

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 241/MP/2022

Coram:

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

Date of Order : 06.06.2023

In the matter of:

Miscellaneous Petition against approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 220 kV Kishanganga-Amargarh D/C line on M/C tower under the scheme "Transmission System associated with Kishanganga HEP" in the Northern Region.

And in the matter of:

NHPC Limited,
(A Govt. of India Enterprise)
NHPC Office Complex, Sector-33,
Faridabad (Haryana) – 121003.

.....Petitioner

Versus

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

..... Respondent

For Petitioner : Shri Rajiv Shankar Dwivedi, Advocate, NHPC
Shri S.K. Meena, NHPC
Shri Aman Mahajan, NHPC

For Respondent : Shri S.S Raju, PGCIL
Shri B.B. Rath, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri Nitish Kumar, PGCIL
Shri Ranjeet Kr. Pandey, PGCIL



Order in Petition No. 241/MP/2022

ORDER

The Petitioner, NHPC Limited, has filed the present Miscellaneous Petition against approval of tariff under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of transmission tariff from the date of commercial operation (COD) to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 220 kV Kishenganga-Amargarh D/C Transmission Line on M/C tower (hereinafter referred to as “the transmission asset”) under the “Transmission System associated with Kishanganga HEP” (hereinafter referred to as “the transmission system”) in the Northern Region.

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

“1) Issue appropriate direction to PGCIL to apportion the cost of multi-circuit towers and land for these towers between both the lines as per the provisions of Regulation 6(2) of CERC Tariff Regulations, 2014.

2) Revise the transmission charges to be paid by the petitioner during the period 27.02.2018 to 17.05.2018 and to recover the difference from PGCIL along with interest.

3) Allow the cost of petition to be recovered from the PGCIL.

4) Pass any further order/orders as are deemed fit and proper in the facts and circumstances of the case.”

3. Brief facts leading to filing of present petition are as follows:

(a) The Petitioner owns Kishanganga Power Station (3x110=330 MW) which is located in the Union Territory of Jammu and Kashmir and is supplying



power to its beneficiaries in the Northern Region from the date of commercial operation of its first unit i.e. 18.5.2018.

- (b) The power from the Petitioner's Kishanganga Power Station is evacuated through 220 kV Kishanganga–Amargarh D/C line and 220 kV Kishanganga–Wagoora D/C line on multi circuit towers upto a common 'T' point near Delina Sub-station and on double circuit tower thereafter.
- (c) The Respondent, Powergrid Corporation of India Limited (PGCIL) was implementing the transmission system associated with Kishanganga HEP. The Petitioner, NHPC and Respondent, PGCIL signed Implementation Agreement dated 8.7.2014 for simultaneous commissioning of generating project and the Associated Transmission System.
- (d) PGCIL filed Petition No. 124/TT/2018 for determination of transmission tariff in respect of Kishanganga-Amargarh D/C line on M/C tower and the Commission vide order dated 25.4.2019 in Petition No. 124/TT/2018, approved COD of Kishanganga-Amargarh D/C line as 27.2.2018, under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations as the associated generation under the scope of work of NHPC was not ready. The Commission in the said order further held that NHPC would bear the transmission charges of the said line from 27.2.2018 to 17.5.2018 (i.e. till COD of the first unit of the Petitioner).
- (e) NHPC filed Review Petition No. 13/RP/2020 against the Commission's order dated 24.5.2019 in Petition No. 124/TT/2018, as there were errors apparent on record in calculation of Annual Fixed Charges (AFC) for the



period 27.2.2018 to 31.3.2018. The Commission vide order dated 26.8.2020, disposed of the said Review Petition No. 13/RP/2020 with the observation that these errors will be corrected at the time of truing up of tariff.

(f) The Respondent, PGCIL filed Petition No.471/TT/2020 for truing up of transmission tariff in respect of the transmission asset i.e. 220 kV Kishanganga-Amargarh D/C line for 2014-19 period and determination of tariff for 2019-24 period. The Commission vide order dated 9.6.2021 in Petition No. 471/TT/2020, allowed transmission tariff for the transmission asset with the observation that transmission charges for the period from 27.2.2018 to 17.5.2018, shall be borne by NHPC. However, PGCIL failed to implead NHPC as Respondent in Petition No. 471/TT/2020 despite the fact it was one of the Respondents in Petition No.124/TT/2018, and was required to make payment of the transmission charges for the period from 27.2.2018 to 17.5.2018 to PGCIL.

(g) On perusal of Form-1A in Petition No. 471/TT/2020 and in Petition No 22/TT/2021, it was found that cost of transmission line as on COD/1.4.2019 in respect of Kishanganga-Amargarh line (line length 43 km) is ₹13438 lakh and the cost of transmission line as on COD/1.4.2019 in respect of Kishanganga Wagoora line (line length 115 km) is ₹12922 lakh. PGCIL had loaded the entire cost of multi-circuit towers and land cost for these towers (which is a common asset for both the lines) in the cost of Kishanganga-Amargarh transmission line. NHPC has clarified this aspect of the matter in



its reply filed in Petition No. 22/TT/2021. PGCIL has admitted this fact in its rejoinder to the reply of NHPC in the said petition.

- (h) PGCIL has loaded complete cost of multi-circuit towers and cost of land for these towers in the capital cost of Kishanganga-Amargarh transmission lines instead of apportionment of cost of these multi circuit towers in both the transmission lines as per Regulation 6(2) of the 2014 Tariff Regulations.
- (i) NHPC noticed the cost of Kishanganga Wagoora transmission line only when PGCIL filed Petition No. 22/TT/2021 on 18.11.2020. However, NHPC could not bring these facts to the notice of the Commission as PGCIL did not implead NHPC as Respondent in Petition No. 471/TT/2020.
- (j) NHPC is affected by non-apportionment of capital cost as the Commission vide order dated 25.4.2019 in Petition No.124/TT/2018 observed that NHPC would bear the transmission charges of Kishanganga-Amargarh transmission line from 27.2.2018 to 17.5.2018. Since PGCIL has loaded the entire cost of multi-circuit towers and land for these towers in the cost of Kishanganga-Amargarh transmission lines, NHPC had to bear high transmission charges for the period from 27.2.2018 to 17.5.2018.
- (k) NHPC filed IA No. 81 of 2021 in Petition No. 471/TT/2020 for its impleadment in the original petition. The Commission vide Record of Proceedings (RoP) dated 1.8.2022 in Review Petition No. 29/RP/2022, observed that IA No. 81 of 2021, filed by NHPC in Petition No. 471/TT/2020, was converted into Review Petition No. 29/RP/2022. The Commission in the said RoP dated 1.8.2022, further observed that NHPC was not a party



to the original petition, hence the grievance of NHPC cannot be considered in a Review Petition. Thus, the Review Petition No.29/RP/2022 of NHPC was converted into a Miscellaneous Petition, and that the Petitioner was directed to file a detailed Miscellaneous Petition. Accordingly, the Petitioner filed the present petition.

4. The Petitioner has served the petition on the Respondent, PGCIL. The Respondent, PGCIL did not file any formal reply to the present petition. However, PGCIL has filed affidavits dated 18.11.2022 and 13.1.2023 in response to RoPs of the Commission dated 27.10.2022 and 20.12.2022 in Petition No. 22/TT/2021 and Petition No. 241/MP/2022. The information given by PGCIL has been discussed in the relevant portions of this order in subsequent paragraphs.

5. The matter heard on 20.12.2022 and order was reserved.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 10.8.2022 and the information submitted by the Respondent PGCIL vide affidavits dated 18.11.2022 and 13.1.2023.

7. Having heard the learned counsel for the Petitioner, representatives for the Respondent, PGCIL and perused the material on record, we proceed to dispose of the petition.

Analysis and Decision

8. We have considered the submissions NHPC and PGCIL and have also gone through the record carefully.

9. On perusal of record, we find that PGCIL filed Petition No.124/TT/2018 for determination of transmission tariff in respect of the transmission asset i.e. 220 kV



Kishanganga-Amargarh D/C line on M/C tower under the transmission system and the Commission vide its order dated 25.4.2019 allowed COD of the transmission asset as 27.2.2018 under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations as the associated generating station under the control of NHPC was not ready. We further note that COD of Unit-I of NHPC was declared on 18.5.2018, therefore, the Commission vide order dated 25.4.2019 in Petition No. 124/TT/2018 directed that transmission charges from 27.2.2018 (COD of the transmission line) to 17.5.2018 (day before COD of Unit-I of NHPC) shall be borne by NHPC as the downstream asset under the scope of work of NHPC was not completed. We also note that NHPC filed Review Petition No. 13/RP/2020 for rectification of arithmetical errors in the calculation of AFC in order dated 25.4.2019 in Petition No. 124/TT/2018 and the Commission disposed of the said Review Petition vide order dated 26.8.2020 observing that the errors will be corrected at the stage of truing up.

10. From the record, we find that PGCIL filed Petition No. 471/TT/2020 and the Commission vide order dated 9.6.2021, trued up the transmission tariff in respect of the transmission asset for the period from 27.2.2018 to 31.3.2019 and also determined tariff for 2019-24 period. PGCIL, however, failed to implead NHPC as Respondent in Petition No. 471/TT/2020 and as such NHPC filed Interlocutory Application (IA) No. 81/IA/2021 for impleading NHPC as a Respondent in Petition No. 471/TT/2020 and to allow it to file its reply to the petition on merits.

11. NHPC has contended that PGCIL filed Petition No. 22/TT/2021 for determination of transmission tariff in respect of Kishanganga-Wagoora Transmission Line from COD to 31.3.2024. Further, the cost of Kishanganga-Amargarh Transmission Line (43 km) as on COD is ₹13438 lakh and the cost of Kishanganga-



Wagoora Transmission Line (115 km) as on COD is ₹12922 lakh. NHPC has further contended that PGCIL has loaded the entire cost of multi-circuit towers, which happen to be a common asset for both the lines, (i.e. Kishanganga-Amargarh and Kishanganga-Wagoora) in the cost of Kishanganga-Amargarh Transmission Line instead of apportionment of cost of these multi-circuit towers in both the above said transmission lines. NHPC has contended that owing to loading of entire cost of multi-circuit portion on Kishanganga-Amargarh Transmission Line, NHPC has to bear higher transmission charges for the period of mismatch from 27.2.2018 to 17.5.2018.

12. Upon hearing the parties on IA No. 81 of 2021, the Commission vide RoP dated 21.12.2021, directed to convert the said IA into a Review Petition in Petition No. 471/TT/2020, resultantly, the said IA was converted into Review Petition No. 29/RP/2022.

13. In the course of hearing the Review Petition No.29/RP/2022 on 1.8.2022, the Commission observed that NHPC was not a party in Petition No. 471/TT/2020 and as such converted the Review Petition No. 29/RP/2022 into a Miscellaneous Petition and directed NHPC to file a detailed Miscellaneous Petition. Accordingly, NHPC has filed Miscellaneous Petition No. 241/MP/2022. In these circumstances, the Review Petition No. 29/RP/2022, became infructuous.

14. PGCIL filed Petition No. 22/TT/2021 for determination of tariff from COD to 31.3.2024 in respect of 220 kV Kishanganga-Wagoora D/C line which was partially on M/C tower under the transmission system. The main plea of NHPC is that entire cost of the multi-circuit portion has been loaded on Kishanganga-Amargarh Transmission Line due to which NHPC has to pay higher transmission charges for the period of mismatch from 27.2.2018 to 17.5.2018, while the cost of multi-circuit



towers was required to be apportioned between Kishanganga Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. Considering this aspect of the matter, the Commission decided to list and hear Petition No. 22/TT/2021 and Petition No. 241/MP/2021 together. It is relevant to mention here that while hearing the parties on IA No. 81 of 2021 in Petition No. 471/TT/2020, on 21.12.2021, the Commission observed that sharing of transmission charges for the period of mismatch between the transmission assets of PGCIL and NHPC has already been decided vide order dated 9.6.2021 in Petition No. 471/TT/2020 and as such Petition No. 471/TT/2020, was not required to be opened.

15. Accordingly, Petition No. 22/TT/2021 and Petition No. 241/MP/2022 were heard together on 27.10.2022 and 20.12.2022. In the course of hearing the said petitions, the Commission sought certain information with regard to (a) the detailed break-up of cost of Kishanganga–Amargarh Transmission Line and Kishanganga–Wagoora Transmission Line along with apportionment of cost of common assets including land, (b) reconciliation of expenditure claimed in Form-1A and expenditure provided in the Auditor’s certificate, revised tariff forms, details of cost adjustment of common assets of Kishanganga-Wagoora Transmission Line and revised apportionment.

16. In response, PGCIL vide affidavits dated 18.11.2022 and 13.1.2023, respectively has submitted the information sought by the Commission. PGCIL has contended that as per the directions in RoP dated 27.10.2022 in Petition No. 22/TT/2021 and Petition No. 241/MP/2022, the capital cost of the Kishanganga–Amargarh Transmission Line and Kishanganga–Wagoora Transmission Line has been re-apportioned and detailed break-up of their cost has been filed vide affidavit



dated 18.11.2022. PGCIL has further contended that RCE-II has been submitted because of re-apportionment of capital cost of the transmission lines.

17. From the submissions of the parties, the issue which needs consideration is whether the cost of multi-circuit towers and land can be apportioned between Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line as per the provisions of Regulation 6(2) of the 2014 Tariff Regulations, 2014.

18. It is relevant to mention here that in respect of 220 kV Kishanganga-Wagoora D/C line, the Commission vide order dated 31.5.2023 in Petition No. 22/TT/2021 has approved the apportionment of common cost between both the transmission assets. Accordingly, in the present petition we deal with the apportionment of common cost relating to 220 kV Kishanganga-Amargarh D/C line on M/C tower under the transmission scheme.

19. We think it proper to refer to the Commission's order dated 25.4.2019 in Petition No.124/TT/2018, whereby the Commission allowed COD of the transmission asset as well as transmission charges for the mismatch period, which is as follows:

"14. We have considered the submissions made by Petitioner and Respondents regarding admissibility of COD under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations, read as under:

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(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end: Provided that:

(i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations :



(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.

15. In support of COD of Asset-I, the petitioner has submitted provisional CEA Certificate dated 22.2.2018 under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010, NRLDC letter dated 16.7.2018 with first time charging date as 25.2.2018, indicating intermittent power flow during trial run period. The petitioner has also submitted the CMD Certificate vide affidavit dated 17.10.2018 certifying that the transmission line, and communication system conform to the relevant Grid Standard and Grid Code and are capable of operation to their full capacity with effect from 27.2.2018 as required under Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010. Thus, in our opinion, when all the conditions for commercial operation are being met, the petitioner cannot be denied the leverage of declaration of Commercial Operation of Asset-I. Considering these facts, we approve the Commercial Operation Date of instant assets as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

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17. Thus, as the COD of the instant transmission assets has been approved as 27.2.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and the COD of unit-I of NHPC was declared on 18.5.2018, the transmission charges from 27.2.2018 (COD of the transmission lines) to 17.5.2018 (day before COD of unit-I of NHPC) shall be borne by NHPC.”

20. On perusal of above order, we note that COD of the transmission asset i.e. 220 kV Kishanganga-Amargarh D/C line on M/C tower is approved as 27.2.2018 under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations.

Capital cost

21. The Commission vide order dated 25.4.2019 in Petition No. 124/TT/2018 has allowed the following capital cost as on COD and Additional Capital Expenditure (ACE) for 2014-19 tariff period after making necessary adjustments of IDC and IEDC of the transmission asset:



(i) **Capital cost as on COD:**

(₹ in lakh)

Expenditure upto COD (claimed)	Less: IDC claimed	Less: IEDC claimed	Hard Cost	IDC allowed on Cash Basis as on COD	IEDC allowed as on COD	Excess and undischarged Initial Spares disallowed on COD	Admissible Capital Cost as on COD
13170.55	801.21	428.50	11940.84	474.92	428.50	201.88	12642.38

(ii) **Capital Cost as on 31.3.2019** (₹ in lakh)

Capital cost as on COD	ACE		Capital cost as on 31.3.2019
	2017-18 (27.2.18 to 31.3.18)	2018-19	
12642.38	191.65	1844.11	14678.14

22. PGCIL filed Petition No. 471/TT/2020 for truing up of transmission tariff of 2014-19 period under the 2014 Tariff Regulations and determination of transmission tariff for 2019-24 period under the 2019 Tariff Regulations for both the transmission lines and the Commission vide its order dated 9.6.2021, trued-up the tariff for 2014-19 period and allowed tariff for 2019-24 tariff period.

23. The details of the trued-up capital cost approved in respect of the transmission lines vide order dated 9.6.2021 in Petition No.471/TT/2020 is as follows:

(i) **Capital cost as on COD**

(₹ in lakh)

Capital cost claimed as on COD vide Auditor's certificate (A)	Un-discharged IDC (B)	IDC disallowed due to computational difference (C)	Capital cost allowed as on COD (D) = (A-B-C)
13170.55	316.97	6.21	12847.37



(ii) **Capital Cost as on 31.3.2019**

(₹ in lakh)

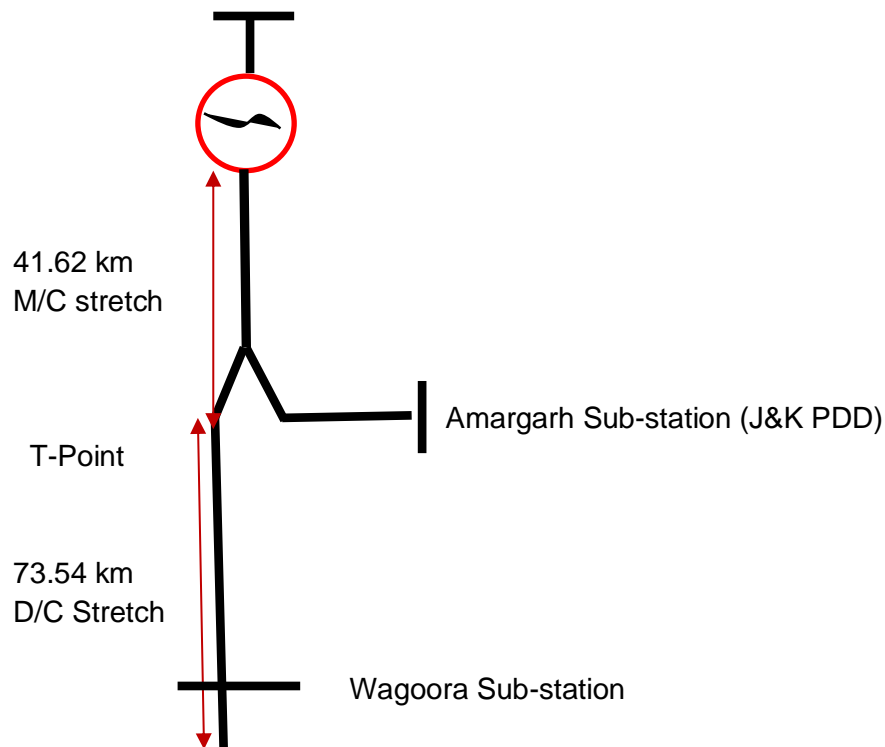
Capital cost as on COD	ACE		Capital cost as on 31.3.2019
	2017-18	2018-19	
12847.37	191.65	1458.60	14497.62

24. NHPC has submitted that entire cost of the multi-circuit portion has been loaded on Kishanganga-Amargarh Transmission Line due to which NHPC has to bear higher transmission charges for the period of mismatch from 27.2.2018 to 17.5.2018. The cost of multi-circuit towers and the land has to be apportioned between the Kishanganga-Amargarh Transmission Line and Kishanganga- Wagoora Transmission Line.

25. PGCIL has submitted that Kishanganga-Amargarh Transmission Line was first put into commercial operation and, therefore, the cost of the towers was included in its cost.

26. We have considered the submissions of the Petitioner and PGCIL. PGCIL was required to construct Kishanganga–Amargarh Transmission Line and Kishanganga–Wagoora Transmission Line for evacuation of 330 MW power from Kishanganga HEP under the scope of work of NHPC. The relevant diagram of Kishanganga HEP (3x110 MW) (NHPC) is as follows:





27. From the above diagram, it is observed that 41.62 multi-circuit stretch is common between Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. However, PGCIL has claimed entire cost of M/C portion under Kishanganga-Amargarh Transmission Line and COD of the Kishanganga-Amargarh Transmission Line was approved as 27.2.2018 under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations as the associated generation under the scope of NHPC was not ready.

28. Regulation 6(2) of the 2014 Tariff Regulations provides as follows:

“2) For the purpose of determination of tariff, the capital cost of a project may be broken up into stages, blocks, units, transmission lines and sub-stations, forming part of the project, if required:

*Provided that where break-up of the capital cost of the project for different stages or units or blocks and for transmission lines or sub-stations is not available and in case of on-going projects, **the common facilities shall be apportioned on the basis of the installed capacity of the units, line length and number of bays:***

Provided further that in relation to multi-purpose hydro schemes, with irrigation, flood



control and power components, the capital cost chargeable to the power component of the scheme only shall be considered for determination of tariff.”

29. On perusal of Regulation 6(2) of the 2014 Tariff Regulations, it is observed that common facilities shall be apportioned on the basis of line length and number of bays. In the present case, 41.62 multi-circuit stretch is common between Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. Accordingly, we are of the view that capital cost of the multi-circuit portion has to be apportioned between the Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. The Petitioner has further submitted the estimated completion cost of both the transmission asset after apportionment of common cost towards land (freehold), transmission line, sub-station, PLCC for the assets Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. We approve the apportionment of common cost between both the transmission assets.

30. It is observed that entire cost of the multi-circuit portion has been loaded on Kishanganga-Amargarh Transmission Line, as a result, NHPC has to bear higher transmission charges for the period of mismatch from 27.2.2018 to 17.5.2018 as per the Commission's order dated 25.4.2019 in Petition No. 124/TT/2018. Therefore, the cost of multi-circuit towers has to be apportioned between Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. In view of the peculiar facts and circumstances, the tariff approved vide order dated 9.6.2021 in Petition No.471/TT/2020 is re-calculated based on the revised cost apportionment between the two transmission lines and revised tariff forms as submitted by PGCIL.



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

Capital cost

31. PGCIL vide affidavit dated 18.11.2022, has submitted break up of cost of Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line along with apportionment of cost of common assets including land.

32. The estimated completion cost of the transmission lines after apportionment of cost of common assets including land is as follows:

a) Kishanganga–Amargarh Transmission Line (COD: 27.2.2018)

(₹ in lakh)

Particulars	Land (Freehold)	Transmission line	Sub-station	PLCC	Total
Expenditure upto COD	1044.61	6180.97	0.00	51.70	7277.28
Expenditure from 27.2.2018 to 31.3.2018	13.99	77.55	0.00	0.00	91.53
Expenditure from 1.4.2018 to 31.3.2019	0.51	662.16	0.00	33.55	696.22
Expenditure from 1.4.2019 to 31.3.2020	0.00	411.55	0.00	61.06	472.61
Expenditure from 1.4.2020 to 31.3.2021	-0.04	349.29	0.00	0.00	349.25
Expenditure from 1.4.2021 to 31.3.2022	0.00	18.76	0.00	0.00	18.76
Total	1059.07	7700.28	0.00	146.31	8905.65

b) Kishanganga–Wagoora Transmission Line (COD: 31.7.2019)

(₹ in lakh)

Particulars	Land (Freehold)	Transmission line	Sub-station	PLCC	Total
Expenditure upto COD	3183.60	17677.38	713.67	105.22	21679.88
Expenditure from 31.7.2019 to 31.3.2020	0.00	991.98	80.89	0.00	1072.87
Expenditure from 1.4.2020 to 31.3.2021	-1.92	1135.42	117.85	0.00	1251.35
Expenditure from 1.4.2021 to 31.3.2022	0.00	39.97	0.00	0.00	39.97
Estimated Expenditure in 2022-23	0.00	70.90	0.00	0.00	70.90
Total	3181.68	19915.65	912.41	105.22	24114.95



33. PGCIL vide affidavit dated 13.1.2023 has submitted revised FR apportioned approved cost, revised RCE apportioned approved cost and revised estimated completion cost of the transmission assets and the same are as follows:

(₹ in lakh)				
Assets	Petition No.	Revised FR apportioned approved cost	Revised RCE apportioned approved cost	Revised estimated completion cost
Kishanganga-Amargarh Transmission Line (COD-27.2.2018)	241/MP/2022 (present petition i.e. revision of 471/TT/2020)	8474.02	9140.41	8905.65
Kishanganga-Wagoora Transmission Line (COD-31.7.2019)	22/TT/2021	18405.58	24602.04	24114.95
Total		26879.60	33742.45	33020.60

34. PGCIL has also submitted revised capital cost incurred as on 31.3.2014 and ACE for 2019-24 tariff period and the same are as follows:

(₹ in lakh)						
Apportioned Cost as per RCE	Exp. Upto 31.3.2019	Additional Capital Expenditure (ACE)				Estimated Completion Cost
		2019-20	2020-21	2021-22	2022-23	
9140.41	8065.04	472.61	349.25	18.76	0.00	8905.66

35. PGCIL has submitted that land in present project is on leasehold basis. However, inadvertently, freehold land was claimed earlier. PGCIL has prayed to condone this inadvertent error and consider land on leasehold basis.

36. The details of capital cost claimed by PGCIL in respect of the transmission as on COD, allowed by the Commission vide order dated 9.6.2021 in Petition No.471/TT/2020 as well as claim made by PGCIL in the instant petition are as follows:



(₹ in lakh)

Claimed as on COD by the Petitioner in Petition No. 471/TT/2020 as per Auditor's Certificate	Allowed by the Commission as on COD in the order in Petition No. 471/TT/2020	Claimed as on COD by the Petitioner in the present Miscellaneous Petition as per Auditor's Certificate
13170.55	12847.37	7277.28

37. The IDC claimed and considered as on the date of commercial operation and summary of discharge of IDC liability up to date of commercial operation and thereafter for the purpose of tariff determination in respect of the transmission asset is as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC disallowed due to computational error	IDC allowed	IDC discharged upto COD	IDC discharged during 2017-18	IDC discharged during 2018-19
1	2	3=2-1	4	5	6
545.95	4.85	541.10	341.72	2.44	196.94

38. PGCIL has claimed IEDC in respect of the transmission asset covered in the present petition and the same is given below. PGCIL has claimed IEDC of the transmission asset as per the Auditor's Certificate. PGCIL has submitted that entire IEDC mentioned in the Auditor's Certificate is on cash basis and was paid upto date of commercial operation.

(₹ in lakh)

IEDC claimed as per Auditor's certificate	IEDC considered as on COD	IEDC discharged up to COD
253.66	253.66	253.66

39. As time over-run in case of the transmission asset was fully condoned, there is no disallowance of IEDC. The IEDC claimed and considered in respect of the



transmission asset as on the date of commercial operation for the purpose of tariff determination is as follows:

(₹ in lakh)

IEDC as per Auditor's Certificate	IEDC allowed
253.66	253.66

40. Initial Spares in respect of the transmission asset claimed by the PGCIL are as follows:

(₹ in lakh)

Particulars	Plant and Machinery Cost (a)	Spares claimed (b)	Limit (c)	Allowable $(d=c*(a-b)/(100-c))$	Excess spares $(e=b-d)$
Transmission Line	6913.18	61.46	1%	69.21	-7.75
Sub-station (Including PLCC)	133.80	5.93	6%	8.16	-2.23

41. The discharge details of Initial Spares of the transmission asset as submitted by the PGCIL are as follows:

(₹ in lakh)

Sl. No.	Particulars	Transmission Line	Sub-station
1	Expenditure up to 27.2.2018 (Upto COD)	0.39	0.00
2	Expenditure in 2017-18	0.00	0.00
3	Expenditure in 2018-19	50.65	5.93
4	Expenditure in 2019-20	10.42	0.00
	Total	61.46	5.93

42. Initial Spares allowed for the transmission asset as per the percentage specified in the 2014 Tariff Regulations are as follows:



(₹ in lakh)

Particulars	Plant and Machinery cost (excluding IDC and IEDC, Land cost & Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations	Initial Spares allowable (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
	A	B	C	$D=(A-B)*C/(100-C)$	
Transmission Line	6913.18	61.46	1.00%	69.21	61.46
Sub-station including PLCC	133.80	5.93	6.00%	8.16	5.93

Since, PGCIL's claim for Initial Spares is within the ceiling, the Initial Spares have been allowed as claimed.

43. The details of the capital cost of the transmission asset now approved as on the date of commercial operation after adjustment of IDC and IEDC are as follows:

(₹ in lakh)

Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	IDC Disallowed due to computational difference (C)	Capital Cost allowed as on COD (E) = (A-B-C)
7277.28	199.38	4.85	7073.05

44. We have considered the submissions made by PGCIL. ACE claimed by PGCIL has been allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations. The un-discharged IDC liability as on the date of commercial operation has been allowed as ACE during the year of its discharge. The ACE allowed in respect of the transmission asset is as follows:



(₹ in lakh)

ACE allowed under Regulation 14(1)(ii) of the 2014 Tariff Regulations (as per Auditor's Certificate including Initial Spares discharged)		IDC Discharged		ACE (Including discharged Initial Spares and IDC)	
2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
91.54	696.22	2.44	196.94	93.98	893.16

45. The details of the capital cost and ACE approved upto 31.3.2019 in respect of the transmission asset covered in instant petition are as follows:

(₹ in lakh)

Capital Cost admitted as on COD	ACE (including accrued IDC and Initial Spares discharged)		Capital Cost as on 31.3.2019
	2017-18	2018-19	
7073.05	93.98	893.16	8060.19

46. The details of the debt and equity as on the date of commercial operation and on 31.3.2019 in respect of the transmission asset considered for the purpose of tariff for 2014-19 period is as follows:

(₹ in lakh)

Particulars	Capital Cost as on COD (₹ in lakh)	(In %)	ACE during 2014-19 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(In %)
Debt	4951.14	70.00	691.00	70.00	5642.13	70.00
Equity	2121.92	30.00	296.14	30.00	2418.06	30.00
Total	7073.05	100.00	987.14	100.00	8060.19	100.00

47. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. The depreciation allowed in respect of the transmission asset is as follows:



(₹ in lakh)

Particulars	2017-18 (Pro-rata for 33 days)	2018-19
Depreciation		
Opening Gross Block	7073.05	7167.03
ACE	93.98	893.16
Closing Gross Block	7167.03	8060.19
Average Gross Block	7120.04	7613.61
Freehold Land	0.00	0.00
Weighted Average Rate of Depreciation (WAROD) (In %)	5.01	5.02
Balance useful life of the asset	35	35
Elapsed Life of the asset	0	0
Aggregated Depreciable Value	6408.04	6852.25
Combined Depreciation during the year	32.24	382.46
Aggregate Cumulative Depreciation at the end of the year	32.24	414.70
Remaining Aggregate Depreciable Value at the end of the year	6375.79	6437.55

48. Interest on Loan allowed in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 33 days)	2018-19
Interest on Loan		
Gross Normative Loan	4951.14	5016.92
Cumulative Repayments up to Previous Year	0.00	32.24
Net Loan-Opening	4951.14	4984.68
Additions	65.79	625.21
Repayment during the year	32.24	382.46
Net Loan-Closing	4984.68	5227.44
Average Loan	4967.91	5106.06
Weighted Average Rate of Interest on Loan (in %)	7.9656	7.9886
Interest on Loan	35.78	407.90



49. Return on Equity (RoE) allowed in respect of the transmission asset is as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 33 days)	2018-19
Return on Equity		
Opening Equity	2121.92	2150.11
Additions	28.19	267.95
Closing Equity	2150.11	2418.06
Average Equity	2136.01	2284.08
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	21.342	21.549
Rate of Return on Equity (in %)	19.705	19.758
Return on Equity	38.05	451.29

Operation & Maintenance Expenses (O&M Expenses)

50. The O&M Expenses claimed by PGCIL for the transmission asset for 2014-19 period are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata)	2018-19
42.70 km D/C (Single Conductor) (220 kV Kishanganga-Amargarh D/C Line on M/C Towers)		
Total O&M Expenses claimed	1.29	14.77

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

(₹ in lakh)		
Element	Norms for 2017-18	Norms for 2018-19
Double Circuit Single Conductor	₹0.334 lakh/ km	₹0.346 lakh/ km



52. We have considered the submissions of the PGCIL. The O&M Expenses allowed for the transmission asset as per norms specified in the 2014 Tariff Regulations are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 33 days)	2018-19
O&M Expenses	1.29	14.77

53. Interest on Working Capital (IWC) allowed in respect of the transmission asset is as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 33 days)	2018-19
Interest on Working Capital		
O&M Expenses (O&M Expenses for 1 month)	1.19	1.23
Maintenance Spares (15% of O&M Expenses)	2.14	2.22
Receivables (Equivalent to 2 months of annual fixed cost)	202.24	213.97
Total Working Capital	205.56	217.42
Rate of Interest (In %)	12.60	12.60
Interest on Working Capital	2.34	27.39

54. The trued up annual fixed charges allowed for the transmission asset for 2014-19 period are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 33 days)	2018-19
Depreciation	32.24	382.46
Interest on Loan	35.78	407.90
Return on Equity	38.05	451.29
Interest on Working Capital	2.34	27.39
O&M Expenses	1.29	14.77
Total	109.71	1283.82



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

55. PGCIL has claimed capital cost of ₹8065.04 lakh as on 31.3.2019 for the transmission asset. However, capital cost as on 31.3.2019 has been worked out as ₹8060.19 lakh and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

56. PGCIL vide Auditor's certificate dated 4.1.2023 has submitted ACE for 2019-24 tariff period in respect of the transmission asset and the same is as follows:

(₹ in lakh)					
ACE claimed	2019-20	2020-21	2021-22	2022-23	2023-24
	472.61	349.25	18.76	0.00	0.00

57. PGCIL has claimed ACE for 2019-24 tariff period in respect of the transmission asset and the same is as follows:

(₹ in lakh)			
ACE claimed	2019-20	2020-21	2021-22
Under Regulation 24(1)(a) of the 2019 Tariff Regulations – Liability payment before the cut-off date	472.16	349.25	-
Under Regulation 25(1)(d) of the 2019 Tariff Regulations-Liability payment after the cut-off date	-	-	18.76
Total	472.61	349.25	18.76

58. We have considered the submissions of the Petitioner. ACE claimed by PGCIL has been allowed under Regulation 25(1)(a) and Regulation 25(1)(d) of the 2019 Tariff Regulations on account of balance and retention payments due to undischarged liability for works executed before the cut-off date. Accordingly, the capital cost considered in respect of the transmission asset for 2019-24 tariff period is as follows:



(₹ in lakh)

Capital Cost as on 31.3.2019	ACE (including Initial Spares discharged)			Capital Cost as on 31.3.2024
	2019-20	2020-21	2021-22	
8060.19	472.61	349.25	18.76	8900.81

59. The debt-equity considered in respect of the transmission asset for the purpose of computation of tariff for 2019-24 tariff period is as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(In %)	ACE during 2019-24 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(In %)
Debt	5642.13	70.00	588.43	70.00	6230.57	70.00
Equity	2418.06	30.00	252.19	30.00	2670.24	30.00
Total	8060.19	100.00	840.62	100.00	8900.81	100.00

60. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD has been worked out as per the rates of depreciation prescribed in 2019 Tariff Regulations. The depreciation allowed in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	8060.19	8532.80	8882.05	8900.81	8900.81
Projected ACE	472.61	349.25	18.76	0.00	0.00
Closing Gross Block	8532.80	8882.05	8900.81	8900.81	8900.81
Average Gross Block	8296.50	8707.43	8891.43	8900.81	8900.81
Freehold Land	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Depreciation (WAROD) (In %)	5.05	5.06	5.07	5.07	5.07
Balance useful life at the beginning of the year	34	33	32	31	30
Elapsed Life of the asset	1	2	3	4	5
Aggregated Depreciable Value	7466.85	7836.68	8002.29	8010.73	8010.73
Combined Depreciation during the year	418.74	440.76	450.47	450.97	450.97



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Aggregate cumulative depreciation at the end of the year	833.44	1274.19	1724.66	2175.63	2626.60
Remaining aggregated depreciable value at the end of the year	6633.41	6562.49	6277.63	5835.10	5384.14

61. IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	5642.13	5972.96	6217.44	6230.57	6230.57
Cumulative Repayments upto Previous Year	414.70	833.44	1274.19	1724.66	2175.63
Net Loan-Opening	5227.44	5139.52	4943.24	4505.91	4054.94
Additions	330.83	244.48	13.13	0.00	0.00
Repayment during the year	418.74	440.76	450.47	450.97	450.97
Net Loan-Closing	5139.52	4943.24	4505.91	4054.94	3603.97
Average Loan	5183.48	5041.38	4724.58	4280.42	3829.46
Weighted Average Rate of Interest on Loan (In %)	8.0199	7.9815	7.9484	7.9347	7.9191
Interest on Loan	415.71	402.38	375.53	339.64	303.26

62. RoE in respect of the transmission asset is worked out and allowed as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	2418.06	2559.84	2664.62	2670.24	2670.24
Additions	141.78	104.78	5.63	0.00	0.00
Closing Equity	2559.84	2664.62	2670.24	2670.24	2670.24
Average Equity	2488.95	2612.23	2667.43	2670.24	2670.24
Return on Equity (Base Rate) (In %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (In %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (In %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	467.47	490.63	501.00	501.53	501.53



63. O&M Expenses in respect of the transmission asset have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
42.70 km Double Circuit Single Conductor					
Norms (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
Total	16.10	16.70	17.25	17.89	18.49
Total O&M expenses allowed (₹ in lakh)	16.10	16.70	17.25	17.89	18.49

64. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, ROI for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points), ROI for 2021-22 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points), whereas ROI for 2022-23 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	1.34	1.39	1.44	1.49	1.54
Maintenance Spares (15% of O&M Expenses)	2.41	2.50	2.59	2.68	2.77
Receivables (Equivalent to 45 days of annual transmission charges)	164.55	168.89	167.96	163.68	158.77
Total Working Capital	168.30	172.79	171.98	167.86	163.09
Rate of Interest (In %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	20.28	19.44	18.06	17.62	17.12



65. The transmission charges allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	418.74	440.76	450.47	450.97	450.97
Interest on Loan	415.71	402.38	375.53	339.64	303.26
Return on Equity	467.47	490.63	501.00	501.53	501.53
Interest on Working Capital	20.28	19.44	18.06	17.62	17.12
O & M Expenses	16.10	16.70	17.25	17.89	18.49
Total	1338.30	1369.89	1362.31	1327.65	1291.36

Sharing of Transmission Charges

66. The Commission vide order dated 25.4.2019 in Petition No.124/TT/2018 held as follows:

“74. The transmission charges from 27.2.2018 to 17.5.2018 shall be borne by NHPC. With effect from 18.5.2018, the transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.”

67. Accordingly, the transmission charges in respect of the transmission asset from 27.2.2018 to 17.5.2018 shall be borne by NHPC. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of 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, as provided in Regulation 43 of the 2014 Tariff Regulations for 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for 2019-24 tariff period.



68. The summarize:

- a. The tariff allowed from COD to 31.3.2019 in respect of the transmission asset vide order dated 25.4.2019 in Petition No. 124/TT/2018, trued up vide order dated 9.6.2021 in Petition No. 471/TT/2020 and approved now in this order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 33 days)	2018-19
Approved vide order dated 25.4.2019 in Petition No. 124/TT/201	830.83	2211.24
Approved after true up vide order dated 9.6.2021 in Petition No. 471/TT/2020	186.72	2219.97
Approved now in the present petition	109.71	1283.82

- b. The tariff allowed for 2019-24 period in respect of the transmission asset vide order dated 9.6.2021 in Petition No. 471/TT/2020 and approved now in the present petition is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges approved vide order dated 9.6.2021 in Petition No. 471/TT/2020	2423.70	2547.22	2491.01	2435.20	2372.86
Annual fixed charges approved in this order	1338.30	1369.89	1362.31	1327.65	1291.36

69. The transmission tariff as allowed in respect of the transmission asset vide order dated 9.6.2021 in Petition No. 471/TT/2020 is withdrawn.

70. Annexure-I and Annexure-II form part of this order.



71. This order disposes of Petition No. 241/MP/2022 in terms of the above findings and discussions.

**sd/-
(P.K. Singh)
Member**

**sd/-
(Arun Goya)
Member**

**sd/-
(I.S. Jha)
Member**



Annexure-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/C OD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Deprecia tion as per Regulati ons	Annual Depreciation as per Regulations (₹ in lakh)	
		2017- 18	2018 -19	Total			2017- 18	2018- 19
Land - Leasehold	1015.29	14.34	28.78	43.12	1058.41	3.34%	34.15	34.87
Transmission Line	6007.51	79.62	829.4 3	909.05	6916.56	5.28%	319.30	343.30
PLCC	50.25	0.02	34.95	34.97	85.22	6.33%	3.18	4.29
Total	7073.05	93.98	893.16	987.14	8060.19		356.63	382.46
Average Gross Block (₹ in lakh)							7120.04	7613.61
Weighted Average Rate of Depreciation							5.01%	5.02%



Annexure-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Land-Leasehold	1058.41	-	0.04	-	-0.04	1058.37	3.34%	35.35	35.35	35.35	35.35	35.35
Transmission Line	6916.56	411.55	349.29	18.76	779.60	7696.16	5.28%	376.06	396.15	405.86	406.36	406.36
PLCC	85.22	61.06	-	-	61.06	146.28	6.33%	7.33	9.26	9.26	9.26	9.26
Total	8060.19	472.61	349.25	18.76	840.62	8900.81		418.74	440.76	450.47	450.97	450.97
						Average Gross Block (₹ in lakh)		8296.50	8707.43	8891.43	8900.81	8900.81
						Weighted Average Rate of Depreciation		5.05%	5.06%	5.07%	5.07%	5.07%

