

**Central Electricity Regulatory Commission
New Delhi**

Petition No. 288/TT/2023

Coram:

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

Date of Order: 26.02.2025

In the matter of:

Petition for approval of tariff for inclusion of the transmission assets in computation of Point of Connection (PoC) Charges and Losses as per the Commission's order dated 12.5.2017 in Petition No. 07/SM/2017 for inclusion in PoC charges in accordance with the Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010 and amendments made thereto, read with Regulations 111 to 113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

**Odisha Power Transmission Corporation Limited,
Janpath, Bhubaneswar,
Odisha-751022.**

...Petitioner

Vs.

1. **Power Grid Corporation of India Limited,**
'Saudamini', Plot No. 2, Sector-29,
Gurugram, Haryana-122001.
2. **Central Transmission Utility of India Limited,**
'Saudamini', Plot No. 2, Sector 29,
Gurugram, Haryana-122001.
3. **Jharkhand State Electricity Board,**
Engineering Building, Dhurwa,
Ranchi-834009.
4. **West Bengal State Electricity Distribution Company Limited,**
Bidyut Bhavan, 8th Floor,
Bidhanagar, Kolkata-700091.
5. **GRIDCO Limited,**
Janpath, Bhubaneswar-751022.

...Respondents



Parties present : Shri R.K Mehta, Advocate, OPTCL
 Ms. Himanshi Andley, Advocate, OPTCL
 Ms. Banishree Pradhan, OPTCL
 Ms. Tamashree Singh, OPTCL

ORDER

The Petitioner, Odisha Power Transmission Corporation Limited (OPTCL), has filed the instant Petition for approval of the transmission tariff for the 2014-19 period in respect of the following nine nos. non-ISTS lines owned by it carrying ISTS power for their inclusion in computation of Point of Connection (PoC) Charges and Losses in accordance with the Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses), Regulations 2010 (hereinafter referred to as “the 2010 Sharing Regulations”) and amendments made thereto, read with Regulations 111 to 113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999:

Sl. No.	Name of the Line	Voltage Level	Connecting Status	Ckt km	Types of Conductor	COD
1	Indravati-Indravati PG S/C	400	Odisha, AP	3.970	Twin ACSR Moose	1999
2	Rengali-Keonjhar-S/C	400	Odihsa, WB	115.530	Twin ACSR Moose	1995
3	Keonjhar-Baripada- S/C	400	Odihsa, WB	104.243	Twin ACSR Moose	1995
4	Baripada-Kharagpur (Upto Odisha Border) S/C	400	Odihsa, WB	21.727	Twin ACSR Moose	1995
5	Jaynagar- Jeypore PGCIL D/C	220	Odihsa, CTU	15.460	ACSR Zebra	1990
6	Rengali-Rengali PGCIL D/C	220	Odihsa, CTU	2.000	ACSR Zebra	1997
7	Balimela PH-U. Sileru S/C	220	Odihsa, AP	24.760	ACSR Zebra	1982*
8	Joda-JSPL S/C	220	Odihsa, JSEB	14.110	ACSR Zebra	1984
9	Joda-Kenduposi S/C	132	Odihsa, JSEB	49.900	ACSR Panther	1985

**The Petitioner’s affidavit dated 23.10.2024, states that the commercial operation date (COD) of Asset-7 was inadvertently mentioned as 1982 instead of 1990. Accordingly, we have considered in this order the COD of Asset-7 as 1982.*



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

- (a) *Determine the Annual Fixed Charge (AFC) / Yearly Transmission Charge (YTC) in respect of the nine (9) nos. ERPC certified Non-ISTS lines of the Petitioner OPTCL for Tariff period 01.04.2014 to 31.03.2019 in accordance with CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2014 and Amendments made thereto;*
- (b) *Direct the CTU and the Implementing Agency (NLDC/POSOCO) to include the AFC/YTC so determined in the PoC Computation and disburse the same to OPTCL after collecting from DICs;*
- (c) *Direct refund of the application fees amounting to Rs. 25,73,700/- (Rs 24,09,000/- deposited against Petition No. 141/TT/2019 +Rs. 1,64,700 /-balance amount from filing fee of petition no.25/TT/2018) to the petitioner*
- (d) *Pass such other order/s, as this Commission deems just and proper in the facts and circumstances of the 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, had directed as under:

"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) The Commission, vide order dated 12.5.2017 in Petition No. 07/SM/2017, directed the Respondents to file the tariff Petitions for the lines already certified



by the RPCs for consideration under the PoC as per the 2014 Tariff Regulations, along with certain information on affidavit by 9.6.2017.

- (c) The Petitioner had earlier filed Petition No. 25/TT/2018 for approval of the transmission tariff of eleven non-ISTS lines carrying ISTS power for the 2014-19 period for their inclusion in the computation of the PoC charges in accordance with the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations 2014 (hereinafter referred to as “2014 Tariff Regulations”). The Petitioner failed to furnish the Eastern Regional Power Committee (ERPC) certificate in respect of its lines carrying ISTS power, and as such the Commission directed it to submit the same. However, the Petitioner did not submit the same. Hence, the Commission, vide its order dated 17.9.2018, disposed of Petition No. 25/TT/2018, granting liberty to the Petitioner to submit the ERPC certificates certifying that the transmission lines owned by it are carrying the ISTS power.
- (d) Thereafter, the Petitioner filed Petition No. 141/TT/2019 for the determination of the Annual Fixed Charge (AFC)/ Yearly Transmission Charge (YTC) in respect of the nine (9) nos. ERPC certified non-ISTS lines of the Petitioner for the 2014-19 tariff period in accordance with the 2010 Sharing Regulations. The Commission, vide order dated 27.5.2020, disposed of the said Petition, observing that the Petitioner neither submitted the required information nor sought any extension of time for filing the information even after the expiry of the two months time demonstrated that the Petitioner was either not in a position to submit the requisite information or was not interested in pursuing the matter. The relevant extracts of the said order are as follows:

“7. The petition was heard on 13.2.2020 and the Commission, through RoP, directed the petitioner to submit the following information by 20.3.2020:



“(i) What was the original purpose of constructing these lines? Submit the relevant documents in this regard.

“(ii) Is there any agreement to transfer power to other region/State through these lines? If so, submit a copy of the same.

“(iii) Whether these lines are being utilized?

“(iv) COD of Assets-7 and 8 as per previous petition was 1995 and 1982 respectively, whereas the COD indicated in the instant petition is different? Clarify the same.”

8. OPTCL has not submitted the information sought vide RoP dated 13.2.2020 even after lapse of more than two months from the due date. Further, OPTCL has not sought any time extension to file the information. In our view, details as sought vide ROP dated 13.2.2020 are material requirements for deciding the petition Not having submitted the required information or having sought any time extension for filing the information even after more than two months have elapsed, demonstrates that either OPTCL is not in a position to furnish the requisite information or is not interested in pursuing the instant petition. Therefore, we dispose of the instant petition.

9. As regards OPTCL’s request to refund the application fees amounting to Rs.25,73,700/- deposited against Petition No. 25/TT/2018, the same shall be adjusted towards the application fees to be paid by OPTCL in future.

10. Accordingly, the Petition No.141/TT/2019 is disposed of.”

- (e) The Petitioner filed Interlocutory Application (IA) No. 27 of 2022 in Petition No. 141/TT/2019, seeking recall of the order dated 27.5.2020 in Petition No. 141/TT/2019. The Commission, vide order dated 4.1.2023, disposed of the said IA, observing that the IA cannot restore the Petition and the reliefs sought by the Petitioner cannot be granted through the said IA. The relevant extracts of the order dated 4.1.2023 in IA No. 27 of 2022 are as under:

“6. We have considered the submissions of OPTCL. OPTCL through the instant IA is seeking recall of the order dated 27.5.2020 in Petition No.141/TT/2019 and approve transmission tariff for 2014-19 tariff period for the nine non-ISTS transmission lines owned by OPTCL, which are carrying ISTS power. We have considered that by this present IA, we cannot restore the Petition No. 141/TT/2019 and the reliefs sought by the Petitioner cannot be granted through the instant IA. The petitioner is at liberty to file a fresh petition for the relief in accordance with law.

7. As regards OPTCL’s prayer for refund of the application fees amounting to Rs.25,73,700/- deposited in Petition No. 25/TT/2018, the Commission in order dated 27.5.2020 in Petition No.141/TT/2019 has already observed that the same shall be adjusted towards the application fees to be paid by OPTCL in future.



8. This order disposes of IA No. 27/IA/2022 in Petition No. 141/TT/2019 in view of the above discussions and findings.”

- (f) Accordingly, the Petitioner has filed the instant Petition for approval of the transmission tariff for the 2014-19 period in respect of the following nine nos. non-ISTS lines (hereinafter referred to as the ‘transmission assets’) owned by it, which carried ISTS power for their inclusion in the computation of PoC Charges and Losses in accordance with the 2010 Sharing Regulations:

Sl. No.	Name of the Line	Voltage Level	Connecting Status	Ckt km	Types of Conductor	COD
1	Indravati-Indravati PG S/C	400	Odisha, AP	3.970	Twin Moose ACSR	1999
2	Rengali-Keonjhar- S/C	400	Odisha, WB	115.530	Twin Moose ACSR	1995
3	Keonjhar-Baripada- S/C	400	Odisha, WB	104.243	Twin Moose ACSR	1995
4	Baripada-Kharagpur (Upto Odisha Border) S/C	400	Odisha, WB	21.727	Twin Moose ACSR	1995
5	Jaynagar-Jeypore PGCIL D/C	220	Odisha, CTU	15.460	ACSR Zebra	1990
6	Rengali-Rengali PGCIL DC	220	Odisha, CTU	2.000	ACSR Zebra	1997
7	Balimela PH-U. Sileru S/C	220	Odisha, AP	24.760	ACSR Zebra	1990
8	Joda-JSPL S/C	220	Odisha, JSEB	14.110	ACSR Zebra	1984
9	Joda-Kenduposi S/C	132	Odisha, JSEB	49.900	ACSR Panther	1985

4. The Respondents include Distribution Licensees, Power Departments, Power Utilities, and Transmission Licensees that receive transmission services from the Petitioner, primarily benefiting the Eastern Region.

5. The Petitioner has served a copy of the Petition on the Respondents 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. No reply has been received from any of the Respondents.

6. The hearing in the matter was held on 9.9.2024, and the order was reserved. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 12.4.2023 and subsequent affidavits dated 5.8.2024 and 23.10.2024, as well as written note of arguments dated 6.9.2024.

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

8. The Petitioner, in the instant Petition, has prayed for approval of the transmission tariff for the period from 2014-15 to 2018-19 for the transmission assets, i.e., nine nos. non-ISTS lines carrying ISTS power. The ERPC vide letter dated 12.10.2018 certified the following nine nos. non-ISTS transmission lines carrying ISTS power for the 2014-19 tariff period:

Sr. No.	Name of Line	Remarks
1	400 kV Indravati-Indravati S/C	-
2	400 kV Rengali-Keonjhar S/C	-
3	400 kV Keonjhar-Baripada S/C	-
4	400 kV Baripada-Kharagpur S/C	Natural ISTS
5	220 kV Jaynagar-Jeypore D/C	-
6	220 kV Rengali-Rengali D/C	-
7	220 kV Balimela PH-U. Sileru S/C	Natural ISTS
8	220 kV Joda-JSPL S/C	-
9	132 kV Joda-Kenduposi S/C	Natural ISTS

9. The Petitioner, vide affidavit dated 23.10.2024, has submitted the 'Single Line Diagram' and the details of the power flow of the transmission assets/transmission lines for the 2014-19 tariff period, which are as follows:



Asset Name	Energy in MU from 1.4.2014 to 31.3.2015	Energy in MU from 1.4.2015 to 31.3.2016	Energy in MU from 1.4.2016 to 31.3.2017	Energy in MU from 1.4.2017 to 31.3.2018	Energy in MU from 1.4.2018 to 31.3.2019
Asset-1: 400 kV Indravati PH - Indravati PG S/C transmission line	1006.578	106.9	-43.749	-2226.733	561.396
Asset-2: 400 kV Rengali-Keonjhar S/C transmission line	-1275	-1421	-852	-870	-998
Asset 3: 400 kV Keonjhar-Baripada PG S/C transmission line	1270	1418	843	855	953
Asset 4: 400 kV Baripada-Kharagpur S/C transmission line	2109	1845	706	647	1144
Asset 5: 220 kV Jaynagar- Jeypore PG D/C transmission line	813.833	104.483	272.108	842.705	1324.822
Asset 6: 220 kV Rengali-Rengali PG D/C transmission line	Idle charge circuit				
Asset 7: 220 kV Balimela PH- Upper. Sileru S/C transmission line					
Asset 8: 220 kV Joda-JSPL S/C transmission line	572.574	682.026	796.505	734.428	854.394
Asset 9: 132 kV Joda-Kenduposi S/C transmission line	1.032	15.025	84.474	137.151	85.464

(+) Positive means export energy from first sub-station of the line
(-) Negative means import energy to first sub-station of the line.

10. The Petitioner has submitted the details regarding the construction of the transmission line and the Power Supply Agreement entered into between the two States. The Petitioner has submitted that Assets 1 to 7 were part of a plan to strengthen the transmission system in the Eastern Region for power export to the Southern Region. Assets-1 to 6 are related to hydropower stations in Odisha (Rengali, Upper Kolab, and Indravati), which are connected to the ISTS through these transmission lines. The Petitioner has further submitted that Assets-2, 3, and 4 were created as a result of the commissioning of LILO of Sub-stations at Keonjhar, Baripada, and Kharagpur, using the original 400 kV SC Rengali-Kolaghat line, a natural ISTS line. Additionally, Assets- 4, 7 and 9 are natural ISTS lines, and their metering and energy accounting are managed at the regional level by ERLDC/ERPC. The Petitioner has also submitted that the status of



the original 220 kV SC Joda-Jamshedpur line was altered due to a LILO arrangement at JSPL, resulting in the creation of Asset-8. The summary of the transmission assets and their purposes are as follows:

Transmission Line	Purpose/Description
400 kV Indravati-Indravati PG	Power evacuation from Indravati PH to ISTS in case of 220 kV line failure.
400 kV Rengali-Keonjhar S/C	Bilateral exchange of Odisha power to West Bengal and the national grid.
400 kV Keonjhar-Baripada	
400 kV Baripada-Kharagpur	
220 kV Jaynagar-Jaypore PG	Evacuation of power during high hydro generation and drawl during high thermal generation.
220 kV Rengali-Rengali PG	Export of Odisha Hydro Power to West Bengal & ISTS via Kolaghat 400 kV Sub-station.
220 kV Balimela PH-U. Sileru S/C	Evacuation/Export of Odisha Power to the State of Andhra Pradesh (Erstwhile).
220 kV Joda-JSPL S/C	Bilateral exchange of power with JSEB (Earlier BSESB).
132 kV Joda-Kenduposi S/C	Export of Odisha Power to JSEB.

11. We have considered the Petitioner's submissions and have perused Regulation 7(1)(n) of the 2010 Sharing Regulations, which provides as under:

“(n) For the computation of transmission charges at each node as per Hybrid Methodology, cost of ISTS transmission licensees whose lines feature on the Basic Network shall be considered:

Provided that in case of STU lines which are physically inter-State lines and whose tariff is approved by the Commission, such tariff shall be considered for computation of PoC charges:

Provided further that in case of non-ISTS lines (lines owned by STUs but being used for carrying inter-State power as certified by respective RPCs), the asset-wise tariff as approved by the respective State Commission shall be considered. Where asset-wise tariff is not available, the tariff as computed by the Commission based on the ARR of the STUs (as approved by respective State Commissions) by adopting the methodology similar to the methodology used for ISTS transmission licensees shall be considered. The transmission charges received by the concerned STU on this account shall be adjusted in its approved Annual Revenue Requirement.”

12. Further, Para 2.1.3 of Annexure-I of the 2010 Sharing Regulations provides as under:

*“.....
Certification of non-ISTS lines carrying inter-State power, which were not approved by the RPCs on the date of notification of the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2009, shall be done on the basis of load flow studies. For this purpose, STU shall put up proposal to the respective RPC Secretariat for approval. RPC Secretariat, in consultation with RLDC, using WebNet Software would examine the proposal. The results of the load flow studies and participation*



factor indicating flow of Inter State power on these lines shall be used to compute the percentage of usage of these lines as inter State transmission. The software in the considered scenario will give percentage of usage of these lines by home State and other than home State. For testing the usage, tariff of similar ISTS line may be used. The tariff of the line will also be allocated by software to the home State and other than home State. Based on percentage usage of ISTS in base case, RPC will approve whether the particular State line is being used as ISTS or not. Concerned STU will submit asset-wise tariff. If asset wise tariff is not available, STU will file petition before the Commission for approval of tariff of such lines. The tariff in respect of these lines shall be computed based on Approved ARR and it shall be allocated to lines of different voltage levels and configurations on the basis of methodology which is being done for ISTS lines.”

13. In view of the above, the certification of non-ISTS lines carrying inter-State power will be carried out by the RPC Secretariat based on the proposal put up by the STU. The RPC Secretariat, in consultation with the RLDC and based on the load flow study using WebNet Software, will examine the percentage of usage of non-ISTS lines by home State and other than home State and, accordingly, issue certification for non-ISTS lines carrying inter-State power.

14. We observe that ERPC issued a certification of non-ISTS lines carrying inter-State power on 12.10.2018 for the year Financial Years (FYs) 2014-15, 2015-16, 2016-17, 2017-18, and 2018-19. The ERPC's letter dated 12.10.2018 is extracted as follows:





ପୂର୍ବ ଓଡ଼ିଶା ବିଦ୍ୟୁତ୍ କମିଟି
Eastern Regional Power Committee
14, ଗୋଲ୍ଫ କ୍ଲବ୍ ରୋଡ୍, ଚାଲିସୁନି, କୋକଟା-700033
14 Golf Club Road, Talichhari, Kolkata-700033

Tel No.:033-24239651, 24239659 FAX No.:033-24239652, 24239653 Web: www.erpco.gov.in

No. ERPC/COM-I/non-ISTS/2018/5246

Date: 12.10.2018

To,

✓ Sr. General Manager (RT&C),
OPTCL, Janpath,
Bhubaneswar- 751022

Sub: Certification of OPTCL lines as non-ISTS lines carrying ISTS power – reg

Ref: Your letter No RT&C-NON-ISTS/2017/281 dated 21.08.2018

Sir,

With reference to your above letter it is to inform that in line with 34th TCC decision, ERPC Secretariat and ERLDC conducted the load flow study using WebNet software for all the quarters of 2014-15, 2015-16, 2016-17, 2017-18 & 2018-19 (upto Q2).

Further, in 129th OCC held on 17.01.2017 it was decided that STU lines carrying ISTS power greater than 50% of the total power as per the WebNet software of the validated data for each quarter will be considered as non-ISTS line carrying ISTS power. The same was also approved by 35th TCC/ERPC.

Subsequently, the summary of the results for percentage utilization of the OPTCL transmission line by Odisha to meet the own demand was placed & discussed in 150th OCC & 38th CCM of ERPC held on 11.10.18 & 12.10.18 respectively. Accordingly, OCC & CCM agreed to certify the following elements as non-ISTS line carrying ISTS power for the tariff period 2014-19.

SN	Name of Line	Remarks
1	400 kV Indravati-Indravati S/C	
2	400 kV Rengali-Keonjhar S/C	
3	400 kV Keonjhar-Baripada	
4	400 kV Baripada-Kharagpur S/C	Natural ISTS
5	220 kV Jeypore-Jaynagar D/C	
6	220 kV Rengali-Rengali D/C	
7	220 kV Balimela-U.Sileru S/C	Natural ISTS
8	220 Joda-Jindal S/C	
9	132 kV Joda-Kenduposi S/C	Natural ISTS

Thanking you

Yours faithfully,

J. Bandyopadhyay 12/10/18
(J. Bandyopadhyay)
Member Secretary

15. According to the power flow details submitted by the Petitioner, it is observed that there is no power flow concerning Assets-6 and 7 from FYs 2014-15 to 2018-19, and the 220 kV Rengali-Rengali PG D/C and 220 kV Balimela PH-Upper Sileru S/C transmission lines are idly charged. Therefore, we are not inclined to allow tariffs for Assets-6 and 7 for the 2014-19 period in this order.

16. Taking into consideration the ERPC certificate dated 12.10.2018, the following seven nos. non-ISTS transmission lines have been considered as the ISTS lines for allowing tariff for the 2014-19 tariff period in the instant order:



Assets	Name of the Transmission Line
Asset-1	400 kV Indravati PH-Indravati PG S/C transmission line
Asset-2	400 kV Rengali-Keonjhar S/C transmission line
Asset-3	400 kV Keonjhar-Baripada PG S/C transmission line
Asset-4	400 kV Baripada-Kharagpur S/C transmission line
Asset-5	220 kV Jaynagar-Jeypore PG D/C transmission line
Asset-8	220 kV Joda-JSPL S/C transmission line
Asset-9	132 kV Joda-Kenduposi S/C transmission line

Capital Cost

17. The Petitioner has submitted that the nine nos. of transmission lines are very old. According to the Petitioner, Assets-2 to 5 and Assets-7 to 9 were commissioned in the regime of the erstwhile Orissa State Electricity Board (OSEB), while Assets-1 and 6 were commissioned by GRIDCO during the years 1999 and 1997, respectively. The Petitioner has submitted that the capital cost data and additional cost of these transmission lines are not available.

18. We have considered the Petitioner's submissions and have gone through the record. We note that the Commission vide order dated 22.6.2018 in Petition No. 155/TT/2017 determined the tariff for the 2014-19 tariff period in respect of 220 kV S/C Joda-Ramachandrapur line and 220 kV S/C Jindal-Jamshedpur line for the 2014-19 tariff period on the basis of a methodology, adopted and followed in the similar cases of inter-State transmission lines. The relevant extracts of the said order dated 22.6.2018 are as follows:

"Tariff Methodology:

14. 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 transmission lines taken together make it around 8.3 % of the total line length owned by PGCIL. Further, 132 kV transmission lines 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 transmission line 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	₹ lakh/km
1.	400 kV D/C TL	1.39 X
2.	220 kV D/C TL	0.57 X
3.	220 kV S/C TL	0.36 X
4.	132 kV D/C TL	0.43 X
5.	132 kV S/C TL	0.31 X

15. Therefore, for arriving at the costs of transmission lines of other voltage levels and circuit configurations, the average transmission line 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.

16. Based on respective year end data, average transmission line length during the year has been worked out. Difference between a particular year's average transmission line 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 transmission line length to arrive at the Average Cost of transmission line (in ₹ 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 transmission line cost during that year. Although the Commission has relied on PGCIL's Annual Reports, there are certain deviations in the cost data worked out. PGCIL was incorporated in 1980-90 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 transmission line 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 transmission line has been back derived considering the 1992-93 average cost. Similarly, abnormal dip/spikes in the transmission line cost for the years 1996-97, 2001-02 and 2004-05 has been corrected by considering the average values of the transmission line costs in the immediate preceding and succeeding years.

17. 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 CERC (Terms & Conditions of Tariff) Regulations, 2014 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 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 transmission line is more than or equal to 25 years as on 1.4.2014, only O & M Expenses and IWC shall be allowed in lieu of complete tariff.”

18. Thus, in effect, this is a normative tariff working methodology which shall be applied in those cases where the audited capital cost information is not available.”

19. The Appellate Tribunal for Electricity (APTEL), vide its common judgment dated 14.11.2022 in Appeal Nos. 267 and 274 of 2018 filed by RRVPNL and Appeal No. 415 of 2019 filed by MPPTCL had set aside the abovementioned methodology of allowing the tariff for the deemed ISTS lines reckoning their useful life as 25 years. The APTEL, in the said judgment, had observed that the useful life of the State-owned Deemed ISTS lines shall be the same as for the ISTS lines specified in the 2014 Tariff Regulations, which is 35 years. The relevant portions of the said judgment of APTEL are 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.”

20. Being aggrieved with the APTEL’s common judgment dated 14.11.2022 in Appeal Nos. 267 of 2018 and 274 of 2018, RRVPNL filed Review Petitions before the APTEL as Review Petition Nos. 12 of 2022 and 13 of 2022 respectively. The grounds for review, as recorded by APTEL in its judgment 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.”

21. The APTEL vide judgment dated 6.7.2023 allowed Review Petition No. 12 of 2022 and Review Petition No. 13 of 2022 filed by RRVPNL, while considering the similar issue raised by MPPTCL in Appeal No. 415 of 2019, remanded 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 reconsideration of the Commission. The relevant portions of the judgment are 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 alongwith IAs, if any, are disposed of accordingly.”

22. As per the directions of the APTEL in the judgment dated 14.11.2022 in Appeal



No.267 of 2018 and batch matters and the subsequent judgment dated 6.7.2023 in Review Petition Nos. 12 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 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 FY 1979-80 onwards till 31.3.2014. As per the earlier methodology, the capital cost has been approved by the Commission from FY 1989-90 onwards till 31.3.2014. Further, in the earlier methodology, due to the unavailability of the base data for the FY 1989-90, FY 1990-91, and FY 1991-92, the average cost of the transmission lines has been back derived considering the average cost from FY 1992-93 onwards up to FY 2013-14 at a Compound Annual Growth Rate (CAGR) of 5.17%. The methodology for deriving the average cost of transmission lines for FY 1989-90, FY 1990-91, and FY 1991-92 has been extrapolated backwards to derive the average cost of transmission lines for the FY 1979-80 to FY 1988-89. Accordingly, the average capital cost of the transmission lines for the FY 1979-80, FY 1980-81, FY 1981-82, FY 1982-83, FY 1983-84, FY 1984-85, FY 1985-86, FY 1986-87, FY 1987-88 and FY 1988-89 has been back derived by applying the Compound Annual Growth Rate (CAGR) factor of 5.17%. The capital cost of the transmission lines, which have not been completed for 35 years, is worked out as per the said methodology. Accordingly, the useful life of the transmission assets covered in the instant tariff Petition as on 1.4.2014 and 31.3.2019 is as follows:

Asset Name	COD	The useful life of 35 years completed as on *
Asset-1: 400 SC Indravati-Indravati PG (3.97 km)	1999	1.4.2034
Asset-2: 400 kV Rengali-Keonjhar-CS (115.53 km)	1995	1.4.2030



Asset-3: 400 kV Keonjhar-Baripada- (104.243 KM)	1995	1.4.2030
Asset-4: 400 kV Baripada-Kharagpur (Upto Odisha Border) (21.727 KM)	1995	1.4.2030
Asset-5: 220 kv Jaynagar-PGCIL-DC (15.46 KM)	1990	1.4.2025
Asset-8: 220 kV Joda-JSPL-SC (14.11 km.)	1984	1.4.2019
Asset-9 132 kV Joda-Kenduposi-SC (49.9 km)	1985	1.4.2020

** Due to non-submission of date and month of COD of the transmission assets, 1st April has been considered for determining the useful life.*

23. According to the above table, none of the above referred seven transmission assets have completed their useful life of 35 years as on 31.3.2014, and all of them will complete their useful life of 35 years beyond 31.3.2019.

24. The Petitioner has not claimed ACE for the transmission assets covered in the instant Petition.

25. It is pertinent to mention here that the determination of tariff of the deemed inter-State transmission lines connecting two States, whose COD is before 31.3.2014 and where the audited capital cost information is not available, has to be determined on the basis of the methodology adopted in a similar Petition vide order dated 10.5.2024 in Petition No. 88/TT/2017. In the said order, the Commission approved the methodology for the benchmark cost on the basis of the transmission lines owned by the Petitioner (PGCIL). In the approved methodology, in a similar case, the useful life of the transmission line has been considered as 35 years, and for the lines more than 35 years, only O&M Expenses and Interest on Working Capital (IWC) have been decided to be allowed. For the transmission assets having the COD on or after 1.4.2014, the tariff has been decided to be allowed on the basis of the audited financial capital cost. The relevant portion of the order dated 10.5.2024 in Petition No. 88/TT/2017 is extracted hereunder:

“9. The Commission, in an order dated 19.12.2017 in Petition No. 88/TT/2017, while approving tariff for eleven transmission lines connecting two States/ deemed ISTS lines owned by the Petitioner for the period 2014-15 to 2018-19, adopted the methodology followed in the case of other States, where the useful life of the transmission lines is



considered as 25 years. The relevant portion of the order dated 19.12.2017 is as follows:

“6. We have considered the submissions made by MPPTCL. MPPTCL has claimed transmission tariff for eleven inter-State transmission lines for the 2014-19 tariff period. Commission vide order dated 14.3.2012 in Petition No. 15/SM/2012 had directed 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 to file petitions under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 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. Some of the owners/developers of these lines had filed tariff petitions and accordingly, tariff was allowed for the period from 2011-12 to 2013-14. Further, the owners/developers of these lines were directed to file petitions for determination of tariff for the 2014-19 tariff period.

7. Commission has, in general, observed that petitioner States have been submitting the necessary information, required for determining the annual transmission charges of their inter-state transmission lines, in contrasting manner thereby causing divergence in working out the tariff. In some cases it was observed that the data related to funding and depreciation was not available and in other cases the assets have already completed, or nearing, their useful life. In most of the petitions, the states have expressed their inability in furnishing the audited capital cost of transmission lines where the lines are older. In such a scenario, tariff workings for older assets are believed to be ending in skewed results. It has been observed that the YTC figures emerging out by the existing methodology are on the higher side. Considering these facts, Commission has conceptualized a modified methodology for determining the tariff of States' inter-state transmission lines.

8. The methodology is broadly based on the following:

- (a) PGCIL's Annual Report data has been used as the reference data; based on which, year wise benchmark cost has been derived.
- (b) Useful life of Transmission Line has been considered as 25 years. Thus, if life is more than or equal to 25 years as on 1.4.2014, only O & M Expenses and Interest on Working Capital (IWC) shall be allowed as per the existing Tariff Regulations, in lieu of complete tariff.
- (c) It is expected that the States do have the audited financial data of recently commissioned (i.e. on or after 1.4.2014) lines.

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 length of transmission lines 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 and 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 Transmission Line taken together makes it around 8.3 % of the total line length owned by PGCIL. Further, 132 kV Transmission Lines 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 Transmission Line 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 February, 2017) suggests the following: -

	Reference cost of 400 kV S/C TL	X lakh/km
1	400 kV D/C TL	1.39 X
2	220 kV D/C TL	0.57 X
3	220 kV S/C TL	0.36 X
4	132 kV D/C TL	0.43 X
5	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 transmission line 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 State 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 transmission line 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 transmission line length to arrive at the Average Cost of transmission line (in ` 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 transmission line 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 transmission line 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 transmission line has been back derived considering the 1992-93 average cost. Similarly, abnormal dip/spikes in the transmission line cost for the years 1996-97, 2001-02 and 2004-05 has been corrected by considering the average values of the transmission line 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 2019 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 2019 Tariff Regulations, 2019 as on 1.4.2019 shall be applied for calculating the rate of interest on working capital on normative basis.*
- (viii) *O & M Expenses as per the 2019 Tariff Regulations shall be considered.*
- (ix) *Where the life of transmission line is more than or equal to 25 years as on 1.4.2014, only O & M Expenses and IWC shall be allowed in lieu of complete tariff.*

12. Thus, in effect, this is a normative tariff working methodology which shall be applied in those cases where the audited capital cost information is not available.”

10. As per the directions of APTEL in 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 determination of the transmission charges of the transmission 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 backward 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 cost of the transmission lines, which have not completed 35 years, is worked out as per the said methodology.”

26. Therefore, we proceed to determine the transmission tariff for the 2014-19 tariff period of the transmission assets.

Determination of Transmission Tariff for the Period 2014-19

27. The Petitioner has submitted that the COD of all the transmission assets is before 31.3.2014, and their audited capital cost is not available. Therefore, as per the settled methodology, the capital cost of the transmission assets 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:

(₹ in lakh)

Asset No.	Asset Name	COD*	Rationalized Cost Per Ckt. km (₹ in lakh)	Length (km)	Multi-plication Factor	Gross Block of the Asset
Asset-1	400 kV Indravati PH-Indravati PG S/C	1.4.1999	20.71	3.97	1.00	82.20
Asset-2	400 kV S/C Rengali - Keonjhar transmission line	1.4.1995	15.64	115.53	1.00	1806.40
Asset-3	400 kV S/C Keonjhar-Baripada- transmission line	1.4.1995	15.64	104.243	1.00	1629.92
Asset-4	400 kV S/C Baripada-Kharagpur (Upto Odisha Border)	1.4.1995	15.64	21.727	1.00	339.72
Asset-5	220 kV Jaynagar-PGCIL-D/C	1.4.1990	28.23	15.46	0.57	248.74
Asset-8	220 kV Joda-JSPL-S/C	1.4.1984	20.86	14.11	0.36	105.96
Asset-9	132 kV Joda-Kenduposi-S/C	1.4.1985	21.94	49.90	0.31	339.36

* Due to the non-submission of the date and month of the COD of the transmission assets, 1st April has been considered for determining the useful life.

28. Assets-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-8, and Asset-9 have already completed the 12 years of their useful life as on 1.4.2014. Therefore, no interest on loan is allowed for them during the 2014-19 tariff period.

Operation and Maintenance Expenses (O&M Expenses)

29. The details of the transmission lines including the conductors used and length considered in the instant order are as follows:

Asset No.	Name of the Line	Types of Conductor	Line length (Ckt km)
Asset-1	400 kV S/C Indravati - Indravati (PG) transmission line	Twin ACSR Moose	3.970
Asset-2	400 kV S/C Rengali-Keonjhar transmission line	Twin ACSR Moose	115.530
Asset-3	400 kV S/C Keonjhar-Baripada- transmission line	Twin ACSR Moose	104.243
Asset-4	400 kV S/C Baripada-Kharagpur (Upto Odisha Border) transmission line	Twin ACSR Moose	21.727



Asset-5	220 kV D/C Jaynagar-Jeypore (PG) transmission line	ACSR Zebra	15.460
Asset-8	220 kV S/C Joda-JSPL transmission line	ACSR Zebra	14.110
Asset-9	132 kV S/C Joda-Kenduposi transmission line	ACSR Panther	49.900

30. The O&M norms under Regulation 29(4) of the 2014 Tariff Regulations for the AC lines are as follows:

“(4) Transmission system

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

Norms for sub-stations (in Rs Lakh per bay)	2014-15	2015-16	2016-17	2017-18	2018-19
Norms for AC and HVDC lines (in Rs Lakh per km)					
Single Circuit (Twin & Triple Conductor)	0.404	0.418	0.432	0.446	0.461
Single circuit (Single conductor)	0.202	0.209	0.216	0.223	0.230
Double circuit (Single conductor)	0.303	0.313	0.324	0.334	0.346
Double circuit (Twin and Triple conductor)	0.707	0.731	0.755	0.780	0.806

31. The O&M Expenses for the transmission assets have been worked out as per the norms specified under Regulation 29(4) of the 2014 Tariff Regulations, and the same are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1	1.60	1.66	1.72	1.77	1.83
Asset-2	46.67	48.29	49.91	51.53	53.26
Asset-3	42.11	43.57	45.03	46.49	48.06
Asset-4	8.78	9.08	9.39	9.69	10.02
Asset-5	4.68	4.84	5.01	5.16	5.35
Asset-8	2.85	2.95	3.05	3.15	3.25
Asset-9	10.08	10.43	10.78	11.13	11.48

32. Accordingly, the computation of transmission charges for the transmission assets for the years 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 are as follows:

Asset-1	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	0.95	0.95	0.95	0.95	0.95
Interest on Loan	0.00	0.00	0.00	0.00	0.00



Return on Equity	3.82	3.82	3.82	3.82	3.82
Interest on Working Capital	0.18	0.18	0.18	0.19	0.19
O&M Expenses	1.60	1.66	1.72	1.77	1.83
Total	6.55	6.61	6.67	6.73	6.79

(₹ in lakh)

Asset-2	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	20.92	20.92	20.92	20.92	20.92
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	84.00	84.00	84.00	84.00	84.00
Interest on Working Capital	4.50	4.58	4.66	4.74	4.83
O&M Expenses	46.67	48.29	49.91	51.53	53.26
Total	156.09	157.79	159.49	161.19	163.01

(₹ in lakh)

Asset-3	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	18.88	18.88	18.88	18.88	18.88
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	75.79	75.79	75.79	75.79	75.79
Interest on Working Capital	4.06	4.14	4.21	4.28	4.36
O&M Expenses	42.11	43.57	45.03	46.49	48.06
Total	140.84	142.38	143.91	145.44	147.09

(₹ in lakh)

Asset-4	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3.93	3.93	3.93	3.93	3.93
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	15.80	15.80	15.80	15.80	15.80
Interest on Working Capital	0.85	0.86	0.88	0.89	0.91
O&M Expenses	8.78	9.08	9.39	9.69	10.02
Total	29.36	29.67	30.00	30.31	30.66

(₹ in lakh)

Asset-5	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2.88	2.88	2.88	2.88	2.88
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	11.57	11.57	11.57	11.57	11.57
Interest on Working Capital	0.53	0.54	0.55	0.56	0.57
O&M Expenses	4.68	4.84	5.01	5.16	5.35
Total	19.66	19.83	20.01	20.17	20.37

(₹ in lakh)

Asset-8	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1.23	1.23	1.23	1.23	1.23
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	4.93	4.93	4.93	4.93	4.93
Interest on Working Capital	0.27	0.27	0.28	0.28	0.29
O&M Expenses	2.85	2.95	3.05	3.15	3.25
Total	9.28	9.38	9.49	9.59	9.70



	(₹ in lakh)				
Asset-9	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3.93	3.93	3.93	3.93	3.93
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	15.78	15.78	15.78	15.78	15.78
Interest on Working Capital	0.91	0.93	0.95	0.96	0.98
O&M Expenses	10.08	10.43	10.78	11.13	11.48
Total	30.70	31.07	31.44	31.80	32.17

Sharing of Transmission Charges

33. 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 has 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.

34. 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 RPCs, and the recovery of the tariff should be linked with its availability, for which necessary mechanisms may be put in place by the ERPC. 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 certified by the ERPC in terms of the provisions under the 2014 Tariff Regulations as applicable.

35. We further direct the Petitioner to approach the Odisha Electricity Regulatory Commission for the adjustment of such recovery against the ARR of the respective years of the Petitioner.



36. This order disposes of Petition No. 288/TT/2023 in terms of the above discussions and findings.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson

