

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 276/TT/2020

Coram:

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

Date of Order: 04.02.2021

In the matter of:

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2019 for determination of Transmission tariff of Transmission lines connecting between Karnataka and other neighbouring states (Natural Inter State Transmission Lines) pertaining to Karnataka Power Transmission Corporation Limited (KPTCL) namely a) 220 kV S/C line from Ambewadi - Ponda (Karnataka - Goa), b) 220 kV S/C line from Ambewadi - Xyldom (Karnataka - Goa), c) 220 kV S/C line from Sedam - Tandur (Karnataka - Telangana), d) 220 kV S/C line from Allipura - Ragalapadu (Karnataka – Andhra Pradesh), e) 220 kV S/C line from Yerandanahalli - Hosur (Karnataka – Tamil Nadu), f) 220 kV S/C line from Kadakola - Kaniyampet (Karnataka - Kerala) and g) 110 kV S/C line from Konaje - Manjeshwar (Karnataka - Kerala) for the period from 1.4.2019 to 31.3.2024.

And in the matter of:

Karnataka Power Transmission Corporation Limited (KPTCL),
Kaveri Bhavan, Kempegowda Road,
Bengaluru- 560 009

.....**Petitioner**

Versus

1. Transmission Corporation of Andhra Pradesh Limited (APTRANSCO),
6th Floor, A Block, Vidyut Soudha,
Khairatabad, Hyderabad – 500 082
2. Transmission Corporation of Telangana Limited (TSTRANSCO),
6th Floor, A Block, Vidyut Soudha,
Khairatabad, Hyderabad – 500 082



3. Tamil Nadu Transmission Corporation Limited, (TANTRANSCO),
No.144, Anna Salai,
Chennai– 600 002
4. Kerala State Electricity Board,
Vidyuthi Bhavanam, Pattom,
Thiruvananthapuram – 695 004
5. Electricity Department,
Government of Goa,
Vidyuth Bhavan, Panaji,
Goa – 403 001

.....Respondents

Parties Present:

For Petitioner: Shri Sriranga, Advocate, KPTCL
Ms. Sumana, Advocate, KPTCL

For Respondent: None

ORDER

The present petition has been filed by Karnataka Power Transmission Corporation Limited (“KPTCL”) (hereinafter referred to as “the Petitioner”) seeking approval of transmission tariff for KPTCL owned following seven transmission lines connecting with other States for inter-State transmission of electricity for 2019-24 tariff period in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) and the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as “the 2010 Sharing Regulations”):

Asset-1: 220 kV S/C line from Ambewadi - Ponda (Karnataka - Goa)



Asset-2: 220 kV S/C line from Ambewadi - Xyldom (Karnataka - Goa)

Asset-3: 220 kV S/C line from Sedam - Tandur (Karnataka - Telangana)

Asset-4: 220 kV S/C line from Allipura - Ragalapadu (Karnataka – Andhra Pradesh)

Asset-5: 220 kV S/C line from Yerandanahalli - Hosur (Karnataka – Tamil Nadu)

Asset-6: 220 kV S/C line from Kadakola - Kaniyampet (Karnataka - Kerala)

Asset-7: 110 kV S/C line from Konaje - Manjeshwar (Karnataka - Kerala)

Background

2. The Petitioner is presently carrying out transmission business as the State Transmission Utility (STU) in the State of Karnataka.

3. The Petitioner had earlier filed Petition no. 24/TT/2018 claiming the transmission tariff for 2014-19 tariff period in respect of the instant seven transmission lines. The Commission vide order dated 12.6.2019 in Petition No. 24/TT/2018 approved the transmission tariff for inclusion in PoC transmission charges computation for the 2014-19 tariff period in respect of these seven transmission lines.

4. The Petitioner has made the following prayers:-

“1) Approve the Capital Cost of the Inter State Transmission Lines connecting between Karnataka and neighbouring states for Rs.5454.95 Lakhs for FY 2019-24;

2) Approve the Transmission Tariff for Assets covered under this Petition at Rs. 1569.64 Lakhs;

3) Approve the reimbursement of Expenditure by the Beneficiaries towards Petition Filing Fee and the expenses incurred on publication of Notices in the Application for approval of Tariff as per the Terms of Regulation 52 of CERC (Terms and conditions of Tariff) Regulations, 2019 and other Expenditure (if any) relating to the filing of Petition;

4) Allow the Petitioner to bill and recover any Taxes on Transmission Charges separately from beneficiaries, if Petitioner is subject to such Taxes;

5) Allow the Petitioner to bill and recover Licensee Fee separately from the beneficiaries;



6) Allow the Petitioner to file the Transmission Tariffs for next Control Period for the Assets included in the present petition with Capital Cost and Additional Capital cost incurred on the above assets.”

Submissions of the Petitioner

5. The Petitioner has submitted the following:

a) As a step towards inclusion of intra-State lines carrying inter-State electricity (natural ISTS lines) under the PoC (point of connection) mechanism, the Commission vide orders dated 14.03.2012 and 21.08.2012 in Petition No.15/Suo-Motu/2012, directed respective transmission licensees to file petition before the Commission for determination of tariff.

b) At present, it is maintaining the instant assets as part of intra-State Transmission Lines duly complying with the Rules and Regulations issued by the Karnataka Electricity Regulatory Commission (KERC).

c) The instant petition has been filed for determination of tariff for 2019-24 tariff period in respect of the following seven transmission lines connecting Karnataka with States of Goa, Andhra Pradesh, Telangana, Tamil Nadu and Kerala:

Asset No.	Name of Transmission Lines	Connecting States	Line Length in km	COD
1	220 KV S/C Line from Ambewadi – Ponda	Karnataka-Goa	60.00	15.3.1992
2	220 KV S/C Line from Ambewadi – Xyldom	Karnataka-Goa	60.00	15.3.1992
3	220 KV S/C Line from Sedam – Tandur	Karnataka-Telangana	9.00	1984
4	220 KV S/C Line from Allipura – Ragalapadu	Karnataka-Andhra Pradesh	64.00	25.9.1975
5	220 KV S/C Line from Yerandanahalli – Hosur	Karnataka-Tamil Nadu	12.60	1962
6	220 KV S/C Line from Kadakola – Kaniyampet	Karnataka-Kerala	81.00	5.3.1978



Asset No.	Name of Transmission Lines	Connecting States	Line Length in km	COD
7	110 KV S/C Line from Konaje – Manjeshwar	Karnataka-Kerala	5.50	13.10.1966

d) Most of the above Assets were constructed more than 30 years back. Subsequent to construction of these lines, termination points of some of the lines have been changed due to which actual capital cost and additional capital cost incurred for the above assets are not available separately with the Petitioner. However, the above transmission assets are being properly maintained and the following capital cost is proposed in respect of the instant assets as per data available with the Petitioner:

(₹ in lakh)

S.No.	Name of Transmission Asset	2019-20	2020-21	2021-22	2022-23	2023-24
1	220 KV S/C Ambewadi-Ponda line	787.48	787.48	787.48	787.48	787.48
2	220 KV S/C Ambewadi-Xyldom line					
3	220 KV S/C Sedam-Tandur Line	56.47	56.47	56.47	56.47	56.47
4	220 KV S/C Allipura-Ragalapadu line	37.75	37.75	37.75	37.75	37.75
5	220 KV S/C Yerandanahalli-Hosur line	1.81	1.81	1.81	1.81	1.81
6	220 KV S/C Kadakola-Kaniyampet line	202.55	202.55	202.55	202.55	202.55
7	110 KV S/C Konaje-Manjeshwar line	4.93	4.93	4.93	4.93	4.93
	Total	1090.99	1090.99	1090.99	1090.99	1090.99

6. The Petitioner has claimed following transmission charges for the instant assets:

(₹ in lakh)

S. N.	Name of Transmission Asset	2019-20	2020-21	2021-22	2022-23	2023-24
1	220 KV S/C Ambewadi-Ponda line	124.78	127.40	130.32	133.16	136.22



S. N.	Name of Transmission Asset	2019-20	2020-21	2021-22	2022-23	2023-24
2	220 KV S/C Ambewadi-Xyldom line					
3	220 KV S/C Sedam-Tandur Line	28.93	29.82	30.76	31.71	32.71
4	220 KV S/C Allipura-Ragalapadu line	42.10	43.44	44.94	46.41	47.97
5	220 KV S/C Yerandanahalli-Hosur line	26.59	27.51	28.48	29.46	30.50
6	220 KV S/C Kadakola-Kaniyampet line	56.49	57.98	59.66	61.28	63.03
7	110 KV S/C Konaje-Manjeshwar line	18.30	18.93	19.58	20.25	20.95
	Total	297.19	305.06	313.74	322.27	331.38
	Total ARR	1569.64				

7. The Petitioner has served a copy of the petition upon the respondents and notice of this application has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the public in response to the notice in newspaper. No reply to the petition has been filed by any Respondent in the matter.

8. The hearing in this matter was held on 13.7.2020 through video conference and the order was reserved.

9. This order is issued considering the submissions made in petition dated 29.11.2019 and the submissions made in affidavit dated 24.8.2020.

10. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

Analysis and Decision



11. The Commission vide order dated 12.6.2019 in Petition no. 24/TT/2018 approved the transmission tariff for 2014-19 tariff period in respect of the following seven transmission lines covered under the instant petition:

Asset No.	Name of Transmission Lines
1	220 KV S/C Line from Ambewadi – Ponda
2	220 KV S/C Line from Ambewadi – Xyldom
3	220 KV S/C Line from Sedam – Tandur
4	220 KV S/C Line from Allipura – Ragalapadu
5	220 KV S/C Line from Yerandanahalli – Hosur
6	220 KV S/C Line from Kadakola – Kaniyampet
7	110 KV S/C Line from Konaje – Manjeshwar

12. The Commission vide the aforesaid order has allowed only IWC (interest on working capital) and O&M Expenses for assets which have completed 25 years as on 1.4.2014 viz. Asset-3 to Asset-7 (mentioned in the table above) and disallowed other components of tariff. The relevant extracts of the order dated 12.6.2019 in Petition no. 24/TT/2018 are as under:

“15. Assets 3 to 7 have already completed twenty five years. Therefore, as per the above methodology, only "Interest on working capital" and "O&M Expenses" components of tariff shall be allowable for these assets. Asset-1 and Asset-2 have not completed 25 years as on 1.4.2014. Therefore, in line with the aforesaid methodology, all tariff components are being allowed till 2016-17. However, on completion of 25 years of these assets, only 2 components namely "Interest on working Capital" and "O & M Expenses" are being allowed for the year 2017-18 and 2018-19.”

13. Aggrieved by the aforesaid decision of the Commission in Order dated 12.6.2019 in Petition no. 24/TT/2018, the Petitioner had filed the review Petition No. 4/RP/2020 contending that denial of all the components of transmission tariff in respect of Assets- 3 to 7 and considering only line length and not bays while granting O&M



Expenses constitute an error apparent on the face of record which requires modification.

14. The Commission vide order dated 3.8.2020 disposed of the Review Petition No. 4/RP/2020 and held as under:

“12 The first contention of KPTCL is that the Commission should have considered the bays meant for the non-ISTS lines carrying inter-State power between Karnataka and neighbouring States while approving O&M Expenses, as the line and bay are necessary for flow of power. We have considered the contention of KPTCL. The Commission in order dated 14.3.2012 in Petition No.15/SM/2012 had clearly stated in paragraph 6 that the non-ISTS lines connecting two States would be included in the computation of PoC charges and there was no mention of the bays in the said order. Accordingly, O&M Expenses are allowed only for non-ISTS lines connecting Karnataka with neighbouring States and O&M Expenses are not allowed for bays. This methodology was adopted not only in case of Karnataka but in case of all other States uniformly. Further, the same methodology was adopted while granting tariff for the 2011-14 period for the non-ISTS lines owned by Karnataka in order dated 12.2.2013 in Petition No.225/TT/2013 and this issue was not raised by KPTCL then. The Commission is consistently of the view that tariff, including O&M Expenses would be granted only for the transmission lines and not for the bays and as such there is no error apparent in this regard.....

13.....According to this approved normative methodology, besides other things, the useful life of the transmission line is deemed to be 25 years and for transmission lines of more than 25 years old as on 1.4.2014, only O&M Expenses and IWC are allowed. In view of the above, in case of Assets-3 to 7 covered in the impugned order, which are more than 25 years old as on 1.4.2014, only O&M Expenses and IWC were allowed. Further, Assets-1 and 2 completed 25 years in 2017. Therefore, for Assets-1 and 2, RoE and other components of tariff were allowed up to 2016-17 and for the years 2017-18 and 2018-19, only IWC and O&M Expenses were allowed as per the approved normative methodology. As the same methodology has been adopted for all the States, we see no error apparent on record on this ground. Thus, review of the impugned order on this ground is also rejected.

14. In view of the above discussion, Review Petition No. 4/RP/2020 is disposed of at the stage of admission.”

15. The STU lines used for carrying inter-State power can be considered for inclusion in the PoC charges only if it is certified by RPC in terms of para 2.1.3 of the Annexure-I to Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 and the same is reproduced below:



“The line-wise YTC of the entire network shall be provided by the Transmission Licensees. In case a line is likely to be commissioned during the Application Period, the data in respect of the same, along with the anticipated COD will be provided by the CTU/ Transmission Licensee to the Implementing Agency.

For the determination of the transmission charges based on Hybrid Methodology applicable in the next Application Period, all the above data shall be provided to the Implementing Agency as per the timelines specified by the Implementing Agency.

Overall charges to be allocated among nodes shall be computed by adopting the YTC of transmission assets of the ISTS licensees, deemed ISTS licensees and owners of the non-ISTS lines which have been certified by the respective Regional Power Committee (RPC) for carrying inter-State power. The Yearly Transmission Charge, computed for assets at each voltage level and conductor configuration in accordance with the provisions of these regulations shall be calculated for each ISTS transmission licensee based on indicative cost provided by the Central Transmission Utility for different voltage levels and conductor configuration. The YTC for the RPC certified non-ISTS lines which carry inter-State power shall be approved by the Appropriate Commission. In case line-wise tariff for the RPC certified non-ISTS lines has not been specified by the Appropriate Commission, the tariff as computed for the relevant voltage level and conductor configuration shall be used. The methodology for computation of tariff of individual asset shall be similar to the methodology adopted for the ISTS transmission licensees and shall be based on ARR of the STU as approved by the respective State Commission. 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 Web Net 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.”

16. The Commission vide Order dated 12.6.2019 in Petition no. 24/TT/2018 has already approved the transmission charges for the 2014-19 tariff period in respect of the seven transmission lines covered under the instant petition based on the respective SRPC's certificates. The relevant extracts of the Order dated 12.6.2019 in Petition no. 24/TT/2018:



“12. Since, the Petitioner has furnished the SRPC’s certificate in respect 110 kV Konaje-Manjeshwar line, the same along with other six assets has been considered for the purpose of Tariff. The tariff in respect of transmission asset „220 kV Chikkodi - Kolhapur D/C Line” is not being considered for the reasons and submissions made by the Petitioner. Accordingly, following Assets have been considered for determination of transmission charges:

Assets		COD
Asset-1	220 KV S/C Line from Ambewadi – Ponda	15.3.1992
Asset-2	220 KV S/C Line from Ambewadi – Xyldom	15.3.1992
Asset-3	220 KV S/C Line from Sedam – Tandur	1984
Asset-4	220 KV S/C Line from Allipura – Ragalapadu	25.9.1975
Asset-5	220 KV S/C Line from Yerandanahalli – Hosur	1962
Asset-6	220 KV S/C Line from Kadakola – Kaniyampet	5.3.1978
Asset-7	110 KV S/C Line from Konaje – Manjeshwar	13.10.1966

17. The Commission vide RoP of the hearing dated 13.7.2020 directed the Petitioner to submit details of power flow in the instant transmission lines. In response, the Petitioner vide affidavit dated 24.8.2020 has submitted the details of the power flow for the period January 2020 to July 2020 in respect of the seven transmission lines covered under the instant petition.

18. Accordingly, the following seven transmission lines covered under the instant petition are considered for determination of transmission tariff for 2019-24 tariff period:

Asset	Name of Asset	COD
Asset-1	220 KV S/C Ambewadi-Ponda line	15.03.1992
Asset-2	220 KV S/C Ambewadi-Xyldom line	15.03.1992
Asset-3	220 KV S/C Sedam-Tandur Line	1984
Asset-4	220 KV S/C Allipura-Ragalapadu line	25.09.1975
Asset-5	220 KV S/C Yerandanahalli-Hosur line	1962
Asset-6	220 KV S/C Kadakola-Kaniyampet line	5.03.1978
Asset-7	110 KV S/C Konaje-Manjeshwar line	13.10.1966



19. The Commission in its order dated 22.6.2018 in Petition No. 155/TT/2017 has adopted a methodology for the transmission charges in respect of natural/ deemed ISTS lines. The relevant portion of the said order is extracted as under:

“9 Some of the State Utilities have filed similar petitions claiming tariff of Inter- State transmission lines connecting two States for the 2014-19 tariff periods as per the directions of the Commission. The information submitted by the State Utilities is incomplete and inconsistent. Further, some of the lines were more than 25 years old and the States were not having the details of the capital cost etc. To overcome these difficulties, the Commission evolved a methodology for allowing transmission charges for such transmission lines connecting two States in orders dated 19.12.2017 in Petition Nos. 88/TT/2017, 173/TT/2016 and 168/TT/2016 filed by Madhya Pradesh Power Transmission Corporation Limited, Maharashtra State Electricity Regulatory Commission and Uttar Pradesh Power Transmission Corporation Limited respectively. The Commission adopted the same methodology in order dated 4.5.2018 in Petition No.112/TT/2017, while granting tariff for ISTS connecting Rajasthan with other States and owned by Rajasthan Rajya Vidyut Prasaran Limited. The Commission derived the benchmark cost on the basis of the transmission lines owned by PGCIL. The useful life of the transmission line was considered as 25 years and for lines more than or equal to 25 years, only O & M Expenses and Interest on Working Capital (IWC) is decided to be allowed as per the existing Tariff Regulations. For assets put into commercial operation on or after 1.4.2014, tariff is decided to be allowed on the basis of the audited financial capital cost. The relevant portion of the order dated 4.5.2018 is extracted hereunder:-

13. It is observed that the information submitted by the Petitioner States for computation of transmission charges for the deemed ISTS lines are not uniform, thereby causing divergence in working out the tariff. In some cases, the data related to funding and depreciation was not available and in some cases the assets have already completed, or nearing, their useful life. In most of the petitions, the states have expressed their inability to furnish the audited capital cost of transmission lines as the lines are old. As a result, tariff workings for old assets are ending in skewed results. It is further observed that the YTC figures emerging out by the existing ARR methodology are on the higher side. Considering these facts, we have conceptualized a modified methodology for determining the tariff of the inter-State transmission lines. 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

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 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 Feb 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

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 State 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 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 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.

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 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 2014 Tariff Regulations, 2014 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."*



20. The above methodology of Petition No. 155/TT/2017 was adopted by the Commission while determining tariff of instant assets for the 2014-19 period vide order dated 12.6.2019 in Petition No. 24/TT/2018. Accordingly, the same methodology subject to the provisions of the 2019 Tariff Regulations has been extended for the purpose of determination of tariff in respect of the instant assets for 2019-24 tariff period also. Thus, while calculating tariff in respect of the instant assets, 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 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 1.4.2019, only O & M Expenses and IWC shall be allowed in lieu of complete tariff.

21. As the instant assets have already completed 25 years of life as on 1.4.2019, as per the methodology adopted in Petition No. 155/TT/2017 quoted in paragraph 19 of this order, only “Interest on Working Capital” and “O&M Expenses” components of tariff shall be allowable for all the seven Assets covered under the instant petition.

Transmission charges

22. Based on the methodology of determination of tariff adopted in Petition No. 155/TT/2017 (also adopted in order dated 12.6.2019 in Petition No. 24/TT/2018 wherein tariff was granted for the instant assets for 2014-19 period), the transmission charges allowed for the instant assets for the 2019-24 tariff period are summarized in the following tables:

(₹ in lakh)

Particulars	Asset-1				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.61	0.63	0.66	0.68	0.70
O & M Expenses	15.12	15.60	16.20	16.74	17.34
Total	15.73	16.23	16.86	17.42	18.04

(₹ in lakh)

Particulars	Asset-2				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.61	0.63	0.66	0.68	0.70
O & M Expenses	15.12	15.60	16.20	16.74	17.34
Total	15.73	16.23	16.86	17.42	18.04

(₹ in lakh)



Particulars	Asset-3				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.09	0.10	0.10	0.10	0.11
O & M Expenses	2.27	2.34	2.43	2.51	2.60
Total	2.36	2.44	2.53	2.61	2.71

(₹ in lakh)

Particulars	Asset-4				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.66	0.68	0.70	0.73	0.75
O & M Expenses	16.13	16.64	17.28	17.86	18.50
Total	16.78	17.32	17.98	18.58	19.25

(₹ in lakh)

Particulars	Asset-5				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.13	0.13	0.14	0.14	0.15
O & M Expenses	3.18	3.28	3.40	3.52	3.64
Total	3.30	3.41	3.54	3.66	3.79

(₹ in lakh)

Particulars	Asset-6				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.83	0.86	0.89	0.92	0.95
O & M Expenses	20.41	21.06	21.87	22.60	23.41
Total	21.24	21.92	22.76	23.52	24.36

(₹ in lakh)

Particulars	Asset-7				
	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	0.06	0.06	0.06	0.06	0.06
O & M Expenses	1.39	1.43	1.49	1.53	1.59
Total	1.44	1.49	1.55	1.60	1.65

Filing Fee and Publication Expenses

23. The Petitioner has sought reimbursement of expenditure by beneficiaries towards petition fee, and other expenses in relation to filing of Petition. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in



connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Sharing of Transmission Charges

24. The transmission charges of the natural ISTS lines considered in the instant petition shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as applicable. Further, the transmission charges allowed in this order shall be adjusted against the ARR approved by KERC.

25. This order disposes of Petition No. 276/TT/2020.

Sd/
(Arun Goyal)
Member

Sd/
(I.S. Jha)
Member

