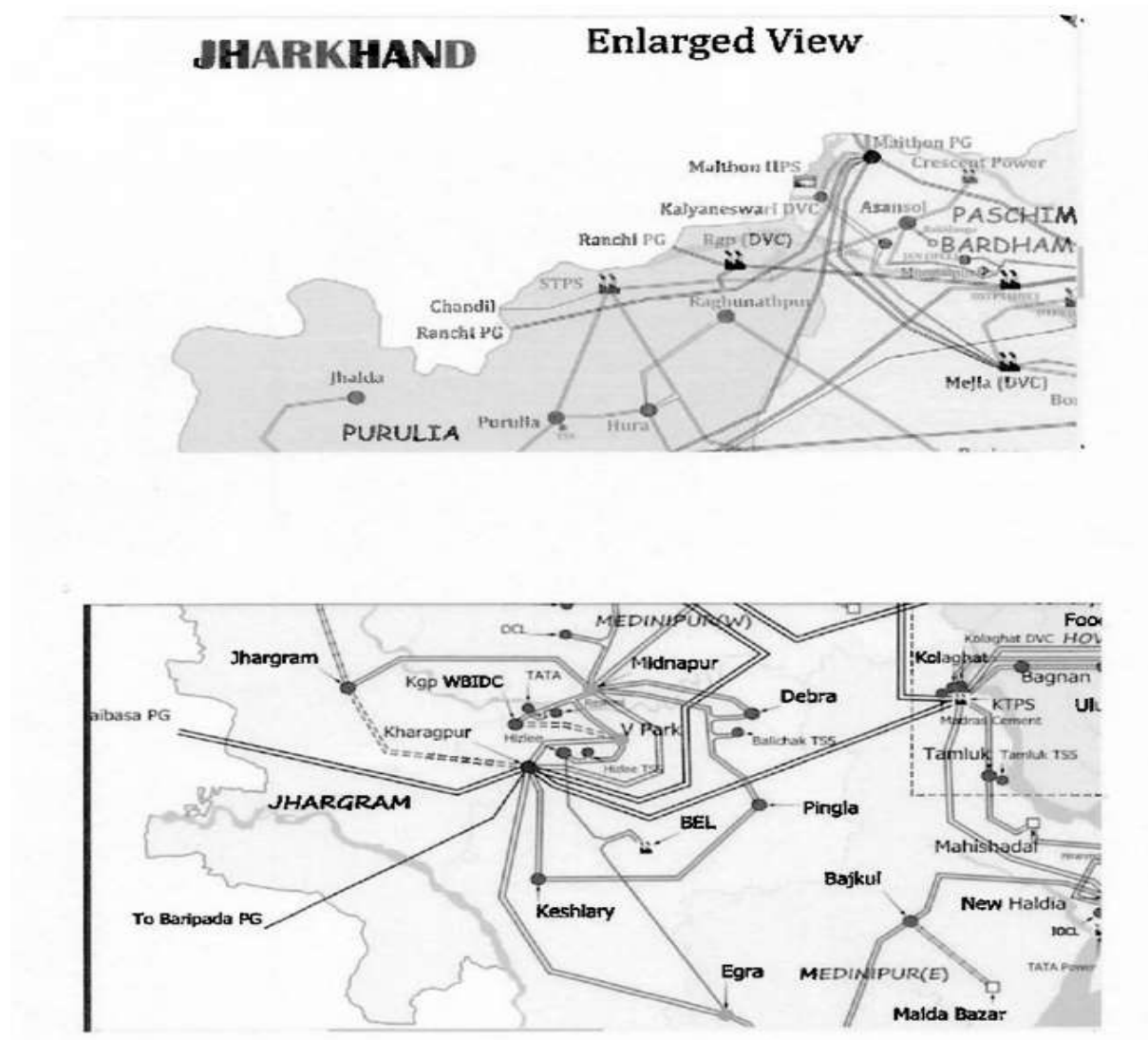
5. The hearing in the matter was held on 8.11.2024 and the order in the matter was reserved.

6. The CTUIL has filed its reply to the Interlocutory Application vide its affidavit dated 7.11.2024.

7. The Petitioner has initially arrayed CTUIL as the sole Respondent in the instant Petition. However, in compliance with the Commission's direction vide RoP of the hearing dated 31.1.2024, the Petitioner subsequently filed the amended 'Memo of Parties' dated 9.2.2024, impleading the Powergrid Corporation of India Limited (PGCIL) as another Respondent in the matter. In the said RoP, the Commission also directed the Petitioner to submit certain information on an affidavit. In compliance with the directions of the Commission, the Petitioner vide affidavit 15.2.2024 has submitted the following information:

- a. The Single Line Diagram (SLD) of the transmission lines covered in the instant Petition:





- b. The 400 kV Kolaghat-Baripada transmission line referenced in the instant Petition is physically present and operational between West Bengal and Odisha with LILO at Kharagpur, while the 220 kV STPS-Chandil transmission line is operational between West Bengal and Jharkhand. However, the Power Supply Agreement (PSA) governing the power supply arrangement between the aforementioned States is not available.
- c. The transfer of energy through the aforementioned transmission lines is duly acknowledged and accounted for by the Regional Load Despatch Centre (RLDC), specifically the Eastern Regional Load Despatch Centre (ERLDC). The

operational status, along with the year-wise power flow details, pertaining to the transmission assets for the 2019-24 tariff period, as received from the ERLDC, are as under:

	400 kV KTPP-Baripada		220 kV STPS-Chandil	
Duration	MWH	MU	MWH	MU
1.4.2019 - 31.3.2020	-1365571.755	-1365.57	238312.72	238.31
1.4.2020 - 31.3.2021	-754391.7667	-754.39	182095.8	182.10
1.4.2021 - 31.3.2022	843905.2256	843.91	530599.404	530.60
1.4.2022 - 31.3.2023	888118.3692	888.12	562420.292	562.42
1.4.2023 - 28.1.2024	414601.6249	414.60	161232.788	161.23

- d. The certification regarding the availability of the transmission assets during the 2019-24 tariff period has not been furnished by the ERLDC. This information is conspicuously absent in the ERLDC's communication. The Petitioner was informed by the Regional Power Committees (RPC) vide email dated 12.2.2024, that the RPCs certify the transmission system belonging to Regional and Inter-regional ISTS Licensees after the same is verified by the concerned RLDCs. It was further communicated to the Petitioner that the ERPCs does not certify the availability of any transmission system that is within the jurisdiction of the State Transmission Utility (STU). The copy of the email dated 12.2.2024 is attached hereunder for reference:



From: CE SLDC <ce.wbsldc@gmail.com>
Sent: Mon, 12 Feb 2024 13:53:59 GMT+0530
To: corporate.rac@wbsetcl.in, g_dutta0304@rediffmail.com
Subject: Fwd: Availability Certificate

----- Forwarded message -----

From: **Shyam Kejriwal** <shyam.kejriwal@gov.in>
Date: Mon, Feb 12, 2024, 1:35 PM
Subject: Availability Certificate
To: <ce.wbsldc@gmail.com>

Madam,

With reference to your email dated 08.02.2024 i.r.o petition no. 309/TT/2023 and 324/TT/2023, it is intimated that RPCs certify the availability of transmission system of Regional and Inter-regional ISTS Licencees after the same is verified by the concerned RLDCs. We do not certify the availability of any transmission system within the STU jurisdiction. This is as per the existing tariff regulations of CERC.

This is for your information

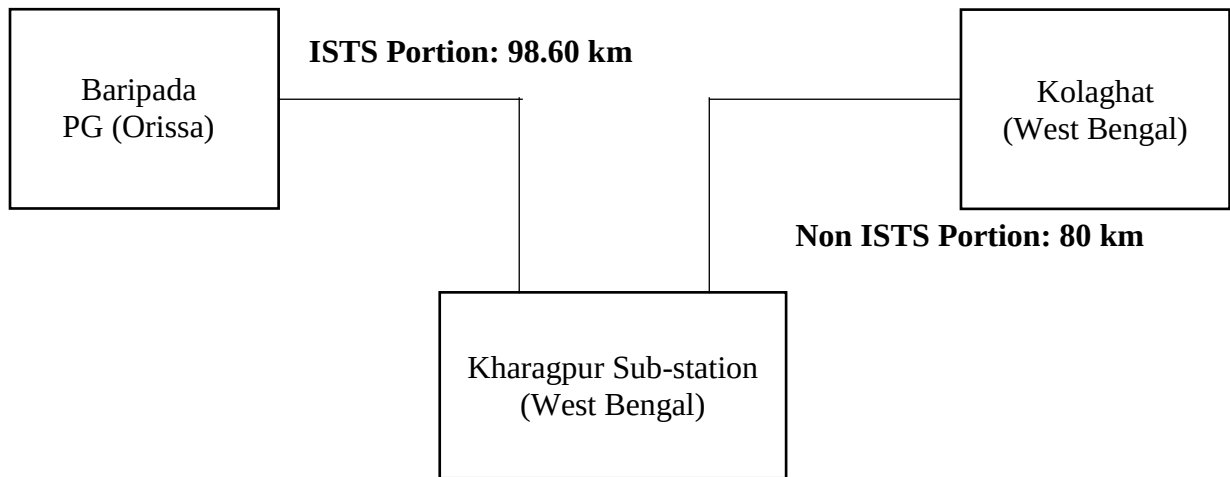
Regards

SHYAM KEJRIWAL
SE (OPERATION)
ERPC, Kolkata

e. The rationale behind the establishment of LILO for the transmission line is to fortify the Extra High Voltage (EHV) Transmission Network, thereby enhancing the reliability and bolstering the availability of the transmission corridor. Additionally, it is pertinent to note that the implementation of LILO has resulted in modification of the length of the transmission line under the inter-State Transmission System, leading to the following adjustments in line lengths:

- 1) Line length of 400 kV Kharagpur-Baripada (ISTS portion): 98.6 km.
- 2) Line length of 400 kV Kolaghat-Kharagpur portion: 80 km.





8. This order is issued after considering the submissions made by the Petitioner in the Petition vide affidavit dated 8.6.2023 and subsequent affidavits dated 9.2.2024 and 15.2.2024.

9. Having heard the learned counsel for the Petitioner and representatives of CTUIL, and perused the material available on record, we proceed to dispose of the Petition.

10. The Petitioner has prayed for the condonation of delay in filing the instant Petition. The condonation of delay in filing has been dealt with in Petition No. 309/TT/2023, wherein, the Commission has condoned the delay of 1681 days in filing the Petition for the 2014-19 tariff period. The order in the said Petition has been issued on 29.5.2025.

11. We have considered the Petitioner's submissions. Regulation 9(2) of the 2019 Tariff Regulations provides the time period for filing application for determination of tariff for the existing assets. The relevant extract of Regulation 9(2) of the 2019 Tariff Regulation is as under:

“9. Application for determination of tariff

.....

(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 31.10.2019, based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2019



(either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2019-24 along with the true up petition for the period 2014-19 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2014.”

12. Power Grid Corporation of India Limited (PGCIL) filed Petition No. 331/MP/2019 for extension of time to file the truing up Petitions in case of the existing transmission assets owned by it by 180 days from 31.10.2019 by relaxing Regulation 9(2) of the 2019 Tariff Regulations. The Commission vide order dated 28.10.2019 in the said Petition held as under:

“8. Regulation 76 of the 2019 Tariff Regulations empower the Commission to relax the provisions on its own motion or on an application made by an interested person. In exercise of power under Regulation 76 of the 2019 Tariff Regulations, we relax the Regulation 9(2) of the 2019 Tariff Regulations and allow the Petitioner to file the tariff petitions for 2019-24 as under:

.....

(b) In case of the existing assets, where final orders for the 2014-19 period are yet to be issued, tariff petitions for truing up of the tariff of the 2014-19 tariff period and determination of tariff for the 2019-24 petition shall be filed by the Petitioner within three months from the date of issue of the final order for the period 2014-19 period. The fees for these petitions shall be paid on or before 31.12.2019 on the basis of provisional tariff already determined for 2014-19. Balance fee shall be paid along with the tariff petitions for the period 2019-24.”

13. Further, in Petition No. 7/SM/2020, the generating companies like NTPC and NHPC sought extension of time for a further period of two months to file the tariff Petitions in respect of some of its generating stations for the 2019-24 period along with truing up Petitions for the 2014-19 period due to the outbreak of COVID-19 pandemic. The Commission vide order dated 6.4.2020 in the said Petition held as under:

“9. We, however, make it clear that in case of the existing generating stations/units or existing transmission assets, as the case may be, where final orders for the 2014-19 period are yet to be issued, the filing of tariff petitions for truing up of tariff of the 2014-19 tariff period and determination of tariff for the 2019-24 period shall be governed by our directions in paragraph 8(b) of order dated 28.10.2019.”

14. We have observed that the Petitioner has filed Petition No. 309/TT/2023 for determination of the transmission tariff for the 2014-19 period on 13.6.2023 in respect of the same transmission assets covered in the instant Petition, namely, Petition No.



324/TT/2023. The Petitioner has filed Petition No. 324/TT/2023 for determination of the transmission tariff for the 2019-24 period on 26.6.2023, i.e., 13 days after filing of the tariff determination Petition for the 2014-19 tariff period. Both the Petitions were heard together by the Commission. The order in Petition No. 309/TT/2023 has been issued on 29.5.2025. The Petitioner has filed the instant Petition before the issuance of the Commission's order in Petition No. 309/TT/2023. Since the condonation of delay in filing the instant Petition has been dealt with in Petition No. 309/TT/2023 (filed by the Petitioner herein), the prayed made in the instant Petition for condonations of delay has become infructuous.

DETERMINATION OF TRANSMISSION TARIFF FOR 2019-24 TARIFF PERIOD

15. The Petitioner has claimed the following transmission charges for the 2019-24 tariff period:

Period	(₹ in lakh)		
	YTC for 400 kV Kolaghat- Baripada	YTC for 220 kV Santalidih-Chandil	Total
2019-20	172.39	47.57	219.96
2020-21	172.10	47.67	219.77
2021-22	171.80	48.61	220.41
2022-23	171.64	44.55	216.19
2023-24	171.61	43.60	215.21

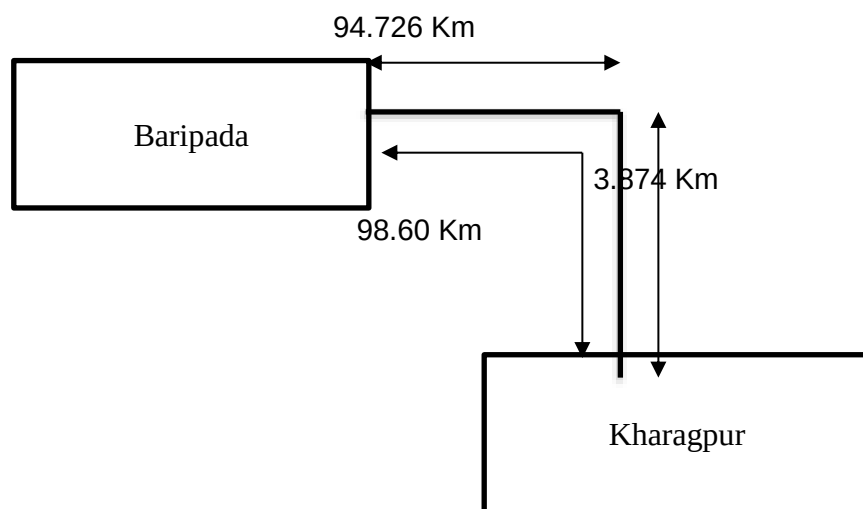
16. It has been observed that the LILO of the 400 kV Kolaghat-Baripada S/C transmission line was loaded at Kharagpur 400 kV Sub-station on 28.4.2012. The implementation of the LILO of the transmission line under the inter-State transmission system was modified, leading to the following adjustments in line lengths:

- 1) Line length of 400 kV Kharagpur-Baripada (ISTS portion): 98.6 km.
- 2) Line length of 400 kV Kolaghat-Kharagpur portion (NON-ISTS Portion): 80 km.

17. Further, it has been observed that as per information submitted by the Petitioner vide letter dated 14.1.2025, out of 98.60 km length (ISTS portion), the Loop Out length of



Kharagpur 400 kV Sub-station to 400 kV Baripada S/C transmission line is 3.874 km.



18. Therefore, in the instant order, the transmission tariff for the 2019-24 tariff period is being determined for the following assets:

Assets	Name of the Asset	Line Length	COD
Asset-1A	400 kV S/C Kolaghat-Baripada transmission line (ISTS Portion) (Original Portion).	94.726 km	16.3.1992
Asset-1B	400 kV S/C Kolaghat-Baripada transmission line (ISTS Portion) (Loop Out Portion).	3.874 km	28.4.2012
Asset-2	220 kV S/C Santaldih-Chandil transmission line.	73.90 Ckm	1.4.1987

Capital Cost of the transmission assets:

19. The Petitioner has submitted that on account of the non-availability of PGCIL's indicative cost data for the different transmission lines and subsequent co-efficient/ratio of base (the ratio of indicative cost of the 400 kV D/C Quad Moose Transmission Line to the indicative cost of other transmission line) for FY 2014-15 onwards, the calculations of YTC for the financial years for the 2019-24 tariff period have been carried out following the same methodology, considering the "ratio of base" same as that for FY 2013-14 as computed by the Commission in the tariff order dated 8.6.2015 in Petition No. 259/TT/2013.

20. The Commission, vide order dated 12.5.2017 in Petition No. 07/SM/2017, stipulated certain directions as per para – 6 and the same is extracted as under:

“Further, the owners/developers of these lines are required to file petitions for determination of tariff for the 2014-19 tariff period, if not done already. The list of the natural inter-state lines for which tariff was granted by the Commission for 2009-14 period is given in the Annexure. The owners/developers of these natural inter-State lines (mentioned in the Annexure) are directed to file petitions for determination of tariff for the 2014-19 tariff in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014”.

21. The Commission, in an order dated 19.12.2017 in Petition No. 88/TT/2017, while approving the tariff for eleven no. (11) of transmission lines connecting two States/ deemed ISTS lines owned by the Petitioner for the period 2014-15 to 2018-19, where the useful life of the transmission lines is considered as 25 years, held the following tariff methodology::

“Tariff Methodology:

9. As per the petitions filed by the states, their ISTS lines generally have the configuration of 132 kV, 220 kV or 400 kV. In the absence of an established tariff data base, in order to develop this methodology Annual Reports of PGCIL from 1989-90 to 2013-14 have been referred to. The Annual Reports depict, inter alia, the information pertaining to year wise total transmission lines’ length in ckt-km and corresponding Gross Block. This pan-India data represents all the five transmission regions and is a composite mix of parameters like terrains, wind-zones, tower and conductor type etc. +/- 500 kV HVDC and 765 kV & above voltage level AC lines too have come up in between and the data also includes those lines. Voltage level-wise data as on 30th April 2017, obtained from PGCIL indicates that the percentage of 220 kV, 132 kV and 66 kV TL taken together makes it around 8.3 % of the total line length owned by PGCIL. Further, 132 kV TLs were established in NER prior to 1990, and Transmission Lines of 220 kV voltage levels were last commissioned in around the year 2004 in NR. Majority of the transmission lines consist of 400 kV which corresponds to 66% of the total transmission line lengths. Thus, the 400 kV and lesser voltage levels account for approximately 75% of the transmission lines. Assuming the above referred spread of voltage wise percentages for earlier years too, it can be said that the year wise average TL cost figures derived from PGCIL data, when further reduced by 25%, fairly represent the average transmission line capital cost corresponding to a 400 kV S/C line. Considering 400 kV S/C transmission line cost as reference cost, Analysis of PGCIL’s indicative cost data (P/L Feb 2017) suggests the following:

Reference cost of 400 kV S/C TL		Rs X lakh/km
	400 kV D/C TL	1.39 X
	220 kV D/C TL	0.57 X
	220 kV S/C TL	0.36 X
	132 kV D/C TL	0.43 X
	132 kV S/C TL	0.31 X

Therefore, for arriving at the costs of transmission lines of other voltage levels and circuit configurations, the average TL cost data shall be multiplied by the factors illustrated in the above table. Lower voltage levels can be treated as part of 132 kV. The above table



contemplates Twin Moose conductor which is widely used in States' transmission lines.

10. *Based on respective year end data, average transmission line length during the year has been worked out. Difference between a particular year's average TL length figures and that for the immediate preceding year provides us the transmission line length added during that year. Average gross block corresponding to transmission lines has been divided by the average TL length to arrive at the Average Cost of TL (in Rs lakh per ckt-km) during the year. Thus, considering the year of COD of a state's ISTS line and its ckt-km, its cost would be worked out by relating it to PGCIL's TL cost during that year. Although the Commission has relied on PGCIL's Annual Reports, there are certain deviations in the cost data worked out. The year 1989-90 was the year of incorporation for PGCIL, and the transmission assets of NTPC, NHPC, NEEPCO, etc. were taken over by PGCIL by mid 1991-92. Thus, as the base data for these years was not available, the corresponding average cost of TL could not be worked out. The average cost from 1992-93 onwards up to 2013-14 shows an increasing trend at a CAGR of 5.17%. Therefore, for the years 1989-90, 1990-91 and 1991-92, the average cost of TL has been back derived considering the 1992-93 average cost. Similarly, abnormal dip/spikes in the TL cost for the years 1996-97, 2001-02 and 2004-05 has been corrected by considering the average values of the TL costs in the immediate preceding and succeeding years.*

11. *While calculating tariff, the following has been considered:*

- (i) Useful life of the transmission line shall be deemed to be 25 years.*
- (ii) Prevailing depreciation rates as per the 2014 Tariff Regulations shall be considered uniformly for all the previous tariff periods so as to do away with the Advance Against Depreciation which was in vogue during earlier tariff periods. Notwithstanding the depreciation considered as recovered earlier, for the purpose of these tariff calculations, remaining depreciable value shall be spread over the remaining useful life of the transmission line, where the elapsed life is more than or equal to 12 years.*
- (iii) Normative debt-equity ratio shall be 70:30.*
- (iv) Normative loan repayment during a year shall be deemed to be equal to the depreciation allowed for that year.*
- (v) Rate of Interest on normative loan shall be the weighted average rate of interest as derived on the basis of PGCIL's Balance Sheet.*
- (vi) In order to avoid complexity, grossing up of rate of Return on Equity with tax rate is being dispensed with.*
- (vii) Bank rate (as defined in the 2014 Tariff Regulations) as on 1.4.2014 shall be applied for calculating the rate of interest on working capital on normative basis.*
- (viii) O&M Expenses as per the 2014 Tariff Regulations shall be considered.*
- (ix) Where the life of TL is more than or equal to 25 years as on 01.04.2014, only O&M Expenses and IWC shall be allowed in lieu of complete tariff."*

22. MPPTCL filed Appeal No. 415 of 2019 against the order dated 19.12.2017 in Petition No. 88/TT/2017 and order dated 12.6.2019 in Review Petition No.11/RP/2018 (in Petition No. 88/TT/2017) before the Appellate Tribunal for Electricity (APTEL). The APTEL vide judgement dated 14.11.2022 in Appeal No.415 of 2019 filed by the Petitioner and Appeal Nos. 267 and 274 of 2018, filed by RRVPNL, observed that the useful life of the



deemed ISTS lines shall be the same as per the ISTS lines specified in the 2014 Tariff Regulations and 2010 Sharing Regulations, which is 35 years. The APTEL further directed the Commission to revisit its orders and to pass consequential orders. The relevant portions of APTEL's judgment dated 14.11.2022 is as follows:

"30. Accordingly, as observed above, it is opined that the decision of the Central Commission for considering the useful life of the State owned Deemed ISTS lines as 25 years is not correct. The useful life of the subject transmission lines shall be the same as for the ISTS lines as specified in the Tariff Regulations 2014 and the Sharing Regulations, 2010 which is 35 years.

ORDER

For foregoing reasons as stated supra, we are of the considered view that the captioned Appeal No. 267 of 2018, Appeal No. 274 of 2018 and Appeal No. 415 of 2019 have merit and are allowed.

The impugned orders dated 20.06.2018 in Petition No. 215/TT/2017, dated 04.05.2018 in Petition No.112/TT/2017 and dated 19.12.2017 in Petition No. 88/TT/2017 read with the order dated 12.06.2019 in Review Petition 11/RP/2018 passed by the Central Electricity Regulatory Commission are set aside.

The Central Electricity Regulatory Commission is directed to revisit the impugned orders and pass the consequential orders in accordance with the observations made in the foregoing paragraphs."

23. Aggrieved with the APTEL's judgment dated 14.11.2022 in Appeal No. 267 of 2018 and 274 of 2018, RRVPNL filed the review petitions before the APTEL as Review Petition Nos. 12 of 2022 and 13 of 2022, respectively. The grounds for review, as recorded by the APTEL in its judgement dated 6.7.2023, are as follows:

"4. The Appeal Nos. 267 & 274 of 2018 were filed assailing the Impugned Orders passed by the Central Commission on two issues that is 1) consideration of the useful life of the Deemed Inter-State Transmission System ('ISTS') Lines to be 25 years instead of the 35 years as prescribed in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 ('Tariff Regulations, 2014'), and 2) direction to the Review Petitioner to file a fresh Petition in respect of ISTS lines on the purported ground that the data in the prescribed format (Line- wise format) was not provided.

5. However, while passing the judgment dated 14.11.2022, this Tribunal allowed the appeals to the extent of aforementioned issue no. 1), also noting that the Issue mentioned at 2) is not being pressed and accordingly, no finding has been passed on this issue, hence the captioned Review Petitions limited to this extent."

"7. As seen from above, the Review Petitioner herein i.e. the Appellant in 267 & 274 of 2018 has assailed both the issues in the said appeals, as such, both the issues required



adjudication, therefore, the Review Petitions have merit and justify to be allowed for judicious conclusion of the appeals nos. 267 & 274 of 2018.

8. As the second issue assailed by the Appellant in Appeal Nos. 267 & 274 of 2018 has not been considered and decided, is an error which is evident on a mere relook at the prayers made in the aforesaid appeals and the written submissions placed on record by the Appellant, and does not require re-examination or detailed discussions.

9. Therefore, we find it most appropriate to review the earlier judgment of this Tribunal.”

24. The APTEL vide judgment dated 6.7.2023 allowed the Review Petition No. 12 of 2022 and Review Petition No. 13 of 2022 filed by RRVNPL while considering the similar issue raised by MPPTCL in Appeal No. 415 of 2019, remitted back Petition No. 215/TT/2017, Petition No. 112/TT/2017 and Petition No. 88/TT/2017 along with Review Petition No. 11/RP/2018 (in Petition No. 88/TT/2017) for re-consideration of the Commission. The extant portion of the judgment is as follows:

“ORDER

“For the foregoing reasons as stated above, we are of the considered view that the Review Petitions have merit and are allowed, the earlier judgment dated 14.11.2022 passed by this Tribunal in Appeal Nos. 267 & 274 of 2018 is amended to the extent as concluded above.

The orders dated 20.06.2018 in Petition No. 215/TT/2017, dated 04.05.2018 in Petition No.112/TT/2017 and dated 19.12.2017 in Petition No. 88/TT/2017 read with the order dated 12.06.2019 in Review Petition 11/RP/2018 passed by the Central Electricity Regulatory Commission are set aside.

The Central Commission shall pass consequential orders by considering the useful life of the State owned Deemed ISTS lines same as for the ISTS lines as specified in the Tariff Regulations 2014 and the Sharing Regulations, 2010 which is 35 years and determining the tariff in accordance with the Regulations specified.

The Review Petitions along with IAs, if any, are disposed of accordingly.”

25. As per the directions of the APTEL in the judgement dated 14.11.2022 in Appeal No. 267 of 2018 and batch matters and the subsequent judgement dated 6.7.2023 in Review Petition No.12 of 2022 and 13 of 2022, we have considered the useful life of the transmission lines as 35 years. Accordingly, we have modified the methodology adopted by us earlier for approving the transmission charges for the transmission lines connecting two States/ deemed ISTS lines, considering the useful life of the transmission lines as 35 years. For the determination of the transmission charges of the assets which have not



completed their 35 years of service as on 1.4.2014, the capital cost of the transmission lines is derived from 1979-80 onwards till 31.3.2014. As per the earlier methodology, the capital cost has been approved by the Commission from 1989-90 onwards till 31.3.2014. Further, in the earlier methodology, due to the unavailability of base data for 1989-90, 1990-91 and 1991-92, the average cost of transmission lines has been back derived considering the average cost from 1992-93 onwards up to 2013-14 at a Compound Annual Growth Rate (CAGR) of 5.17%. The methodology for deriving the average cost of transmission lines for 1989-90, 1990-91, and 1991-92 has been extrapolated backwards to derive the average cost of transmission lines for 1979-80 to 1988-89. Accordingly, the average capital cost of the transmission lines for 1979-80, 1980-81, 1981-82, 1982-83, 1983-84, 1984-85, 1985-86, 1986-87, 1987-88 and 1988-89 has been back derived by applying the Compound Annual Growth Rate (CAGR) factor of 5.17%. The capital costs of the transmission lines, which have not completed 35 years, is worked out as per the said methodology.

26. The Commission, vide order dated 29.5.2025 in Petition No. 309/TT/2023, has determined the transmission tariff of the concerned assets for the 2014-19 tariff period based on the methodology cited above. Similarly, we now proceed to determine the transmission tariff for the tariff period 2019-24 of the concerned transmission assets of which the commercial operation date (COD) is earlier than 31.3.2014 and where the audited capital cost information is not available.

27. As per the methodology, the capital cost has been derived taking into consideration the approved length and configurations of the line, the year of COD allowed, and the rationalized cost of the year. Accordingly, the derived capital cost of the transmission assets is as under:



Asset No.	COD	Rationalized Cost (₹ in lakh / Ckm)	Length (Ckm)	Multiplication Factor	Gross Value of the Asset (₹ in lakh)
Asset-1A	16.3.1992	29.69	94.726	1.00	2812.00
Asset-1B	28.4.2012	65.67	3.874	1.00	254.40
Asset-2	1.4.1987	24.26	73.90	0.36	645.54

28. As above, the useful life of the transmission assets as on 31.3.2019 is as follows:

Asset No.	Lines Length	COD	Useful life of 35 years completed as on	Whether useful life completed as on 31.3.2019
Asset-1A	94.726 km	16.3.1992	15.3.2027	NO
Asset-1B	3.874 km	28.4.2012	28.4.2047	NO
Asset-2	73.90 km	1.4.1987	31.3.2022	NO

29. From the above table, Asset-1A and Asset-1B have not completed 35 years of useful life as on 31.3.2019. Therefore, all the elements of the transmission charges are allowed for Asset-1 for the 2019-24 tariff period.

30. However, the useful life of Asset-2 will be completed on 31.3.2022, therefore, for Asset-2, all the elements of the transmission charges are allowed for FY 2019-20, 2020-21 and 2021-22 and afterwards only O&M Expenses and IWC are allowed for FY 2022-23 and 2023-24.

31. Asset-1A and Asset-2 have already completed 12 years of their useful life before 1.4.2019. Hence, Nil amount of IoL for these transmission assets is allowed for the 2019-24 tariff period.

32. As stated above, the transmission charges are worked out as per the new methodology approved by the Commission, considering the useful life of the transmission lines as 35 years. As per the new methodology, the capital cost has been derived taking into consideration the length and configurations of the transmission line, the year of COD, and the rationalized cost of the year.



Additional Capital Expenditure (ACE):

33. The Petitioner has submitted that no ACE has incurred in the 2019-24 period; therefore, no change is there in its capital cost in the subsequent years in respect of the transmission assets. Hence, ACE for the 2019-24 tariff period has been considered as NIL for both transmission assets.

Operation and Maintenance Expenses (O&M Expenses):

34. The O&M Expenses claimed by the Petitioner in respect of transmission assets for the 2019-24 tariff period are as under:

(₹ in lakh)							
Sl. No.	Name of the Line	Line length (in km)	2019-20	2020-21	2021-22	2022-23	2023-24
1	400 kV S/C Kolaghat-Baripada Transmission line Baripada-Kharagpur Section.	128.615	64.69	67.01	69.32	71.77	74.34
2	220 kV S/C Santaldih-Chandil Transmission Line.	73.9	18.62	19.21	19.95	20.62	21.36

35. The O&M norms under Regulation 35(3) of the 2019 Tariff Regulations for the AC lines are as follows:

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

Description	2019-20	2020-21	2021-22	2022-23	2023-24
Single circuit (Single conductor)	0.252	0.260	0.270	0.279	0.289
Single circuit (Twin and Triple conductor)	0.503	0.521	0.539	0.558	0.578

36. The O&M Expenses have been worked out as per the norms specified under Regulation 35(3) of the 2019 Tariff Regulations, and the same is as follows:

(₹ in lakh)						
Sl. No.	Name of the Line	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1A	400 kV S/C Kolaghat-Baripada	94.726	94.726	94.726	94.726	94.726



	transmission line Baripada-Kharagpur Section (ISTS Portion) (Original Portion) (in km).					
	Norms as per Regulation	0.503	0.521	0.539	0.558	0.578
	O&M Expenses allowed	47.65	49.35	51.06	52.86	54.75
Asset-1B	400 kV S/C Kolaghat-Baripada transmission line Baripada-Kharagpur Section (ISTS Portion) (Loop Out Portion) (in km).	3.874	3.874	3.874	3.874	3.874
	Norms as per Regulation	0.503	0.521	0.539	0.558	0.578
	O&M Expenses allowed	1.95	2.02	2.09	2.16	2.24
Asset-2	220 kV S/C Santaldih-Chandil transmission line (in km)	73.90	73.90	73.90	73.90	73.90
	Norms as per Regulation	0.252	0.260	0.270	0.279	0.289
	O&M Expenses allowed	18.63	19.21	19.95	20.62	21.36

37. Accordingly, the computation of the transmission charges for the 2019-24 tariff period in case of Asset-1A, Asset-1B, and Asset-2 is given in the following table, and the calculation details of the transmission charges allowed for the transmission assets are given in Annexure-I to III to this order:

(₹ in lakh)

Asset-1A	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	32.57	32.57	32.57	32.57	32.57
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	130.76	130.76	130.76	130.76	130.76
Interest on Working Capital	4.53	4.30	4.08	4.15	4.82
O&M Expenses	47.65	49.35	51.06	52.86	54.75
Total	215.51	216.98	218.47	220.34	222.90

(₹ in lakh)

Asset-1B	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	13.43	13.43	13.43	13.43	13.43
Interest on Loan	6.92	5.62	4.55	3.76	3.04
Return on Equity	11.83	11.83	11.83	11.83	11.83
Interest on Working Capital	0.57	0.52	0.47	0.46	0.52
O&M Expenses	1.95	2.02	2.09	2.16	2.24
Total	34.70	33.42	32.37	31.64	31.07

(₹ in lakh)

Asset-2	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	7.48	7.48	7.48	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	30.02	30.02	30.02	0.00	0.00
Interest on Working Capital	1.38	1.31	1.25	0.78	0.93
O&M Expenses	18.63	19.21	19.95	20.62	21.36
Total	57.50	58.01	58.69	21.40	22.29



Filing Fee and Publication Expenses

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

Licence Fee and RLDC, Fees and Charges

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

Service Tax

40. The Petitioner has sought liberty to recover service tax on transmission charges separately from the Respondents, if at any time service tax on transmission is withdrawn from the negative list in the future.

41. We have considered the Petitioner's submission. Since the service tax is not levied on transmission of electricity, and service tax has been subsumed under the GST Act, the Petitioner's prayer for billing and recovery of service tax on transmission charges from the DICs/ beneficiaries is rendered infructuous.

Sharing of transmission charges:

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



transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, the 2010 Sharing Regulations have been repealed, and the sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the transmission charges approved in this order for the transmission assets shall be recovered in accordance with the applicable Sharing Regulations as per Regulation 43 of the 2014 Tariff Regulations and Regulation 57(2) of the 2019 Tariff Regulations. Further, the transmission charges allowed in this order shall be adjusted against the ARR approved by the State Commission.

43. We observe that once the transmission charges of non-ISTS lines are included in the ISTS pool, the availability of such lines needs to be verified by the respective RPC, and recovery of tariff should be linked with its availability, for which necessary mechanisms may be put in place by the RPC. We direct that YTC of such intra-State lines shall be included in the PoC Pool based on the availability of each of the lines to be certified by the ERPC in terms of the provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, as applicable.

44. We further direct the Petitioner to approach the WBERC for the adjustment of such recovery against the ARR of the respective years of the Petitioners.

45. To summarize, the Annual Fixed Charges (AFC) allowed in respect of the transmission asset for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)							
AFC		Line Length (Ckm)	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1 (Claimed)*		98.6	172.39	172.10	171.80	171.64	171.61
Asset-1A	(Allowed)	94.726	215.51	216.98	218.47	220.34	222.90
Asset-1B	(Allowed)	3.874	34.70	33.42	32.37	31.64	31.07



		(₹ in lakh)					
AFC			2019-20	2020-21	2021-22	2022-23	2023-24
Asset-2	(Claimed)	73.90	47.57	47.67	48.61	44.55	43.60
	(Allowed)		57.50	58.01	58.69	21.40	22.29

* The LILO of the 400 kV Kolaghat-Baripada S/C Transmission Line (Asset) was loaded at Kharagpur 400 kV Sub-station on 28.4.2012 and due to implementation of LILO, the length of the transmission line under the inter-state transmission system got modified leading to the line length of 400 kV Kharagpur-Baripada (ISTS portion) to 98.6 km (Asset-1A: 94.726 km and Asset-1B: 3.874 km)

46. The Annexures to this order form part of the order.

47. This order disposes of Petition No. 324/TT/2023, in terms of the above discussions and findings.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson

Annexure-I**CALCULATION OF ANNUAL TRANSMISSION CHARGES OF ASSET-1A****Asset-1A: 400 kV S/C Kolaghat-Baripada transmission line (ISTS Portion) (Original Portion)****(` In lakh)**

Rationalised cost of 400 kV line Rs lakh per km	29.69	As on	3.31.2019	Life in years		35
Transmission Line length, in km	94.73	Lapsed life	27.04	Voltage, kV-SC		400
Multiplication factor	1.00		27			
		2019-20	2020-21	2021-22	2022-23	2023-24
		1.00000				
Gross Block		2812.00	2812.00	2812.00	2812.00	2812.00
Addition during 2019-24 due to Projected ACE		0.00	0.00	0.00	0.00	0.00
Gross Block total		2812.00	2812.00	2812.00	2812.00	2812.00
Average Gross Block		2812.00	2812.00	2812.00	2812.00	2812.00
Depreciation						
Rate of Depreciation (in %)	5.28	5.28	5.28	5.28	5.28	5.28
Depreciable value	90%	2530.80	2530.80	2530.80	2530.80	2530.80
Lapsed Life as on 31.3.2019	27	27.00	28.00	29.00	30.00	31.00
Balance useful life of the asset (At the beginning of the year)		8.00	7.00	6.00	5.00	4.00
Remaining Depreciable value (At the beginning of the year)		260.56	227.99	195.42	162.85	130.28
Cumulative Depreciation (At the end of the year)	1781.68	2270.24	2302.81	2335.38	2367.95	2400.52
	749.12	32.57				
Depreciation (during the period)		32.57	32.57	32.57	32.57	32.57
Remaining Depreciable value (At the end of the year)		227.99	195.42	162.85	130.28	97.71
Interest on Loan						
Gross Normative Loan	1968.40	1968.40	1968.40	1968.40	1968.40	1968.40
Cumulative Repayment upto Previous Year		1968.40	1968.40	1968.40	1968.40	1968.40
Net Loan-Opening		0.00	0.00	0.00	0.00	0.00
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Repayment during the year		0.00	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of		7.6244	7.2725	7.1153	7.4434	7.6871



Interest on Loan (in %)							
Interest			0.00	0.00	0.00	0.00	0.00
Return on Equity							
Gross Notional Equity		843.60					
Opening Equity			843.60	843.60	843.60	843.60	843.60
Average Equity			843.60	843.60	843.60	843.60	843.60
Rate of Return on Equity (in %)			15.50	15.50	15.50	15.50	15.50
Return on Equity			130.76	130.76	130.76	130.76	130.76
Interest on Working Capital							
Maintenance Spares			7.15	7.40	7.66	7.93	8.21
O&M expenses			3.97	4.11	4.26	4.41	4.56
Receivables		45 Days	26.50	26.75	26.93	27.16	27.41
Total			37.62	38.27	38.85	39.50	40.18
Interest Rate (in %)			12.05	11.25	10.50	10.50	12.00
Interest			4.53	4.30	4.08	4.15	4.82
Annual Transmission Charges							
Depreciation			32.57	32.57	32.57	32.57	32.57
Interest on Loan			0.00	0.00	0.00	0.00	0.00
Return on Equity			130.76	130.76	130.76	130.76	130.76
Interest on Working Capital			4.53	4.30	4.08	4.15	4.82
O&M Expenses			47.65	49.35	51.06	52.86	54.75
Total			215.51	216.98	218.47	220.34	222.90



Annexure-II**CALCULATION OF ANNUAL TRANSMISSION CHARGES of ASSET-1B****ASSET-1B: 400 kV S/C Kolaghat-Baripada transmission line (ISTS Portion) (Loop Out Portion)**

(₹ in lakh)

Rationalised cost of 400 kV line ₹ lakh per km	65.67	As on	3.31.2019	Life in years		35
Transmission Line length, in km	3.874	Lapsed life	6.93	Voltage, kV-SC		400
Multiplication factor	1.00		6			
		2019-20	2020-21	2021-22	2022-23	2023-24
		1.00000				
Gross Block		254.40	254.40	254.40	254.40	254.40
Addition during 2019-24 due to Projected ACE		0.00	0.00	0.00	0.00	0.00
Gross Block total		254.40	254.40	254.40	254.40	254.40
Average Gross Block		254.40	254.40	254.40	254.40	254.40
Depreciation						
Rate of Depreciation (in %)	5.28	5.28	5.28	5.28	5.28	5.28
Depreciable value	90%	228.96	228.96	228.96	228.96	228.96
Lapsed Life as on 31.3.2019	6	6.00	7.00	8.00	9.00	10.00
Balance useful life of the asset (At the beginning of the year) (Year)		29.00	28.00	27.00	26.00	25.00
Remaining Depreciable value (At the beginning of the year) (Year)		148.37	134.93	121.50	108.07	94.64
Cumulative Depreciation (At the end of the year)	80.59	80.59	94.03	107.46	120.89	134.32
	148.37	6.45				
Depreciation (during the period)		13.43	13.43	13.43	13.43	13.43
Remaining Depreciable value (At the end of the year)		134.93	121.50	108.07	94.64	81.20
Interest on Loan						
Gross Normative Loan	178.08	178.08	178.08	178.08	178.08	178.08
Cumulative Repayment upto Previous Year		80.59	94.03	107.46	120.89	134.32
Net Loan-Opening		97.49	84.05	70.62	57.19	43.76
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Repayment during the year		13.43	13.43	13.43	13.43	13.43
Net Loan-Closing		84.05	70.62	57.19	43.76	30.32
Average Loan		90.77	77.34	63.91	50.47	37.04
Weighted Average Rate of Interest on Loan (in %)		7.6244	7.2725	7.1153	7.4434	7.6871
Interest		6.92	5.62	4.55	3.76	2.85



Return on Equity							
Gross Notional Equity		76.32					
Opening Equity			76.32	76.32	76.32	76.32	76.32
Average Equity			76.32	76.32	76.32	76.32	76.32
Rate of Return on Equity (in %)			15.50	15.50	15.50	15.50	15.50
Return on Equity			11.83	11.83	11.83	11.83	11.83
Interest on Working Capital							
Maintenance Spares			0.29	0.30	0.31	0.32	0.34
O&M expenses			0.16	0.17	0.17	0.18	0.19
Receivables		45 Days	4.27	4.12	3.99	3.90	3.80
Total			4.72	4.59	4.48	4.40	4.32
Interest Rate (in %)			12.05	11.25	10.50	10.50	12.00
Interest			0.57	0.52	0.47	0.46	0.52
Annual Transmission Charges							
Depreciation			13.43	13.43	13.43	13.43	13.43
Interest on Loan			6.92	5.62	4.55	3.76	2.85
Return on Equity			11.83	11.83	11.83	11.83	11.83
Interest on Working Capital			0.57	0.52	0.47	0.46	0.52
O & M Expenses			1.95	2.02	2.09	2.16	2.24
Total			34.70	33.42	32.37	31.64	30.87

Annexure-III**CALCULATION OF ANNUAL TRANSMISSION CHARGES OF
ASSET-2: 220 kV S/C Santaldih-Chandil Transmission line**

(' in lakh)

Rationalised cost of 400 kV line ` lakh per km	24.26	As on	3.31.2019	Life in years		35
Transmission Line length, in km	73.900	Lapsed life	32.00	Voltage, kV-SC		220
Multiplication factor	0.36		32			
		2019-20	2020-21	2021-22	2022-23	2023-24
		1.00000				
Gross Block		645.54	645.54	645.54	645.54	645.54
Addition during 2019-24 due to Projected ACE		0.00	0.00	0.00	0.00	0.00
Gross Block total		645.54	645.54	645.54	645.54	645.54
Average Gross Block		645.54	645.54	645.54	645.54	645.54
Depreciation						
Rate of Depreciation (in %)	5.28	5.28	5.28	5.28	5.28	5.28
Depreciable value	90%	580.99	580.99	580.99	580.99	580.99
Lapsed Life as on 31.3.2019	32	32.00	33.00	34.00	35.00	36.00
Balance useful life of the asset (At the beginning of the year) (Year)		3.00	2.00	1.00	0.00	0.00
Remaining Depreciable value (At the beginning of the year) (year)		22.43	14.95	7.48	0.00	0.00
Cumulative Depreciation (At the end of the year)	409.02	558.56	566.03	573.51	580.99	580.99
	171.97	7.48				
Depreciation (during the period)		7.48	7.48	7.48	0.00	0.00
Remaining Depreciable value (At the end of the year)		14.95	7.48	0.00	0.00	0.00
Interest on Loan						
Gross Normative Loan	451.88	451.88	451.88	451.88	451.88	451.88
Cumulative Repayment upto Previous Year		451.88	451.88	451.88	451.88	451.88
Net Loan-Opening		0.00	0.00	0.00	0.00	0.00
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Repayment during the year		0.00	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan (in %)		7.6244	7.2725	7.1153	7.4434	7.6871
Interest		0.00	0.00	0.00	0.00	0.00
Return on Equity						
Gross Notional Equity	193.66					



Opening Equity			193.66	193.66	193.66	193.66	193.66
Average Equity			193.66	193.66	193.66	193.66	193.66
Rate of Return on Equity (in %)			15.50	15.50	15.50	15.50	15.50
Return on Equity			30.02	30.02	30.02	30.02	30.02
Interest on Working Capital							
Maintenance Spares			2.79	2.88	2.99	3.09	3.20
O&M expenses			1.55	1.60	1.66	1.72	1.78
Receivables		45 Days	7.07	7.15	7.24	6.39	6.49
Total			11.42	11.63	11.89	11.20	11.47
Interest Rate (in %)			12.05	11.25	10.50	10.50	12.00
Interest			1.38	1.31	1.25	1.18	1.38
Annual Transmission Charges							
Depreciation			7.48	7.48	7.48	0.00	0.00
Interest on Loan			0.00	0.00	0.00	0.00	0.00
Return on Equity			30.02	30.02	30.02	30.02	30.02
Interest on Working Capital			1.38	1.31	1.25	1.18	1.38
O&M Expenses			18.63	19.21	19.95	20.62	21.36
Total			57.50	58.01	58.69	51.81	52.75

