

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 112/TT/2017

And

Petition No. 215/TT/2017

Coram:

**Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri Ramesh Babu V., Member**

Date of Order: 02.08.2024

In the matter of:

Re-consideration of the Commission's orders dated 4.5.2018 in Petition No.112/TT/2017 and dated 20.6.2018 in Petition No. 215/TT/2017 pursuant to the directions of the Appellate Tribunal for Electricity (APTEL) in its common judgment dated 14.11.2022 in Appeal Nos. 267 of 2018, 274 of 2018 and 415 of 2019 read with APTEL's order dated 6.7.2023 in Review Petition Nos. 12 of 2022 and 13 of 2022 in Appeal No. 267 of 2018 and batch matters.

In the matter of:

Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan,
Jyoti Nagar, Jaipur,
Rajasthan-302005

...Petitioner

Vs.

1. Power Grid Corporation of India Limited,
Saudamini, Plot No.2, Sector-29,
Near IFFCO Chowk, Gurgaon-122001,
Haryana.
2. Haryana Vidyut Prasaran Nigam,
Shakti Bhawan,
Sector-6, Panchkula-134109,
Haryana.
3. Haryana Power Purchase Centre,
2nd Floor, Shakti Bhawan,
Sector-6, Panchkula-134109,
Haryana.



4. Madhya Pradesh Power Transmission Company Limited,
Block No.2, Shakti Bhawan,
Rampur, Jabalpur,
Madhya Pradesh-482008.
5. Madhya Pradesh Power Management Company Limited,
Block No.11, 1st Floor, Shakti Bhawan,
Rampur, Jabalpur-482008,
Madhya Pradesh.
6. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
7. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
8. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
9. North Delhi Power Limited,
Power Trading and Load Dispatch Group,
CENNET Building, Pitampura,
New Delhi-110034.
10. Uttar Pradesh Power Transmission Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-2266001,
Uttar Pradesh.
11. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001,
Uttar Pradesh.

...Respondents

Parties Present: Shri Shubham Arya, Advocate, RRVPNL
Ms. Pallavi Saigal, Advocate, RRVPNL
Ms. Anumeha Smiti, Advocate, RRVPNL

ORDER

The Petitioner, Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPNL), filed
Petition No. 215/TT/2017 for the determination of transmission tariff for the Financial



Year (FY) 2017-18 in respect of the 21 deemed inter-State transmission lines for inclusion in computation of Point of Connection (PoC) transmission charges. The Commission, vide its order dated 20.6.2018, allowed the tariff in respect of the 18 transmission lines except for Assets-18, 19, and 20. The Commission, in the said order dated 20.6.2018, observed that Asset-18, i.e., 220 kV D/C Aau-Baithwasia line, Asset-19, i.e., 220 kV D/C Baithwasia-Bhawad line and Asset-20 i.e. 220 kV D/C Badisid-Aau line were put into commercial operation on 29.3.2015, 25.3.2015 and 13.4.2016 respectively for which the Petitioner was expected to be in possession of the audited capital cost and financial data. Accordingly, the Commission, in its said order, directed the Petitioner to file a fresh Petition for approval of tariff for Assets-18, 19, and 20 as per the provisions of the 2014 Tariff Regulations along with required information specified in the Tariff Forms.

2. The Petitioner, Rajasthan Rajya Vidyut Prasaran Nigam Limited, filed Petition No. 112/TT/2017 for the determination of tariff for the FY 2014-15, FY 2015-16, and FY 2016-17 in respect of the 20 deemed inter-State transmission lines for inclusion in the computation of PoC transmission charges and the Commission vide its order 4.5.2018 allowed tariff in respect of the 18 transmission lines except for Assets-18 and 19, namely, 220 kV Baithwasia-Bhawad line and 220 kV D/C Gajner-Bikaner (400 kV GSS) line respectively. The Commission, in its said order dated 4.5.2018, observed that Assets-18 and 19 were declared under commercial operation on 29.3.2015 and 25.3.2015, respectively, and as such, the Petitioner must have the audited financial data of these transmission lines. Accordingly, the Commission, in the aforesaid order dated 4.5.2018, granted liberty to the Petitioner to file a fresh Petition for the



determination of YTC of these transmission lines along with the relevant cost data as per the 2014 Tariff Regulations.

3. While granting tariff in respect of the deemed ISTS lines covered in Petition Nos. 215/TT/2017 and 112/TT/2017, the Commission, in its aforesaid orders, adopted a methodology for the determination of tariff of the transmission lines wherein the useful life of the State transmission lines was taken as 25 years. Further, for such deemed ISTS lines that were more than or equal to 25 years old, their tariff was restricted to only Operation & Maintenance Expenses (O&M Expenses) and Interest on Working Capital (IWC) as per the Tariff Regulations. The methodology adopted by the Commission in the said orders provided that the transmission lines/assets which were put under commercial operation on or after 1.4.2014, their tariff would be determined on the basis of the audited financial capital cost of each asset.

4. The Petitioner, RRVPNL, challenged the Commission's order dated 20.6.2018 in Petition No. 215/TT/2017 and dated 4.5.2018 in Petition No. 112/TT/2017, before the Appellate Tribunal for Electricity (APTEL) in Appeal Nos. 267 of 2018 and 274 of 2018, respectively, on two counts, namely one for consideration of the useful life of the deemed Inter-State Transmission System (ISTS) Lines to be 25 years instead of 35 years as prescribed by the Central Electricity Regulatory Commission (Terms and Conditions) of Tariff Regulations, 2014 (hereinafter referred to as 'the 2014 Tariff Regulations') and the other for giving direction to the Petitioner/RRVPNL to file a fresh Petition in respect of the ISTS lines along with cost data in the prescribed format as line-wise data in format was not provided.

5. The APTEL, in its common judgment dated 14.11.2022 in Appeal Nos. 267 of 2018, 274 of 2018, and 415 of 2019 set aside the Commission's orders dated



20.6.2018 in Petition No. 215/TT/2017, dated 4.5.2018 in Petition No. 112/TT/2017 and dated 19.12.2017 in Petition No. 88/TT/2017 with the direction to the Commission to revisit the said orders and pass consequential orders. The relevant portion of the APTEL's judgment dated 14.11.2022 is extracted as under:

“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.”

6. Aggrieved by the decision of dated 14.11.2022 in Appeal Nos. 267 of 2018 and 274 of 2018, RRVPNL filed Review Petition Nos. 12 of 2022 and 13 of 2022 on the ground that no finding was given by the APTEL for the cases where asset-wise details of the transmission system/line-wise data in format were not provided. The APTEL, vide its order dated 6.7.2023, allowed the Review Petition Nos. 12 of 2022 and 13 of 2022 and amended its judgment dated 14.11.2022 in Appeal Nos. 267 of 2018 and 274 of 2018, observing that the Central Electricity Regulatory Commission's Sharing Regulations evidently specify the methodology to be adopted in case asset-wise details of the transmission system are not available, and as such, the Central Commission is bound to pass the orders in strict compliance with its regulations. The relevant portions of the APTEL's order dated 6.7.2023 are extracted as under:

“13. From the CERC Regulations, it is seen that there is no mandate to maintain the asset wise or Line wise detail in respect of the Transmission assets in question and in case, the tariff for such assets/ lines was determined by the State Commission in terms of the Tariff Regulations notified by the State Commission, wherein the methodology specified tariff determination for the Transmission system as a whole, on the basis of the cumulative data provided by the Review Petitioner and not an Element wise tariff determination, before the tariff determination is brought under the jurisdiction of CERC, the tariff ought to be determined on the basis of ARR of the Review Petitioner as determined by the State Commission.”

“14. It was also pleaded by the Review Petitioner that it has succeeded to the Transmission function and assets of the erstwhile Rajasthan State Electricity Board which was an integrated entity undertaking all electricity activities in the State for a long time prior to its re-organization in the year 1999 and therefore, no individual Asset wise



details are available, accordingly, to deal with such contingencies, the Central Commission had notified the aforesaid CERC Regulations which provides that in the absence of the asset wise tariff, the tariff as computed by the State Commission in the respective ARRs shall be considered.”

“16. As seen from above, that the CERC Sharing Regulations evidently specify the methodology to be adopted in case asset wise details of the transmission system are not available, the Central Commission is bound to pass the orders in strict compliance to its Regulations.”

7. Accordingly, Petition Nos. 112/TT/2017 and 215/TT/2017 were re-opened and heard. The orders in the instant Petitions were reserved on 6.2.2024. However, the same could not be issued prior to Shri P.K. Singh, Member, demitting the office. Therefore, the matters were heard again on 29.5.2024, and orders were reserved. Despite the opportunity given, none of the Respondents have filed their replies in the remand proceedings.

8. The Commission, vide its orders dated 4.5.2018 in Petition No. 112/TT/2017 and dated 20.6.2018 in Petition No. 215/TT/2017, approved the tariff of the deemed ISTS lines observing the following 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 ₹ 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.”

9. As per the directions of the APTEL in the common judgment dated 14.11.2022 in Appeal No. 267 of 2018 and batch matters read with the APTEL's order dated 6.7.2023 in Review Petition Nos. 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 with 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 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 the 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 base data for the FY 1989-90, FY 1990-91, and FY 1991- 92, the average cost of transmission lines has been back derived considering the average cost from the 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 the FY 1989-90, FY 1990-91, and FY 1991- 92 has been extrapolated backward 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 completed 35 years, is



worked out as per the said methodology. Accordingly, we proceed to re-determine the tariff in Petition No. 112/TT/2017 for the FY 2014-15, FY 2015-16, and FY 2016-17, and that in Petition No. 215/TT/2017 for the FY 2017-18.

Re-determination of tariff for the FY 2014-15, FY 2015-16 and FY 2016-17 in Petition No. 112/TT/2017 and for the FY 2017-18 in Petition No. 215/TT/2017)

10. The Commission vide order dated 4.5.2018 in Petition No. 112/TT/2017, approved the transmission tariff for the FY 2014-15, FY 2015-16, and FY 2016-17, and vide order dated 20.6.2018 in Petition No. 215/TT/2017 for the FY 2017-18 for the following deemed ISTS transmission lines:

Sl. No.	Tariff granted in Petition No 112/TT/2017	Tariff granted in Petition No. 215/TT/2017	COD
1	Asset-1: 220 kV S/C Chirawa Hissar Line (Rajasthan-Haryana)	Asset-I: kV S/C Chirawa-Hissar Line (Raj-Har)	27.11.2010
2	Asset-2: 132 kV S/C Sadulpur (Rajgarh) - Hissar Line	Asset-II: kV S/C Sadulpur (Rajgarh)-Hissar Line	3.10.1959
3	Asset-3: 132 kV S/C Amrapura-Thedi- Sirsa Line	Asset-III: 132 kV S/C Amrapura Thedi- Sirsa Line	19.12.1970
4	Asset-4: 132 kV S/C Khandar-Sheopur Line	Asset-IV: 132 kV S/C Khandar-Sheopur Line	5.07.2008
5	Asset-5: 220 kV S/C Anta-Kota Line	Asset-V: 220 kV S/C Anta-Kota Line	1.3.1969
6	Asset-6: 220 kV SC RAPP (B)-Kota Line	Asset-VI:220 kV S/C RAPP (B)- Kota Line	1.9.1977
7	Asset-7: 220 kV S/C RAPP (B) - RAPP (A) Line	Asset-VII:220 kV S/C RAPP (B)-RAPP (A) Line	1.9.1977
8	Asset-8: 220 kV S/C MIA (Alwar)-Badarpur Line	Asset-VIII:220 kV S/C MIA (Alwar)-Badarpur Line	22.11.1975
9	Asset-9: 220 kV S/C Agra-Bharatpur Line (Rajasthan Uttar Pradesh)	Asset-IX:220 kV S/C Agra-Bharatpur Line(Raj-UP)	30.12.1982
10	Asset-10: 220 kV S/C Kota (Sakatpura)-Badod (Rajasthan-Madhya Pradesh)	Asset-X: 220 kV S/C Kota (Sakatpura)-Badod (Raj-MP)	20.8.1977
11	Asset-11: 220 kV S/C Modak-Badod (Rajasthan-Madhya Pradesh)	Asset-XI:220 kV S/C Modak-Badod (Raj-MP)	2.1.1988
12	Asset-12: 220 kV S/C Khetri- Dadri Line I (Rajasthan Haryana)	Asset-XII:220 kV S/C Khetri-Dadri Line I (Raj-Haryana)	23.12.1977
13	Asset-13: 220 kV S/C Khetri-Dadri Line II (Rajasthan Haryana)	Asset-XIII:220 kV S/C Khetri-Dadri Line II (Raj-Haryana)	2.3.1985
14	Asset-14: 400 kV S/C Jodhpur - Merta Line-I	Asset-XIV: 400 kV S/C Jodhpur -Merta Line-I	15.9.2004



15	Asset-15: 400 kV S/C Jodhpur - Merta Line-II	Asset-XV:400 kV S/C Jodhpur - Merta Line-II	27.10.2012
16	Asset-16: 400 kV S/C Merta-Ratangarh Line	Asset-XVI:400 kV S/C Merta-Ratangarh Line	9.5.2008
17	Asset-17: 400 kV S/C Merta-Heerapura Line	Asset-XVII:400 kV S/C Merta-Heerapura Line	13.7.2004
18	Asset-18: 220 kV D/C Aau-Baithwasia Line	Asset-XVIII:220 kV D/C Aau-Baithwasia Line	29.3.2015
19	Asset-19: 220 kV D/C Baithwasia-Bhawad Line	Asset-XIX: 220 kV D/C Baithwasia-Bhawad Line	25.3.2015
20	Asset-20: 220 kV D/C Gajner-Bikaner Line*	-	22.1.2013
21	-	Asset-XX: 220 kV D/C Badisid-Aau Line	13.4.2016
22	-	Asset-XXI:220 kV S/C Bhadla-Bap Line	31.3.2014

* Tariff granted for the FY 2016-17 only in Petition No. 112/TT/2017.

11. Taking into consideration the COD of the aforesaid transmission lines/transmission assets, it is noted that some of the transmission lines have completed their useful life of 35 years as on 31.3.2014, and certain transmission lines have not completed their useful life as on 31.3.2014, and some of the transmission lines have been commissioned after 1.4.2014. Accordingly, the useful life of the transmission lines as on 31.3.2014 is as follows:

Asset Name	Name of the Line	COD	Length in km considered for tariff purpose	Useful life of the line as on 31.3.2014
Asset-1	220 kV S/C Chirawa-Hissar line (Rajasthan-Haryana)	27.11.2010	118.00	3 years, 5 months and 4 days
Asset-2	132 kV S/C Sadulpur (Rajgarh) - Hissar line	3.10.1959	78.00	54 years, 5 months and 28 days
Asset-3	132 kV S/C Amrapura Thedi-Sirsa line	19.12.1970	80.00	43 years, 3 months and 12 days
Asset-4	132 kV S/C Khandar-Sheopur line	5.7.2008	12.62	5 years, 8 months and 26 days
Asset-5	220 kV S/C Anta-Kota Line	1.3.1969	67.00	45 years, 0 month and 30 days
Asset-6	220 kV SC RAPP (B)-Kota Line	1.9.1977	42.00	36 years, 6 months and 30 days
Asset-7	220 kV S/C RAPP (B) – RAPP (A) Line	1.9.1977	2.00	36 years, 6 months and 30 days
Asset-8:	220 kV S/C MIA (Alwar)-Badarpur Line	22.11.1975	131.60	38 years, 4 months and 9 days



Asset-9	220 kV S/C Agra-Bharatpur Line (Rajasthan-Uttar Pradesh)	30.12.1982	48.12	31 years, 3 months and 1 day
Asset-10	220 kV S/C Kota (Sakatpura)-Badod (Rajasthan-Madhya Pradesh)	20.8.1977	59.62	36 years, 7 months and 11 days
Asset-11	220 kV S/C Modak-Badod (Rajasthan-Madhya Pradesh)	2.1.1988	16.50	26 years, 2 months and 29 days
Asset-12	220 kV S/C Khetri-Dadri Line I (Rajasthan-Haryana)	23.12.1977	70.91	36 years, 3 months and 8 days
Asset-13	220 kV S/C Khetri-Dadri Line II (Rajasthan-Haryana)	2.3.1985	77.00	29 years, 0 month and 29 days
Asset-14	400 kV S/C Jodhpur -Merta Line-I	15.9.2004	106.86	9 years, 6 months and 16 days
Asset-15	400 kV S/C Jodhpur -Merta Line-II	27.10.2012	107.48	1 year, 5 months and 4 days
Asset-16	400 kV S/C Merta- Ratangarh Line	9.5.2008	172.50	5 years, 10 months and 22 days
Asset-17	400 kV S/C Merta- Heerapura Line	13.7.2004	178.07	9 years, 8 months and 18 days
Asset-18	220 kV D/C Aau-Baithwasia Line	29.3.2015	46.63	-
Asset-19	220 kV D/C Baithwasia-Bhawad Line	25.3.2015	33.03	-
Asset-20	220 kV D/C Gajner- Bikaner (400 kV GSS) Line	22.1.2013	58.67	1 year, 2 months and 9 days
Asset-21	220 kV S/C Bhadla-bap line **	31.3.2014	52.06	-
Asset-20 (In Petition No.215/TT/2017)	220 kV D/C Badisid-Aau Line**	13.4.2016	59.20	

* * Considered for the FY 2017-18 only.

12. For ease of computation of tariff based on the useful life, the transmission assets have been categorized into three groups, namely, Groups-A, B, and C. In this order, Group-A contains the transmission assets that have already completed the useful life of 35 years as on 31.3.2014, Group-B are those transmission assets that have not completed their useful life of 35 years as on 31.3.2014, while Group-C consists of those transmission lines which have been commissioned after 1.4.2014.

Group-A

13. It is observed that the Assets-2 and 3, Assets-5, 6, 7 and 8, Asset-10 and Asset-12 have completed their useful life of 35 years as on 31.3.2014. Therefore, as per the Commission's new methodology, 'NIL' capital cost has been considered for these



transmission assets and only 'Interest on Working Capital' (IWC) and 'O&M Expenses' components of tariff have been allowed for them.

Operation and Maintenance Expenses:

14. The following norms have been specified in the 2014 Tariff Regulations:

(₹ in lakh)

Norms for AC lines (in ₹ lakh per km)					
	2014-15	2015-16	2016-17	2017-18	2018-19
Single circuit (Single conductor)	0.202	0.209	0.216	0.223	0.23
Single Circuit (Twin and Triple conductor)	0.404	0.418	0.432	0.446	0.461
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	0.78	0.806

15. The O&M Expenses in respect of the transmission assets have been worked out as per the norms specified in the 2014 Tariff Regulations, which are as follows:

(₹ in lakh)

Asset	2014-15	2015-16	2016-17	2017-18
Asset-2	31.51	32.60	33.70	34.79
Asset-3	32.32	33.44	34.56	35.68
Asset-5	27.07	28.01	28.94	29.88
Asset-6	16.97	17.56	18.14	18.73
Asset-7	0.81	0.84	0.86	0.89
Asset-8	53.17	55.01	56.85	58.69
Asset-10	24.09	24.92	25.76	26.59
Asset-12	28.65	29.64	30.63	31.63

16. Accordingly, the transmission charges for the Assets-2 and 3, Assets-5, 6, 7 and 8, Asset-10 and Asset-12 for the FY 2014-15, FY 2015-16 and FY 2016-17 in Petition No. 112/TT/2017, and for FY 2017-18 in Petition No. 215/TT/2017 are as follows:



(₹ in lakh)

Asset-2				
Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	1.74	1.80	1.86	1.92
O & M Expenses	31.51	32.60	33.70	34.79
Total	33.25	34.40	35.56	36.71

(₹ in lakh)

Asset-3				
Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	1.79	1.85	1.91	1.97
O & M Expenses	32.32	33.44	34.56	35.68
Total	34.11	35.29	36.47	37.65

(₹ in lakh)

Asset-5				
Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	1.50	1.55	1.60	1.65
O & M Expenses	27.07	28.01	28.94	29.88
Total	28.56	29.55	30.54	31.53

(₹ in lakh)

Asset-6				
Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	0.94	0.97	1.00	1.03
O & M Expenses	16.97	17.56	18.14	18.73
Total	17.91	18.53	19.15	19.77

(₹ in lakh)

Asset-7				
Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	0.04	0.05	0.05	0.05
O & M Expenses	0.81	0.84	0.86	0.89
Total	0.85	0.88	0.91	0.94



(₹ in lakh)

Asset-8 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	2.94	3.04	3.14	3.24
O & M Expenses	53.17	55.01	56.85	58.69
Total	56.10	58.05	59.99	61.94

(₹ in lakh)

Asset-10 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	1.33	1.38	1.42	1.47
O & M Expenses	24.09	24.92	25.76	26.59
Total	25.42	26.30	27.18	28.06

(₹ in lakh)

Asset-12 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	0.00	0.00	0.00	0.00
Interest on Working Capital	1.58	1.64	1.69	1.75
O & M Expenses	28.65	29.64	30.63	31.63
Total	30.23	31.28	32.33	33.37

Group-B:

17. Asset-1, Asset-4, Asset-9, Asset-11, Assets-13, 14, 15, 16 and 17, Asset-20 (220 kV Gajner-Bikaner (400 kV GSS) Line in Petition No. 112/TT/2017) and Asset-21 (220 kV S/C Bhadla -Bap Line in Petition No. 215/TT/2017) have been commissioned prior to 31.3.2014 or on 31.3.2014 and they have not completed their useful life of 35 years. Therefore, as per the new methodology, the capital cost of these 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 these transmission assets is as follows:



(₹ in lakh)

Asset	Name of the Line	COD	Length in km considered for tariff purpose	Capital cost considered for tariff purpose (₹ in lakh)	Completed useful life of the line as on 31.3.2014
Asset-1	220 kV S/C Chirawa-Hissar Line (Rajasthan-Haryana)	27.11.2010	118.00	2220.07	3 years
Asset-4	132 kV S/C Khandar-Sheopur Line	5.7.2008	12.62	185.97	5 years
Asset-9	220 kV S/C Agra-Bharatpur Line (Rajasthan-Uttar Pradesh)	30.12.1982	48.12	326.70	31 years
Asset-11	220 kV S/C Modak-Badod (Rajasthan-Madhya Pradesh)	2.1.1988	16.50	144.13	26 years
Asset-13	220 kV S/C Khetri-Dadri Line II (Rajasthan-Haryana)	2.3.1985	77.00	578.22	29 years
Asset-14	400 kV S/C Jodhpur - Merta Line-I	15.9.2004	106.86	2906.94	9 years
Asset-15	400 kV S/C Jodhpur - Merta Line-II	27.10.2012	107.48	7058.04	1 years
Asset-16	400 kV S/C Merta-Ratangarh Line	9.5.2008	172.50	8199.85	5 years
Asset-17	400 kV S/C Merta-Heerapura Line	13.7.2004	178.07	4844.08	9 years
Asset-20 (In Petition No. 112/TT/2017)	220 kV D/C Gajner-Bikaner (400 kV GSS) Line	22.1.2013	58.67	2196.08	1 years
Asset-21 (In Petition No. 215/TT/2017)	220 kV S/C Bhadla-Bap Line	31.3.2014	52.06	1734.34	0 Years

18. Since Asset-9, Asset-11 and Asset-13 have completed their useful life of 12 years as on 1.4.2014, Interest on Loan (IOL) for these transmission assets has not been allowed during the 2014-19 tariff period. Similarly, Asset-14 and Asset-17 have completed their useful life of 12 years as on 1.4.2017. Therefore, IOL for these transmission assets is not allowed for the FY 2017-18 i.e. from 1.4.2017 to 31.3.2018.



O&M Expenses

19. The O&M Expenses have been worked out for Assets-1, 4, 9, 11, 13, 14, 15, 16, 17, 20 (220 kV D/C Gajner-Bikaner (400 kV GSS) Line in Petition No. 112/TT/2017) and 21 (220 kV S/C Bhadla-Bap Line in Petition No. 215/TT/2017) as per the norms specified in the 2014 Tariff Regulations and the same are as follows:

(₹ in lakh)				
Asset	2014-15	2015-16	2016-17	2017-18
Asset-1	47.67	49.32	50.98	52.63
Asset-4	5.10	5.28	5.45	5.63
Asset-9	19.44	20.11	20.79	21.46
Asset-11	6.67	6.90	7.13	7.36
Asset-13	31.11	32.19	33.26	34.34
Asset-14			46.16	47.66
Asset-15			46.43	47.94
Asset-16			74.52	76.94
Asset-17			76.93	79.42
Asset-20* 220 kV D/C Gajner-Bikaner (400 kV GSS) Line in Petition No. 112/TT/2017			44.29	-
Asset-21** (220 kV S/C Bhadla-Bap Line in Petition No. 215/TT/2017)				23.22

**In the case of Asset-20 (220 kV D/C Gajner-Bikaner (400 kV GSS) Line in Petition No. 112/TT/2017), the Petitioner has not claimed any tariff for the FY 2017-18. Accordingly, the O&M Expenses are not allowed in respect of the Asset-20 for FY 2017-18.*

*** In the case of Asset-21 (220 kV S/C Bhadla-Bap Line in Petition No. 215/TT/2017), the Petitioner has claimed tariff for the FY 2017-18. Accordingly, O&M Expenses are allowed in respect of the Asset-21 for the FY 2017-18.*

20. Accordingly, the transmission charges for Asset-1, Asset-4, Asset-9, Asset-11, Asset-13, Assets-14, 15, 16 and 17, Assets-20 (220 kV D/C Gajner-Bikaner (400 kV GSS) Line) and Asset-21 (220 kV S/C Bhadla-Bap Line) for the FY 2014-15, FY 2015-16 and FY 2016-17 in Petition No. 112/TT/2017, and that for FY 2017-18 in Petition No. 215/TT/2017 are as follows:



(₹ in lakh)

Asset-1 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	117.22	117.22	117.22	117.22
Interest on Loan	81.37	73.58	65.57	57.65
Return on Equity	103.23	103.23	103.23	103.23
Interest on Working Capital	9.58	9.49	9.40	9.31
O & M Expenses	47.67	49.32	50.98	52.63
Total	359.07	352.85	346.40	340.04

(₹ in lakh)

Asset-4 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	9.82	9.82	9.82	9.82
Interest on Loan	5.42	4.76	4.08	3.40
Return on Equity	8.65	8.65	8.65	8.65
Interest on Working Capital	0.83	0.83	0.82	0.81
O & M Expenses	5.10	5.28	5.45	5.63
Total	29.82	29.32	28.81	28.31

(₹ in lakh)

Asset-9 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	3.78	3.78	3.78	3.78
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	15.19	15.19	15.19	15.19
Interest on Working Capital	1.51	1.55	1.59	1.62
O & M Expenses	19.44	20.11	20.79	21.46
Total	39.93	40.63	41.35	42.06

(₹ in lakh)

Asset-11 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	1.67	1.67	1.67	1.67
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	6.70	6.70	6.70	6.70
Interest on Working Capital	0.56	0.57	0.59	0.60
O & M Expenses	6.67	6.90	7.13	7.36
Total	15.60	15.85	16.09	16.33

(₹ in lakh)

Asset-13 Annual Transmission Charges	2014-15	2015-16	2016-17	2017-18
Depreciation	6.70	6.70	6.70	6.70
Interest on Loan	0.00	0.00	0.00	0.00
Return on Equity	26.89	26.89	26.89	26.89
Interest on Working Capital	2.49	2.55	2.61	2.67
O & M Expenses	31.11	32.19	33.26	34.34
Total	67.18	68.32	69.46	70.60



(₹ in lakh)

Asset-14 Annual Transmission Charges	2016-17	2017-18
Depreciation	153.49	33.67
Interest on Loan	19.45	0.00
Return on Equity	135.17	135.17
Interest on Working Capital	9.64	6.52
O & M Expenses	46.16	47.66
Total	363.91	223.02

(₹ in lakh)

Asset-15 Annual Transmission Charges	2016-17	2017-18
Depreciation	372.66	372.66
Interest on Loan	262.19	237.51
Return on Equity	328.20	328.20
Interest on Working Capital	24.73	24.25
O & M Expenses	46.43	47.94
Total	1034.22	1010.56

(₹ in lakh)

Asset-16 Annual Transmission Charges	2016-17	2017-18
Depreciation	432.95	432.95
Interest on Loan	179.74	149.90
Return on Equity	381.29	381.29
Interest on Working Capital	27.00	26.44
O & M Expenses	74.52	76.94
Total	1095.50	1067.53

(₹ in lakh)

Asset-17 Annual Transmission Charges	2016-17	2017-18
Depreciation	255.77	56.11
Interest on Loan	32.41	0.00
Return on Equity	225.25	225.25
Interest on Working Capital	16.07	10.86
O & M Expenses	76.93	79.42
Total	606.43	371.64

(₹ in lakh)

Asset-20 Annual Transmission Charges	2016-17
Depreciation	115.95
Interest on Loan	81.58
Return on Equity	102.12
Interest on Working Capital	9.34
O & M Expenses	44.30
Total	353.29



(₹ in lakh)	
Asset-21 Annual Transmission Charges	2017-18
Depreciation	93.69
Interest on Loan	66.52
Return on Equity	82.51
Interest on Working Capital	6.87
O & M Expenses	23.22
Total	272.80

GROUP-C

21. The Petitioner has claimed the COD of the Asset-18, i.e., 220 kV D/C Aau-Baithwasia Line as 29.3.2015(in Petition No. 112/TT/2017), Asset-19, i.e. 220 kV D/C Baithwasia- Bhawad Line as 25.3.2015 (in Petition No. 112/TT/2017) and Asset-20 i.e. 220 kV D/C Badisid-Aau line as 13.4.2016 (In Petition No.215/TT/2017).

22. Vide Record of Proceedings dated 6.9.2023, the Petitioner was directed to submit required information for Assets-18 and 19, Asset-20 as specified in the Tariff Forms in terms of the provisions of the 2014 Tariff Regulations and justification of the capital cost for Assets-18, 19 and Asset-20.

23. In response, the Petitioner has submitted that as per the 2010 Sharing Regulations and the third amendment to the 2010 Sharing Regulations, the cost has to be considered as per the prescribed ARR methodology. The Petitioner has submitted that the APTEL vide its order dated 6.7.2023 in Review Petition Nos. 12 of 2022 and 13 of 2022 has held that the Central Commission is required to strictly comply with the provisions of the 2010 Sharing Regulations. The Petitioner further submitted that the tariff has to be considered as per the ARR methodology.

24. We have considered the submissions of the Petitioner. The Petitioner had initially filed Petition No 213/TT/2013 for the determination of tariff for twenty (20)



transmission lines wherein the Commission, vide order dated 18.3.2015, observed as under:

“14. The certificate of NRPC is available in terms of the above Regulation in respect of six transmission lines which were included in the Commission’s order dated 14.3.2012. Since the certification is not available for the 14 transmission lines, we direct the petitioner to approach NRPC for the required certification of these lines for inclusion in the PoC Charges. Accordingly, only the six transmission lines are being considered in this petition for grant of annual transmission charges. Further, since the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 came into force with effect from 1st July, 2011, Yearly Transmission Charges (YTC) for these six transmission lines have been calculated for the year 2011-12 (1.7.2011 to 31.3.2012), 2012-13 and 2013-14.”

25. The Commission, vide order dated 18.3.2015 in Petition No. 213/TT/2013, observed as follows:

“9. The matter was heard on 25.3.2014 and the petitioner was directed to submit the capital cost of the assets (if available) certified by an auditor, the funding pattern of the assets, repayment schedule and the interest rate of loans, cumulative depreciation against the assets as on 31.3.2012, details of the ARR approved by the State Commission for the 2009-14 period and the details of the O&M Expenses.

10. In response, the petitioner, vide affidavit dated 15.5.2014, has submitted that the audited capital cost, the actual repayment schedule and interest rates of the loans of the instant assets are not available. Since, the actual debt and equity considered towards the transmission assets as on the date of commercial operation is also not available, the petitioner has considered a notional debt equity ratio of 70:30 for the instant assets. The petitioner has submitted that the State Commission considers the depreciation for the entire transmission assets of the petitioner while approving the Annual Revenue Requirement (ARR) and hence the actual information on cumulative depreciation of these transmission assets is not separately available with the petitioner. It has been further submitted that as per the methodology adopted by the State Commission while calculating depreciation of assets, the life of transmission line has been considered as 35 years with a salvage value of 10% and the applicable depreciation has been calculated for 2012-13 and 2013-14 using Straight Line Method. However, depreciation is claimed for assets older than 35 years. The petitioner has submitted that the ARR and the O&M norms for the 2009-14 tariff period have been approved by the State Commission.”

26. Perusal of the above reveals that the Petitioner has not been able to submit the details of the capital cost of the transmission assets certified by the Auditor, the funding pattern of the transmission assets, the repayment schedule, the interest rate of loans, and cumulative depreciation. The Commission considered the difficulty of the



Petitioner that the transmission assets have been commissioned before the financial year 1990 and accurate capital cost of these transmission lines is not available. To facilitate the STUs, the Commission approved the tariff from 1.7.2011 to 31.3.2014 on the basis of the indicative cost of the lines of various configurations owned and operated by PGCIL for the purpose of computation of the capital cost.

27. During the Validation Committee meeting held on 20.6.2018, the representative of CTUIL stated the difficulty being faced with respect to the billing of such STUs whose tariff was not determined for the 2014-19 tariff period. He further observed that the Commission had issued tariff orders in respect of the many STUs for the 2009-14 tariff period and, in some cases, for the 2014-19 period. Presently, in the case of 14 out of 18 STUs, the billing is done as per the past approved tariff.

28. The Commission, vide order dated 12.5.2017 in Petition No 7/SM/2017, directed the owners/developers of the inter-State transmission lines of the 132 kV and above in the North Eastern Region and 220 kV and above in the Northern, Eastern, Western, and Southern Regions to file the Petitions under the 2014 Tariff Regulations for including their transmission assets in computation of the PoC transmission charges and losses under the 2010 Sharing Regulations. The relevant extracts of the order are as follows:

“ 2. Since the tariff period 2014-19 is drawing a close in the next seven months and the State Utilities as mentioned above have not filed the tariff petitions, the present petition was listed for hearing and for further directions on 21.8.2018. However, none of the State Utilities appeared on the schedule date of hearing. We direct the above utilities to file the tariff petitions within two months in respect of the transmission lines connecting two States which are within their purview in terms of the 2014 Tariff Regulations.”

29. In pursuance of the above direction, the STUs have filed their respective tariff Petitions before the Commission while the rest have not. In the absence of the tariff



order, the tariff approved for FY 2013-14 is being continued for the 2014-19 tariff period. The Commission has changed the methodology of computation of tariff for the Inter-State transmission lines connecting with two States which has an implication on the tariff.

30. It is pertinent to mention that the Commission is consistently following the various methods for the determination of tariffs. During the 2009-14 tariff period, indicative cost methodology using ARR data was prevalent. During the 2014-19 tariff period, the Commission evolved a methodology wherein the assets commissioned up to 31.3.2014 were approved and adopted by the Commission in Petition No. 88/TT/2017. As per the judgment of the APTEL dated 14.11.2022 in Appeal Nos. 267 of 2018 and batch matters, the useful life of the State-owned ISTS lines transmission has been considered as 35 years, and the Commission has accordingly further revised the methodology for the determination of tariff of the deemed ISTS lines.

31. It is noted that for the transmission assets which have been commissioned after 1.4.2014, the Commission approved the tariff only on the basis of the 2014 Tariff Regulations and did not exercise any other methodology for the determination of tariff and also did not grant tariff by exercising its 'Power to Relax'. In the cases of APTRANSCO and TSTRANSCO also, the Commission approved the tariff of the transmission assets after they achieved COD on 1.4.2014, purely on the basis of tariff regulations, and did not grant any relaxations to STUs for claiming the tariff.

32. In the instant case, Assets-18, 19 and 20 (220 kV D/C Badisid-Aau Line) are commissioned after 1.4.2014. The Commission, in its order, did not observe that the tariff could not be granted for these three transmission assets. The Commission, in its order, however, directed the Petitioner to file the tariff Petition as per the 2014 Tariff



Regulations. However, the Petitioner failed to file the required information as per the 2014 Tariff Regulations.

33. The relevant provisions of Regulations 6, 7, and 10 of the 2014 Tariff Regulations are extracted as under:

“6. Tariff determination

(ii) in case of commercial operation of the generating station or transmission system including communication system on or after 1.4.2014, the generating company or transmission licensee shall file a consolidated petition combining all the units of the generating station or file appropriate petition for transmission elements of the transmission system which are likely to be commissioned during next six months from the date of application.”

Regulation 7 of the 2014 tariff Regulations is as follows:

7. Application for determination of tariff:

(2) The transmission licensee may make an application for determination of tariff for new transmission system including communication system or element thereof as the case may be in accordance with the Procedure Regulations, in respect of the transmission system or elements thereof anticipated to be commissioned within 180 days from the date of filing of the petition.

(5) If the petition is inadequate in any respect as required under Annexure-I of these regulations, the application shall be returned to the generating company or transmission licensee as the case may be, for resubmission of the petition within one month after rectifying the deficiencies as may be pointed out by the staff of the Commission.

“10. Prudence Check of Capital Expenditure:

The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time:

Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff: Provided further that in cases where benchmark norms have been specified, the generating company or transmission licensee shall submit the reasons for exceeding the capital cost from benchmark norms to the satisfaction of the Commission for allowing cost above benchmark norms.



34. Though the Petitioner has claimed the tariff for Assets-18, Asset-19, and Asset-20 (220 kV D/C Badisid-Aau line in Petition No.215/TT/2017)) after 1.4.2014 but it has failed to submit the Tariff Forms.

35. During the course of the hearing on 29.5.2024, the Petitioner was directed to submit certain information, including the capital cost finally approved by the Rajasthan Electricity Regulatory Commission of the following lines:

- (i) 220 kV D/C Aau-Baithwasia line
- (ii) 220 kV Baithwasia-Bhawad line
- (iii) 220 kV S/C Bhadla-Bap line

36. The Petitioner, vide affidavit dated 18.6.2024, has submitted the following information:

- (a) The 220 kV S/C Bhadla-Bap line (Asset-21) was commissioned on 31.3.2014, and its tariff was allowed by this Commission, vide order dated 20.6.2018 in Petition No. 215/TT/2017. The 220 kV D/C Badisid-Aau line (Asset-20 in Petition No. 215/TT/2017) was commissioned on 13.4.2016, but its tariff was not allowed by this Commission in the said order dated 20.6.2018. Accordingly, the name of the line should be 220 kV D/C Badisid-Aau line, and the details have been provided for this line.
- (b) The regulations of the Rajasthan Electricity Regulatory Commission (RERC) did not prescribe element-wise tariff determination, and the tariff was determined for the transmission system as a whole on the basis of the cumulative data provided by RVPN. Therefore, the capital cost of the individual assets is not finally approved by RERC, and only the investment plan has been approved by RERC. The investment plan for the said lines was approved by RERC in its order dated 9.10.2024 in Petition Nos. 437/14



and 463/14. As per the audited Books of Accounts, the capital cost of the lines are as under:

Sl. No	Asset	Value (₹in lakh)
(i)	220 kV D/C Aau-Baithwasia line	2004.25
(ii)	220 kV D/C Baithwasia-Bhawad line	1276.40
(iii)	220 kV D/C Badisid-Aau line	2857.05

(c) The Petitioner, in its Auditor's Certificate dated 10.6.2024, has submitted the capital cost of the 220 kV D/C Aau-Baithwasia line (Asset-18), 220 kV D/C Baithwasia-Bhawad line (Asset-19), and 220 kV D/C Badisid-Aau line (Asset-20 in Petition No.215/TT/2017). The details of the same are as follows:

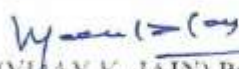
CERTIFICATE OF CAPITAL COST

This is to certify that the as per Audited books of accounts and other relevant document produced before us the gross block (Capital Cost) of following fixed assets as on 31st March, 2024 of Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur is as under:

Sr.No	Name of Project	Capital Cost (as on 31.03.2024) (value in Rs. Laes)
1.	220 KV D/C Aau-Baithwasialine	2004.25

We have obtained all information & explanations, which to the best of our knowledge and belief were necessary for the purpose of our examination.

For B.Khosla & Co.
Chartered Accountant
FRN : 000205C


(VIJAY K. JAIN) Partner
M.No. 70758
UDIN: 24070758BKGTHK7817
JAIPUR
DATED : 10-06-2024



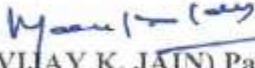
CERTIFICATE OF CAPITAL COST

This is to certify that the as per Audited books of accounts and other relevant document produced before us the gross block (Capital Cost) of following fixed assets as on 31st March, 2024 of **Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur** is as under:

Sr.No	Name of Project	Capital Cost (as on 31.03.2024) (value in Rs. Lacs)
1.	220 KV D/C Baithwasia-Bhawad line	1276.40

We have obtained all information & explanations, which to the best of our knowledge and belief were necessary for the purpose of our examination.

For B.Khosla & Co.
Chartered Accountant
FRN : 000205C


(VIJAY K. JAIN) Partner
M.No. 70758
UDIN: 24070758BKGTHL8877
JAIPUR
DATED : 10-06-2024



CERTIFICATE OF CAPITAL COST

This is to certify that the as per Audited books of accounts and other relevant document produced before us the gross block (Capital Cost) of following fixed assets as on 31st March, 2024 of **Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur** is as under:

Sr.No	Name of Project	Capital Cost (as on 31.03.2024) (value in Rs. Lacs)
1.	220 KV D/C Badisid-Aau Line	2857.05

We have obtained all information & explanations, which to the best of our knowledge and belief were necessary for the purpose of our examination.

For B.Khosla & Co.
Chartered Accountant
FRN : 000205C


(VIJAY K. JAIN) Partner
M.No. 70758
UDIN: 24070758BKGTHN1480
JAIPUR
DATED : 10-06-2024



37. We have considered the submissions of the Petitioner. The asset-wise capital cost allowed is analyzed in the succeeding paragraphs:

Asset-18: (220 kV D/C Aau-Baithwasia transmission line)

38. Asset-18 achieved COD in FY 2014-15. RERC vide its order dated 9.10.2014 in Petition Nos. 437/14 and 463/14, approved the investment plan as well as the capital cost of 220 kV D/C Aau-Baithwasia transmission line as ₹2004.25 lakhs and, vide Auditor's Certificate dated 10.6.2024 certified the capital cost of 220 kV D/C Aau-Baithwasia transmission line as ₹2004.25 lakhs.



39. In Petition No. 112/TT/2017, the Petitioner has claimed the transmission tariff for FY 2016-17 only in respect of the Asset-18: 220 kV D/C Aau-Baithwasia Line and Asset-19: 220 kV D/C Baithwasia- Bhawad Line. Further, the Petitioner, in Petition No. 215/TT/2017, has claimed the transmission tariff for FY 2017-18 only in respect of Asset-18: 220 kV D/C Aau-Baithwasia Line, Asset-19: 220 kV D/C Baithwasia- Bhawad Line and Asset-20: 220 kV D/C Badisid-Aau line. However, the Commission, vide its orders dated 4.5.2018 in Petition No. 112/TT/2017 and dated 20.6.2018 in Petition No. 215/TT/2017 did not approve the tariff for these three transmission assets. Accordingly, we proceed to determine the transmission tariff for the FYs 2016-18 for Asset-18: 220 kV D/C Aau-Baithwasia Line, Asset-19: 220 kV D/C Baithwasia- Bhawad Line, and that for the FY 2017-18 for Asset-20: 220 kV D/C Badisid-Aau line.

Capital Cost for the 2014-19 tariff period

40. The Petitioner has claimed tariff for the transmission assets but has failed to submit the Tariff Forms. The Commission vide RoP for the hearing dated 6.9.2023, directed the Petitioner to submit the required information for Asset-18, Asset-19, and Asset-20 as specified in the Tariff Forms as per the provisions of the 2014 Tariff Regulations and justification of the capital cost for Asset-18, Asset-19, and Asset-20.

Asset-18: (220 kV D/C Aau-Baithwasia transmission line)

41. Taking into consideration the RERC approval of the investment plan and Auditor's Certificate, the capital cost of Asset-18, i.e., 220 kV D/C Aau-Baithwasia transmission line is considered as ₹2004.25 lakh for the determination of tariff.



Asset-19: (220 kV D/C Baithwasia-Bhawad Line)

42. The Petitioner has claimed the COD of Asset-19 i.e. 220 kV D/C Baithwasia-Bhawad Line as 25.3.2015. However, as per the information available on the RRVPL's website regarding EHV lines, it is found that the 220 kV D/C Baithwasia-Bhawad Line (one ckt including gantry charged) achieved COD on 25.3.2015 and 220 kV Bhawad-Baithwasia line (Ckt-II) achieved the COD on 16.1.2017. Accordingly, the COD of the 220 kV Baithwasia-Bhawad line (Ckt-1) Line is considered as 25.3.2015. and the COD of the 220 kV Bhawad-Baithwasia line (Ckt-II) is considered as 16.1.2017 for determination of tariff.

43. RERC, vide its order dated 9.10.2014 in Petition Nos. 437/14 and 463/14 approved the investment plan as well as the capital cost of the 220 kV D/C Baithwasia-Bhawad transmission line as ₹1276.40 lakhs and, vide Auditor's certificate dated 10.6.2024 certified the capital cost of the 220 kV D/C Baithwasia-Bhawad transmission line as ₹1276.40 lakh. Taking into consideration the RERC approval of the investment plan and Auditor's Certificate, the capital cost of 220 kV D/C Baithwasia-Bhawad transmission line is considered ₹1276.40 lakh for the purpose of the determination of tariff.

44. The Petitioner has submitted the capital cost of 220 kV D/C Aau-Baithwasia line, 220 kV D/C Baithwasia-Bhawad line, and 220 kV D/C Badisid-Aau line vide Auditor's Certificate dated 10.6.2024. We have considered the Petitioner's submissions. The asset-wise capital cost allowed is analysed in subsequent paras.

45. It is observed that Ckt-I and Ckt-II are achieved COD on 25.3.2015 and 16.1.2017, respectively. Out of the total capital cost of ₹1276.40 lakh, 50% of the



capital cost will be allowed from 25.3.2015 to 15.1.2017 and from 16.1.2017, 100% capital cost is considered for the determination of tariff.

Asset-20: (220 kV D/C Badisid-Aau transmission line)

46. The Petitioner has claimed the COD of Asset -20 as 13.4.2016, which falls in the FY 2016-17. RERC vide its order dated 9.10.2014 in Petition Nos. 437/14 and 463/14 approved the investment plan as well as the capital cost of the 220 kV D/C Badisid-Aau transmission line (Asset-20) as ₹2857.05 lakh. The Petitioner vide Auditor's Certificate dated 10.6.2024 has certified the capital cost of the 220 kV D/C Badisid-Aau transmission line as ₹2857.05 lakh. Taking into consideration the RERC approval of the investment plan and Auditor's Certificate, the capital cost of 220 kV D/C Badisid-Aau transmission line (Asset-20) is considered as ₹2857.05 lakh for the purpose of the determination of tariff.

Treatment of IDC, IEDC, and Initial Spares

47. The Petitioner has not claimed the IDC, IEDC, and Initial Spares for the aforesaid transmission assets.

Additional Capital Expenditure (ACE)

48. The Petitioner has not claimed the Additional Capital Expenditure (ACE) for the 2014-19 tariff period.

Debt- Equity Ratio

49. The debt-equity ratio of 70:30 has been considered in respect of the following transmission assets as on COD and as on 31.3.2019 in accordance with Regulation 19 of the 2014 Tariff Regulations:



Asset-18: 220 kV D/C Aau-Baithwasia Line

Funding	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	1402.98	70.00	1402.98	70.00
Equity	601.28	30.00	601.28	30.00
Total	2004.25	100.00	2004.25	100.00

Asset-19 : 220 kV D/C Baithwasia- Bhawad Line

Funding	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ lakh)	(in %)
Debt	446.74	70.00	893.48	70.00
Equity	191.46	30.00	382.92	30.00
Total	638.20	100.00	1276.40	100.00

Asset-20 : 220 kV D/C Badisid-Aau line

Funding	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	1999.94	70.00	1999.94	70.00
Equity	857.12	30.00	857.12	30.00
Total	2857.05	100.00	2857.05	100.00

Depreciation

50. Depreciation in respect of the transmission assets has been worked out as per Regulation 27 of the 2014 Tariff Regulations.

51. Asset-18 (220 kV D/C Aau-Baithwasia Line), Asset-19 (220 kV D/C Baithwasia-Bhawad line) and Asset-20 (220 kV D/C Badisid-Aau line in Petition No. 215/TT/2017) in the instant Petition were put into commercial operation on 29.3.2015, 25.3.2015 and 13.4.2016 respectively and they will complete 12 years beyond the FY 2018-19. Thus, the depreciation has been calculated annually based on the Straight-Line Method and at the rates specified in Appendix-II. Accordingly, the depreciation has been worked out for Assets-18, 19, and 20 on the basis of the capital expenditure as on COD and



additional capitalization incurred/ projected to be incurred thereafter, wherein the depreciation for the first year has been calculated on a *pro rata* basis for the year/ part of the year.

(₹ in lakh)

Sr. No.	Particulars	Asset-18	
		2016-17	2017-18
A	Opening Gross Block	2004.25	2004.25
B	Addition during the year 2014-19 due to projected ACE	0.00	0.00
C	Closing Gross Block (A+B)	2004.25	2004.25
D	Average Gross Block (A+C)/2	2004.25	2004.25
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
F	Balance useful life (at the beginning of the year)	34.00	33.00
G	Lapsed Life (at the beginning of the year)	1.00	2.00
H	Aggregated Depreciable Value	1803.83	1803.83
I	Depreciation during the year	105.82	105.82
J	Cumulative Depreciation (at the end of the year)	211.65	317.47
K	Remaining Depreciable Value (H-J)	1592.18	1486.35

(₹ in lakh)

Sr. No.	Particulars	Asset-19(a)	Asset-19(b)	
		2016-17 (1.4.2016 to 15.1.2017) (290 days)	2016-17 (16.1.2017 to 31.3.2017) (75 days)	2017-18
A	Opening Gross Block	638.20	1276.40	1276.40
B	Addition during the year 2014-19 due to projected ACE	0.00	0.00	0.00
C	Closing Gross Block (A+B)	638.20	1276.40	1276.40
D	Average Gross Block (A+C)/2	638.20	1276.40	1276.40
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
F	Balance useful life (at the beginning of the year)	34.00	34.00	33.00
G	Lapsed Life (at the beginning of the year)	1.00	1.00	2.00
H	Aggregated Depreciable Value	574.38	1148.76	1148.76
I	Depreciation during the year	26.77	13.85	67.39
J	Cumulative Depreciation (at the end of the year)	60.47	81.24	148.64
K	Remaining Depreciable Value (H-J)	513.91	1067.52	1000.12



Sr. No.	Particulars	(₹ in lakh)	
		Asset-20	
		2017-18	
A	Opening Gross Block	2857.05	
B	Addition during the year 2014-19 due to projected ACE	0.00	
C	Closing Gross Block (A+B)	2857.05	
D	Average Gross Block (A+C)/2	2857.05	
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	
F	Balance useful life (at the beginning of the year)	35.00	
G	Lapsed Life (at the beginning of the year)	0.00	
H	Aggregated Depreciable Value	2571.35	
I	Depreciation during the year	150.85	
J	Cumulative Depreciation (at the end of the year)	150.85	
K	Remaining Depreciable Value (H-J)	2420.49	

Interest on Loan

52. The Petitioner has not submitted the Form-9C for Assets-18 (220 kV D/C Aau-Baithwasia Line), Asset-19 (220 kV D/C Baithwasia-Bhawad line), and Asset-20 (220 kV D/C Badisid-Aau line in Petition No. 215/TT/2017). Therefore, in the absence of actual interest rates deployed for the transmission assets, the rate of interest during the FY 2016-17 and FY 2017-18 as applied in other transmission assets in the Petition, has been applied for these transmission assets also. IoL has been allowed in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed in respect of the Assets-18, 19, and Asset-20 for the FY 2016-17 and the FY 2017-18 are as follows:

Particulars	(₹ in lakh)		
	Asset-18		
	2016-17	2017-18	
A	Gross Normative Loan	1402.98	1402.98
B	Cumulative Repayments up to Previous Year	105.82	211.65
C	Net Loan-Opening (A-B)	1297.15	1191.33
D	Addition due to ACE	0.00	0.00
E	Repayment during the year	105.82	105.82
F	Net Loan-Closing (C+D-E)	1191.33	1085.50
G	Average Loan (A+F)/2	1244.24	1138.41



H	Weighted Average Rate of Interest on Loan (in %)	7.210	7.277
I	Interest on Loan (GxH)	89.71	82.85

(₹ in lakh)

Sr. No.	Particulars	Asset-19(a)	Asset-19(b)	
		2016-17 (1.4.2016 to 15.1.2017) (290 days)	2016-17 (16.1.2017 to 31.3.2017) (75 days)	2017-18
A	Gross Normative Loan	446.74	893.48	893.48
B	Cumulative Repayments up to Previous Year	33.70	67.39	81.24
C	Net Loan-Opening (A-B)	413.04	826.09	812.24
D	Addition due to ACE	0.00	0.00	0.00
E	Repayment during the year	26.77	13.85	67.39
F	Net Loan-Closing (C+D-E)	386.27	812.24	744.84
G	Average Loan (A+F)/2	399.66	819.16	778.54
H	Weighted Average Rate of Interest on Loan (in %)	7.210	7.210	7.277
I	Interest on Loan (GxH)	22.90	12.14	56.66

(₹ in lakh)

Particulars		Asset-22 2017-18
A	Gross Normative Loan	1999.94
B	Cumulative Repayments up to Previous Year	0.00
C	Net Loan-Opening (A-B)	1999.94
D	Addition due to ACE	0.00
E	Repayment during the year	150.85
F	Net Loan-Closing (C+D-E)	1849.08
G	Average Loan (A+F)/2	1924.51
H	Weighted Average Rate of Interest on Loan (in %)	7.277
I	Interest on Loan (GxH)	140.05

Return on Equity (RoE)

53. The Petitioner has neither submitted any tariff form nor any supporting document with respect to the tax rate for the purpose of grossing up the RoE. Therefore, the effective tax rate during the FY 2016-17 and the FY 2017-18 tariff period has been considered as zero for the purpose of grossing up RoE. Accordingly, as per Regulation 25(3) of the 2014 Tariff Regulations, RoE allowed in respect of the Assets-



18 (220 kV D/C Aau-Baithwasia Line), Asset-19 (220 kV D/C Baithwasia-Bhawad line) and Asset-20 (220 kV D/C Badisid-Aau line in Petition No. 215/TT/2017) is as follows:

(₹ in lakh)

Particulars		Asset-18	
		2016-17	2017-18
A	Opening Equity	601.28	601.28
B	Additions	0.00	0.00
C	Closing Equity (A-B)	601.28	601.28
D	Average Equity (A+B)/2	601.28	601.28
E	Return on Equity (Base Rate) (in %)	15.50	15.50
F	Effective Tax Rate /MAT Rate for respective year (in %)	0.00	0.00
G	Rate of Return on Equity (in %)	15.50	15.50
H	Return on Equity (DxG)	93.20	93.20

(₹ in lakh)

Sr. No.	Particulars	Asset-19(a)	Asset-19(b)	
		2016-17 (1.4.2016 to 15.1.2017) (290 days)	2016-17 (16.1.2017 to 31.3.2017) (75 days)	2017-18
A	Opening Equity	191.46	382.92	382.92
B	Additions	0.00	0.00	0.00
C	Closing Equity (A-B)	191.46	382.92	382.92
D	Average Equity (A+B)/2	191.46	382.92	382.92
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50
F	Effective Tax Rate /MAT Rate for respective year (in %)	0.00	0.00	0.00
G	Rate of Return on Equity (in %)	15.50	15.50	15.50
H	Return on Equity (DxG)	23.58	12.20	59.35

(₹ in lakh)

Particulars		Asset-20
		2017-18
A	Opening Equity	857.12
B	Additions	0.00
C	Closing Equity (A-B)	857.12
D	Average Equity (A+B)/2	857.12
E	Return on Equity (Base Rate) (in %)	15.50
F	Effective Tax Rate /MAT Rate for respective year (in %)	0.00
G	Rate of Return on Equity (in %)	15.50
H	Return on Equity (DxG)	132.85



Operation and Maintenance Expenses (O&M Expenses)

54. The O&M Expenses have been worked out in respect of Assets-18, 19, and Asset-20 as per Regulation 35(3) of the 2014 Tariff Regulations and the same are as follows:

(₹ in lakh)		
Asset details	2016-17	2017-18
Asset-18: 220 kV D/C Aau-Baithwasia Line (Length: 46.63 km)	15.21	15.57
	2016-17	2017-18
Asset-19 220 kV D/C Baithwasia - Bhawad Line (33.03 km) (Upto 15.1.2017)	11.30	-
220 kV D/C Baithwasia - Bhawad Line (33.03 km) (from 16.1.2017)	24.94	25.76
Asset-20: 220 kV D/C Badisid -Aau line (Length in KM: 59.20)		23.22

Interest on Working Capital (IWC)

55. The IWC has been worked out in accordance with Regulation 28(1)(c) of the 2014 Tariff Regulations. The Rate of Interest (ROI) considered is 13.50% (SBI base rate as on 1.4.2014 of 10.00% plus 350 basis points) for the FY 2014-15 (the year of COD of Asset-18 220 kV Aau-Baithwasia Line and Asset-19 220 kV Baithwasia-Bhawad Line) and 12.80% (SBI base rate as on 1.4.2016 of 9.30% plus 350 basis points) for the FY 2016-17 (the year of COD of Asset-20: 220 kV D/C Badisid-Aau Line). The components of the working capital and interest allowed thereon for Asset-18 (220 kV D/C Aau-Baithwasia Line), Asset-19 (220 kV D/C Baithwasia-Bhawad line), and Asset- 20 (220 kV D/C Badisid-Aau line in Petition No. 215/TT/2017) are as follows:



(₹ in lakh)

Particulars		Asset-18	
		2016-17	2017-18
A	Working Capital for O&M Expenses (one month of O&M Expenses)	1.27	1.30
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M Expenses)	2.28	2.34
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	51.91	50.80
D	Total Working Capital (A+B+C)	55.45	54.43
E	Rate of Interest (in %)	13.50	13.50
F	Interest on Working Capital (DxE)	7.49	7.35

(₹ in lakh)

	Particulars	Asset-19(a)	Asset-19(b)	
		2016-17 (1.4.2016 to 15.1.2017) (290 days)	2016-17 (16.1.2017 to 31.3.2017) (75 days)	2017-18
A	Working Capital for O&M Expenses (one month of O&M Expenses)	1.19	10.11	2.15
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	2.13	18.21	3.86
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	18.22	53.03	35.80
D	Total Working Capital (A+B+C)	21.54	81.35	41.81
E	Rate of Interest (in %)	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	2.31	2.26	5.64

(₹ in lakh)

Particulars		Asset-20
		2017-18
A	Working Capital for O&M Expenses (one month of O&M Expenses)	1.94
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	3.48
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	76.24
D	Total Working Capital (A+B+C)	81.66
E	Rate of Interest (in %)	12.80
F	Interest on Working Capital (DxE)	10.45



Approved Annual Fixed Charges for the 2014-19 Tariff Period

56. The Annual Fixed Charges (AFC) approved in respect of Assets-18 and 19 (i.e., 220 kV D/C Aau-Baithwasia Line and 220 kV D/C Baithwasia-Bhawad Line) for the FY 2016-17 and the FY 2017-18, and that for Asset-20 (220 kV D/C Badisid-Aau Line) for the FY 2017-18 are as follows:

(₹ in lakh)

Particulars	Asset-18	
	2016-17	2017-18
Depreciation	105.82	105.82
Interest on Loan	89.71	82.85
Return on Equity	93.20	93.20
Interest on Working Capital	7.49	7.35
O&M Expenses	15.21	15.57
Total	311.43	304.79

(₹ in lakh)

Particulars	Asset-19(a)	Asset-19(b)	
	2016-17 (1.4.2016 to 15.1.2017) (290 days)	2016-17 (16.1.2017 to 31.3.2017) (75 days)	2017-18
Depreciation	26.77	13.85	67.39
Interest on Loan	22.90	12.14	56.66
Return on Equity	23.58	12.20	59.35
Interest on Working Capital	2.31	2.26	5.64
O&M Expenses	11.30	24.94	25.76
Total	86.86	65.38	214.81

(₹ in lakh)

Asset-20	2017-18
Depreciation	150.85
Interest on Loan	140.05
Return on Equity	132.85
Interest on Working Capital	10.45
O&M Expenses	23.22
Total	457.43

Sharing of Transmission Charges

57. The sharing of the transmission charges for inter-State transmission systems was governed by the provisions of the 2010 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. Further, the transmission charges allowed in this order shall be adjusted against the ARR approved by the State Commission.

58. 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 the tariff should be linked with its availability, for which necessary mechanisms may be put in place by the RPC. We direct that the 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 NRPC in terms of the provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, as applicable.

59. We further direct the Petitioner to approach the RERC for adjustment of such recovery against the ARR of the respective years of the Petitioner.

60. This order disposes of Petition Nos. 112/TT/2017 and 215/TT/2017 in terms of the above discussions and findings, as per the directions of the APTEL passed in the instant remand order.

sd/-
(Ramesh Babu V.)
Member

sd/-
(Arun Goyal)
Member

sd/-
(Jishnu Barua)
Chairperson

