

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 17/TT/2022

Coram:

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

Date of Order: 31.07.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and for determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset-I:** 2 Nos. 400 kV GIS line bays at Koteshwar Sub-station under Extension of 400/220 kV Koteshwar Pooling Station and **Asset-II:** 1 No. 220 kV line bay at 400/220 kV Roorkee Sub-station under "Line bays associated with Northern Region System Strengthening Scheme-XXXVI" in the Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No. 2,
Sector-29, Gurgaon-122001 (Haryana).

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).



4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
6. Punjab State Electricity Board,
The Mall, Patiala-147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana) 134109.
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Limited (TPDDL),
33 kV Sub-station Building,
Hudson Line, Kingsway Camp,
North Delhi-110009
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun.



16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. NRSS XXXVI Transmission Limited,
Essel Infraprojects Limited, 6th floor, Plot No.19,
Film City, Sec-16 A, Gautam Buddha Nagar,
Noida, UP-201301.
19. Power Transmission Corporation of Uttarakhand Limited (PTCUL),
Vidyut Bhawan near ISBT crossing,
Saharanpur road, Majra,
Dehradun-248002.

...Respondent(s)

For Petitioner: Shri S. S Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri Ved Rastogi, PGCIL
Shri Zafrul Hassan, PGCIL
Shri Vipin Joseph, PGCIL

For Respondent: Shri Buddy Ranganadhan, Advocate, PTCUL
Shri Abhishek Kumar, Advocate, PTCUL
Shri Karan Arora, Advocate, PTCUL
Shri Venkatesh, Advocate, NRSS XXXVI
Shri Anant Singh Ubeja, Advocate, NRSS XXXVI
Shri Mohit Mansharamani, Advocate, NRSS XXXVI
Ms. Ambika Gupta, Advocate, NRSS XXXVI

ORDER

Power Grid Corporation of India Limited(hereinafter, the petitioner) has filed the instant petition for determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of **Asset-I:** 2 Numbers 400 kV GIS line bays at Koteshwar Sub-station under Extension of 400/220 kV Koteshwar pooling station and **Asset-II:** 1 Number 220 kV line bay at



400/220 kV Roorkee Sub-station (hereinafter referred to as “the transmission assets”) under “Line bays associated with Northern Region System Strengthening Scheme-XXXVI” (hereinafter referred to as “the transmission system”).

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

- 1) *Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 2) *Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –9 above.*
- 3) *Approve the DOCO of both the assets under clause 5 (2) of Tariff Regulation’2019*
- 4) *Condone the delay and allow IDC/IEDC as claimed in the petition as delay is on account of force majeure as per CERC Regulations’ 2019 22(2)(a) “uncontrollable factors”*
- 5) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*
- 6) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 7) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 8) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 9) *Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.8 above.*
- 10) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 11) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 12) *Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.*

and pass such other relief as Hon’ble Commission deems fit and appropriate under the



circumstances of the case and in the interest of justice.”

Background

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

- a. The Investment Approval (IA) and expenditure sanction of the transmission system was accorded by the Board of Directors (BoD) of the Petitioner in its 339th meeting held on 29.3.2017 and communicated vide Memorandum Ref No. C/CP/ Line Bays-XXXVI dated 30.3.2017, at an estimated cost of ₹3558 lakh including an IDC of ₹ 228 lakh based on October, 2016 price level.
- b. The scope of the scheme was discussed and agreed in 35th Standing Committee Meeting for Power System Planning for Northern Region held on 3.11.2014, and in 33rd and 38th meeting of NRPC held on 11.11.2014 and 25.10.2016 respectively.
- c. The scope of work covered under the transmission system is as follows:

Sub-station

- (i) Extension of 400/220 kV Koteshwar Pooling Station
400 kV
GIS Line bays: 2 Numbers
 - (ii) Extension of 400/220 kV Roorkee Sub-station
220 kV
Line bays: 1 Number
- d. As per IA, the schedule completion of the transmission system is 18 to 30 months progressively from the date of IA matching with the completion schedule of TBCB line. Since the TBCB line is not yet executed, the maximum schedule of 30 months is taken as schedule date of commercial operation (SCOD). The date of IA is 29.3.2017, therefore, SCOD is 28.9.2019 against which the transmission assets are anticipated to be under commercial operation (COD) as follows:



Assets	SCOD	COD
Asset-I	28.9.2019	31.3.2021 (Anticipated)
Asset-II		28.9.2019

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been said to be received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Power Transmission Corporation of Uttarakhand Limited (PTCUL), Respondent No. 19, has filed its replies vide affidavits dated 30.8.2022, 14.12.2022 and 10.3.2023 and has raised issue of COD of Bay-5 and Bay-6 of Asset-II. The Petitioner has filed its rejoinder to the replies of PTCUL vide affidavits dated 9.9.2022 and 4.1.2023. The issues raised by PTCUL and the clarifications given by the Petitioner has been dealt in the relevant paragraphs of this order.

6. The hearing in this matter was held on 9.1.2023 through video conference and the order was reserved.

7. This order is being issued after considering the submissions made by the Petitioner in the petition vide affidavit dated 29.1.2022 and affidavits dated 9.5.2022, 24.8.2022, 11.11.2022 and 20.2.2023, PTCUL's replies filed vide affidavits dated 30.8.2022, 14.12.2022 and 10.3.2023 and Petitioner's rejoinder vide affidavits dated 9.9.2022 and 4.1.2023 thereto.



8. Having heard the representatives of the Petitioner and perusal of the materials available on record, we proceed to dispose of the petition.

9. The Petitioner vide affidavit 9.5.2022 submitted that Asset-I is yet to be put under commercial operation. The Petitioner vide affidavit dated 24.8.2022 submitted that Asset-I is still under anticipated COD and is proposed to be executed by 30.9.2022.

10. The Commission vide RoP dated 27.10.2022 directed the Petitioner to file a fresh petition in respect of Asset-I as there may be considerable delay in COD of Asset-I and tariff in respect of Asset-II only will be considered in the present petition. Accordingly, the Petitioner is at liberty to file fresh petition in case of Asset-I after achieving actual COD of the transmission asset.

Determination of Annual Fixed Charges For 2019-24 Tariff Period

11. The Petitioner has claimed following transmission charges in respect of the Asset-II for 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	16.06	34.12	35.86	36.43	36.63
Interest on Loan	15.42	30.43	28.96	26.52	23.76
Return on Equity	15.95	33.59	34.91	35.35	35.49
O&M Expenses	12.26	24.92	25.74	26.58	27.46
Interest on Working Capital	1.25	2.57	2.63	2.64	2.64
Total	60.94	125.63	128.10	127.52	125.98

12. The details of Interest on Working Capital (IWC) claimed by the Petitioner in respect of Asset-II for 2019-24 tariff period are as follows:



(₹ in lakh)

Particulars	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2.01	2.08	2.15	2.22	2.29
Maintenance Spares	3.62	3.74	3.86	3.99	4.12
Receivables	14.74	15.49	15.79	15.72	15.49
Total Working Capital	20.37	21.31	21.80	21.93	21.90
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	1.25	2.57	2.63	2.64	2.64

Date of Commercial Operation (“COD”)

13. The Petitioner has claimed the COD of Asset-II as 28.9.2019 under Regulation 5(2) of 2019 Tariff Regulations as the associated transmission line under the scope of PTCUL was not ready on 28.9.2019.

14. Regulation 5 of the 2019 Tariff Regulations provides as follows:

“5. Date of Commercial Operation: (1) *The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*

(2) *In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
- (c) Implementation Agreement, if any, executed by the parties;*



- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;*
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.”*

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of –

a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or

b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or

c) the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s);

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation.”

15. The Petitioner has submitted that one additional 220 kV Bay to be constructed at 400 kV Puhana (Roorkee) under ISTS has been agreed in 35th Standing Committee Meeting for Power System Planning for Northern Region held on 3.11.2014 on the request of PTCUL. The approval for energization of 220 kV bay was given on 18.10.2018 by CEA and the 220 kV bay at Roorkee was idle charged on 27.10.2018. Further, there is no information available w.r.t to the associated downstream system,



hence, the COD of Asset-II is proposed as 28.9.2019 and is claimed under Regulation 5(2) of 2019 Tariff Regulations.

16. In support of its claim towards the actual COD of Asset-II, the Petitioner has submitted a no-load RLDC charging certificate dated 29.10.2020, CEA energization certificate dated 15.10.2018 and the Petitioner's CMD certificate as required under the Grid Code.

17. PTCUL vide affidavit dated 30.8.2022 has submitted as follows:

- (a) In 35th Standing Committee Meeting on Power System Planning for Northern Region held on 3.11.2014 (35th SCM), PTCUL stated that it is impossible to take out further 220 kV overhead lines from 400 kV (Puhana) Roorkee ISTS Sub-station due to severe RoW issues. PTCUL further requested for one number more 220 kV Bay to be constructed at 400 kV Puhana (Roorkee) under ISTS. Considering severe RoW issues in 400 kV Puhana, PTCUL intimated in the meeting that 220 kV cable will be required to be laid in the Petitioner's premises for which PTCUL would require permission from the Petitioner. The relevant extracts from the 35th SCM are as follows:

"Director (Operation) PTCUL stated that it is not impossible to take out further 220 KV overhead lines from 400 KV (Puhana) Roorkee ISTS Substation due to severe ROW issue. Presently, only 2 no. 220 KV circuit has been constructed. He stated that PTCUL required 3 additional 220 KV circuit from 400 KV Puhana. Two no. 220 KV Bays are available at Puhana (Roorkee). One no. more 220 KV Bay to be constructed at 400 KV Puhana (Roorkee) under ISTS. Also, considering sever ROW issues in 400 KV Puhana, 220 KV cable will be required to be laid in PGCIL premises for which PTCUL would require permission from PGCIL. Accordingly, he requested for 3 Nos. 220kV line bays for cable connection at Roorkee 400KV S/s (PG). AGM PGCIL agreed with the proposal"

- (b) PTCUL, vide letter dated 10.12.2014 to the Petitioner alongwith reference of the 35th SCM, clearly stated that due to severe RoW issues in the vicinity of 400 kV Puhana Sub-station, the utilization of the remaining 2 Numbers 220 kV Bays could not be done. PTCUL further stated that a proposal to construct 220/33 kV



Sub-station at the premises of the Petitioner was not agreed to by the Petitioner. PTCUL requested for giving concurrence for utilization of remaining 220 kV bays at 400/220 kV Puhana Sub-station.

- (c) PTCUL, vide letter dated 26.11.2016 informed the Petitioner about the details of 220 kV existing bays and requirement of 220 kV bays at 400/220 kV Sub-station Puhana (PGCIL). The relevant extract from the letter dated 26.11.2016 is as follows:

“1. Presently 04 No. 220 KV bays are available at 400/220 KV Substation, Puhana for PTCUL. Out of 04 No. bays 02 No. 220 KV bays has been utilized for LILO of 220 KV SIDCUL Haridwari – Roorkee line at 400/220 KV Puhana and 02 No. are proposed to be utilized for LILO of 220 KV Roorkee – Nara line at 400/220 KV Substtion Puhana (PGCIL).

2. 02 No. 220 KV additional bay are required for proposed 220 KV Double Circuit line from 400/220 KV Puhana to 220 KV Substation Pirankaliyar line.

Keeping in view of above, total 06 No. 220 KV bays will be required by PTCUL at 400/220 KV S/s Puhana (PGCIL), whereas only 05 No. 220 KV bays would be available at 400/220 KV Puhana (PGCIL) as per your above referred letter. Hence agenda for one no additional 220 KV bay may kindly be put –up in the next standing committee meeting of Northern Region on Power System Planning, as one no. additional 220 KV bay will be required by PTCUL at 400/220 KV S/s Puhana.”

- (d) Subsequently, the matter was deliberated in the 39th Meeting of Standing Committee on Power System Planning of Northern Region (SCPSPNR) held on 29/30.5.2017, wherein requirement of 01 (One) number additional 220 kV bay at 400/220 kV Sub-station at Roorkee (Puhana), was agreed by the Petitioner. Thereafter, the 2nd meeting of Northern Region Standing Committee on transmission was held on 13.11.2018 (2nd NRSCT), wherein, it was *inter alia*, agreed that existing 220 kV line bays at 400/220 kV Puhana (PG) would be utilised for Puhana-Pirankaliyar 220 kV D/C line (under construction expected by March, 2019) and 02 Numbers additional 220 kV bay (which will be implemented by the Petitioner) would be utilised for LILO of Roorkee-Nara 220 kV line at Puhana (PGCIL) (expected by March, 2022). The relevant extract from the minutes of the said meeting is as follows:

“5.6 PGCIL enquired about the utilisation of 220 kV outlets from Puhana (PG) 400/220 kV substation. PTCUL stated that 2 no of existing line bays at Puhana 400/220 kV substation had been utilised for Puhana–Roorkee (PTCUL) 220 kV S/c



line and Puhana-Roshanabad 220 kV S/c line. Two no. of 220 kV line bays would be utilized for PuhanaPirankaliyar 220 kV D/c line (under construction expected by March 2019). In addition to this two no of 220 kV line bays at 400/220kV Puhana (PG), which are under implementation by POWERGRID would be utilized for LILO of Roorkee-Nara 220kV S/c line at Puhana (PG) (expected by March 2022).”

- (e) Asset-II was initially planned for construction of 220 kV S/C Roorkee (Puhana)-Pirankaliyar line in 2014. Later, on PTCUL decided to construct the second circuit of above said line and requested for one more additional 220 kV bay at 400 kV Sub-station Puhana (PGCIL), which was agreed in the 39th SCSPNR Meeting held in 2017. Further, for utilization of 02 Numbers existing 220 kV bays, PTCUL proposed to construct a LILO of 220 kV Roorkee-Nara line. But later on, it was deliberated in the 2nd NRSCT Meeting that existing 220 kV bays would be utilized for 220 kV Roorkee (Puhana)-Pirankaliyar line and the newly constructed 02 Numbers 220 kV bays would be utilized for LILO of 220 kV Roorkee-Nara line (expected by March, 2022). Further, since the downstream network (one circuit of 220 kV Roorkee (Puhana)–Pirankaliyar line) for which one number additional 220 kV bays was requested by PTCUL is already implemented by PTCUL, PTCUL is not a defaulting party. PTCUL had coordinated with the Petitioner for utilizing its existing 02 Numbers 220 kV bays. Since the Petitioner was not able to implement 02 Numbers new 220 kV Bays in matching time frame of construction of 220 kV D/C Roorkee (Puhana)-Pirankaliyar line (executed in September, 2020) as 01 Number 220 kV bay (Asset-II) was executed in October, 2018 and another 220 kV Bay was executed in March, 2022. Therefore, PTCUL agreed to interchange the utilization of downstream network. LILO of 220 kV Roorkee-Nara Line which was later agreed to be implemented by PTCUL for utilization of 02 Numbers additional 220 kV bays at 400 kV Sub-station Puhana is necessarily a double circuit line, and 02 nos. 220 kV bays must be implemented together for termination of the LILO line and the bays cannot be implemented in different time schedule, otherwise, LILO cannot be said to be implemented in technical terms. PTUCL has further submitted that the Petitioner is not entitled to any relief as it has misled the Commission by suppressing material facts.



18. In response, PGCIL vide affidavit dated 9.9.2022 has submitted as follows:
- (a) Asset-II i.e. 1 Nos. 220 kV line bay at 400/220 kV Roorkee Sub-station is 5th Number of 220 kV bay at Roorkee Sub-station. The additional bay i.e. 5th bay was agreed in 35th SCM held on 3.11.2014 on request of PTCUL. The Bay requirement was sought by PTCUL for termination of Roorkee (Powergrid)-Pirankaliyar 220 kV line (S/C on D/C) and the same can be inferred from 39th SCM held on 29/30.5.2017.
- (b) 5th bay was further agreed in 38th NRPC meeting held on 24/25.10.2016. Further as per 36th ECM held on 26.7.2016, the same is to be implemented under Regulated Tariff Mechanism (RTM) and in 37th ECM, it was noted that, MoP vide its letter no. 15/3//2016-Trans dated 28.10.2016 has approved the transmission system to be implemented under compressed time schedule through RTM by the Petitioner. Based on the approval at SCM, RPC, ECM and MoP, IA was accorded by the Board of director on 29.3.2017 with time scheduled of 18 to 30 months. After the IA of instant transmission system i.e later in 39th SCM held on 29/30.5.2017, one additional bay (6th Bay) at Roorkee (Powergrid) Sub-station was agreed on request of PTCUL as they proposed to string second circuit of Roorkee (Powergrid)-Pirankaliyar 220 kV line. The 6th Bay is not part of present project and is covered under different project i.e “Northern Region System Strengthening-XL(NRSS-XL)”. PTCUL is trying to mislead by bringing the issue of 6th Bay here in its reply.
- (c) The approval for energization of 5th No. 220 kV bay at Powergrid end i.e. Asset-II of instant petition was given on 18.10.2018 by CEA and the 220 kV bay at Roorkee was idle charged on 27.10.2018. However, the COD of the asset is proposed as 28.9.2019 considering the maximum schedule of 30 months provided in IA as downstream was not connected.
- (d) As per 2nd meeting of NRSCT held on 13.11.2018, the Roorkee (Powergrid)-Pirankaliyar line was anticipated to be completed by March, 2019 and as per the information submitted in the reply of PTCUL, the 220 kV D/C



Roorkee (Powergrid)-Pirankaliyar line was executed in September, 2020, however the bay in question i.e. 5th No. 220 kV bay at Powergrid end was idle charged on 27.10.2018 and thus the contention raised by PTCUL that downstream network (one circuit of 220 kV Roorkee- Pirankaliyar line) for which instant bay i.e 5th bay was planned is already implemented and PTCUL is wrong and misleading.

(e) The downstream connectivity is under the scope of PTCUL for all bays available at Powergrid end and it was the proposal of PTCUL, to use existing available bay for termination of 220 kV D/C Roorkee (Powergrid)-Pirankaliyar line and use remaining two bays i.e. 5th bay covered under instant petition and 6th bay covered under NRSS-XL (not part of this petition) for termination of LILO of Roorkee-Nara 220 kV S/C line. Thus, it was sole decision of PTCUL on how to utilize the bays and the Petitioner has no say on this, as all bays were to be utilized by PTCUL and the same can be inferred from 2nd meeting of NRSCT held on 13.11.2018.

19. PTCUL has further submitted for invocation of Regulation 5(2) of the 2019 Tariff Regulations, basic requirement is an agreed implementation schedule. There is no agreed implementation schedule in respect of 5th and 6th Bays. There was no communication to PTCUL from the Petitioner with regard to the execution dates of these Bays. Bay 3 and Bay 4 were originally meant for Roorkee-Nara line. Bay 5 and Bay 6 were proposed for Puhana-Piran Kaliyar line. Puhana-Piran Kaliyar line was ready in 2018. However, Bay 5 and Bay 6 were not made ready by the Petitioner. Since Bay 3 and Bay 4 were ready and already included as part of PoC, PTCUL used Bay 3 and Bay 4 to terminate Puhana-Piran Kaliyar line with the consent of Petitioner and also incurred additional cost for the same. There was no communication from the Petitioner informing PTCUL with regard to actual execution dates of Bay 5 and Bay 6 or that the



Petitioner at any time enquired about the execution status of Roorkee-Nara line from PTCUL. Therefore, Regulation 5(2) of 2019 Tariff Regulations is not complied with.

20. In response to a query of the Commission during the hearing dated 9.1.2023, PTCUL agreed that all the six number of Bays were executed at the request of PTCUL, and that PTCUL requested for 6th Bay on 26.11.2016.

21. In response to a query of the Commission, PTCUL vide affidavit dated 10.3.2023 has submitted the utilization plan with reference to Bay No. 5 (Asset-II) and bay no. 6 wherein PTCUL has submitted that PTCUL is considering constructing a 220 kV Sub-station near Raipur along with its associated 220 kV transmission line to be fed through the Bay No. 5 & 6 and accordingly, the bays will be utilized in tandem with the said sub-station.

22. We have considered the submissions of the Petitioner and PTCUL. The first contention of the PTCUL is that for invocation of Regulation 5(2) of the 2019 Tariff Regulations, basic requirement is an agreed implementation schedule and there is no agreed implementation schedule in respect of 5th and 6th Bays. It is statutory requirement under the second provision to Regulation 5(2)(c) of 2019 Tariff Regulations to enter implementation agreement, if any between the parties. In the instant case, the Petitioner and PTCUL have not entered any implementation agreement for implementation of the project. The transmission system is approved in 35th SCM held on 3.11.2014. The relevant extract of the minutes is as follows:

“3. LILO of Koteshwar Pooling Station- Meerut 765 KV D/c line at proposed 765/400 KV Substation Rishikesh:



Director (Operation) PTCUL stated that it is not impossible to take out further 220 KV overhead lines from 400 KV (Puhana) Roorkee ISTS Substation due to sever ROW issue. Presently, only 2 no. 220 KV circuit has been constructed. He stated that PTCUL required 3 additional 220 KV circuit from 400 KV Puhana. Two no. 220 KV Bays are available at Puhana (Roorkee). One no. more 220 KV Bay to be constructed at 400 KV Puhana (Roorkee) under ISTS. Also, considering sever ROW issues in 400 KV Puhana, 220 KV cable will be required to be laid in PGCIL premises for which PTCUL would require permission from PGCIL. Accordingly he requested for 3 Nos. 220 kV line bays for cable connection at Roorkee 400kV S/s (PG). AGM PGCIL agreed with the proposal.”

23. We have perused the minutes of the 35th SCM held on 3.11.2014. The proposal for construction of the instant line bay at Roorkee Sub-station was discussed and agreed in the said meeting. Based on the SCM approval, the Board of Directors of PGCIL in its 339th meeting held on 29.3.2017 approved the scheme and as per IA dated 29.3.2017, the transmission assets were scheduled to be commissioned within 18 to 30 months. The Petitioner has communicated the same to Managing Director, PTCUL about the approval of the transmission system and SCOD of the transmission assets. It is observed that PTCUL has neither raised the issue of SCOD of 1 number of 220 kV bay in any other subsequent meeting nor that this was not required for PTCUL, Further, PTCUL did not request for revision of SCOD. Therefore, we find no merit in the contention of the PTCUL.

24. The second contention of the PTCUL is that 220 kV Puhana-Piran Kaliyar D/C line was ready in 2018. However, 2 numbers of 220 kV bays i.e. Bay 5 and Bay 6 were not made ready by the Petitioner. The Petitioner has to construct one number of 220 kV bay for termination of Roorkee (Powergrid)-Pirankaliyar 220 kV line (S/C on D/C). PTCUL initially decided to construct 220 kV (S/C on D/C) Roorkee (Puhana)-Pirankaliyar line and later on decided to construct the second circuit of 20 kV (S/C on



D/C) Roorkee (Puhana)-Pirankaliyar line for which an additional 220 kV bay was required. PTCUL has executed the Pirankaliyar Sub-station by making the LILO of the existing 220 kV Roorkee-Roshnabad line due to delay in implementation of 220 kV Puhana-Piran Kaliyar D/C line which was implemented only in the month of September, 2020. As far as one number of 220 kV Bay at Roorkee Sub-station is concerned, the Petitioner has obtained approval of CEA energization on 18.10.2018 and idle charged on 27.10.2018 and declared the deemed COD of the bays as 28.9.2019. Therefore, we are not inclined to agree with the contention of the PTCUL that 220 kV Puhana-Piran Kaliyar D/C line was ready for charging in 2018.

25. The third contention of the PTCUL is that the Petitioner has to implement 02 numbers of additional 220 kV bays at 400 kV Puhana Sub-station for termination of 220 kV Puhana-PiranKaliyar D/C line, and 02 numbers 220 kV bays must be implemented together for termination of the line and the bays cannot be implemented in different time schedule. With respect to 6th bay, PTCUL vide letter dated 26.11.2016 requested for additional 6th bay and the same was discussed in 39th SCM held on 29/30.5.2017 and additional one Number 220 kV Bay (6th bay) along with one Number 500 MVA 400/220 kV ICT at Roorkee Sub-station of Powergrid was agreed as an ISTS scheme. Based on this, the IA of the 6th 220 kV bay and 500 MVA ICT was obtained on 16.2.2019 with SCOD as 15.12.2020. Therefore, the contention of PTCUL that both the two no. of 220 kV bays is implemented together for termination of the line is misconceived and rejected.



26. Accordingly, we conclude that the Petitioner has implemented one number of 220 kV bay for termination of 220 kV Puhana-PiranKaliyar line (S/C on D/C tower) and claimed the COD of Asset-II as 28.9.2019 under Regulation 5(2) of the 2019 Tariff Regulations as the associated transmission line was not put into commercial operation by PTCUL.

27. Taking into consideration the 'no-load' RLDC charging certificate dated 29.10.2020, CEA energization certificate dated 15.10.2018 and the Petitioner's CMD certificate, the COD for Asset-II is approved as 28.9.2019 under Regulation 5(2) of the 2019 Tariff Regulations.

Capital Cost

28. Regulation 19 of the 2019 Tariff Regulations provides as follows:

“19. Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these*



- regulations;
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
 - (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
 - (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
 - (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
 - (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
 - (n) *Expenditure on account of change in law and force majeure events; and*
 - (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff*



- petition;*
- (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

- (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
- (d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
- (e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*

29. The Petitioner has claimed the following capital cost in respect of Asset-II and has submitted the Auditor’s certificate in support of the same:

Approved apportioned cost	Capital cost up to COD	Projected expenditure				Estimated completion cost
		2019-20	2020-21	2021-22	2022-23	
666.59	536.41	41.40	36.49	10.42	5.21	629.93

30. The Petitioner has submitted that the estimated completion cost of Asset-II is within the approved apportioned cost. Therefore, there is no cost over-run.

31. We have considered the submissions of the Petitioner. It is observed that the estimated completion cost of ₹629.93 lakh including ACE of ₹93.52 lakh is within the FR apportioned approved cost of ₹666.59 lakh. Therefore, there is no cost over-run with respect to Asset-II.



Time over-run

32. As per IA dated 29.3.2017, Asset-II was scheduled to be put into commercial operation within 18-30 months from the date of IA i.e. by 29.9.2019 and it was put into commercial operation on 28.9.2019. Accordingly, there is a no time over-run in case of Asset-II.

Interest during Construction (“IDC”)

33. The Petitioner has claimed the following IDC for Asset-II and has submitted the statement showing IDC claim, discharge of IDC liability as on the date of COD and, thereafter:

(₹ in lakh)			
IDC as per Auditor’s Certificate	IDC discharged up to COD	IDC discharged during 2019-20	IDC discharged during 2020-21
21.30	16.66	3.63	1.02

34. We have considered the submissions of the Petitioner. The allowable IDC has been worked out considering the information submitted by the Petitioner. Further, the loan amount as on COD has been mentioned in Form-6 and Form-9C. IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)						
IDC as per Auditor’s certificate	IDC disallowed	IDC allowed on accrual basis	IDC allowed on cash basis as on COD	Un-discharged IDC liability as on COD	Discharge of IDC liability allowed as ACE	
					2019-20	2020-21
21.30	0.00	21.30	16.66	4.64	3.63	1.01

Incidental Expenditure During Construction (IEDC)

35. The Petitioner has claimed IEDC of ₹12.79 lakh in respect of Asset-II. The Petitioner has submitted Auditor’s Certificate in this regard. Further, the Petitioner has



submitted that the entire IEDC claimed in the Auditor's Certificates is on cash basis and is paid up to COD of the transmission asset.

36. We have considered the submissions of the Petitioner. IEDC considered in respect of Asset-II as on COD for the purpose of tariff determination in the instant order and it is as follows:

		(₹ in lakh)
IEDC claimed as per Auditor's Certificate	IEDC disallowed due to time over-run	IEDC allowed
12.79	0.00	12.79

Initial Spares

37. Regulation 23(d) of the 2019 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to the following ceiling norms:

"23 (d) Transmission System

- (i) *Transmission line - 1.00%*
- (ii) *Transmission Sub-station*
 - Green Field - 4.00%
 - Brown Field - 6.00%
- (iii) *Series Compensation devices and HVDC Station – 4.00%*
- (iv) *Gas Insulated Sub-station (GIS)*
 - Green Field - 5.00%
 - Brown Field - 7.00%
- (v) *Communication system - 3.50%*
- (vi) *Static Synchronous Compensator – 6.00%*

38. The Petitioner has claimed Initial Spares in respect of Asset-II for sub-station and PLCC separately based on completion cost as per the Auditor's Certificate. The Petitioner has further submitted that the excess Initial Spare is procured on account of system requirement for smooth operation of the grid and has claimed Initial Spares as follows:



(₹ in lakh)

Asset	Plant and Machinery excluding IDC, IEDC, land cost and cost of Civil works as on cut-off date (A)	Initial spares claimed by the Petitioner (B)
Sub Station (Brownfield)		
Asset-II	402.66	86.98
PLCC		
Asset-II	52.48	61.58
Total	455.14	111.04

39. The Petitioner has submitted that the discharge of Initial Spares for Asset-II has been considered on cash basis in the Auditor's Certificate. The discharge statement of Initial Spares is as follows:

(₹ in lakh)

Total spares claimed	Initial Spares discharged up to COD	Initial Spares discharged during		
		2019-20	2020-21	2021-22
Sub-station (Brownfield)				
86.98	82.21	1.59	1.59	1.59
PLCC				
24.06	24.06	0.00	0.00	0.00
Total	111.04	1.59	1.59	1.59

40. We have considered the submissions of Petitioner. The Commission in order dated 24.1.2021 in Petition No. 126/TT/2020 has already held PLCC to be a part of sub-station. Therefore, Initial Spares have been computed by combing the cost of both PLCC and sub-station and allowed as per the norms specified for sub-station in the 2019 Tariff Regulations. Accordingly, we have considered the Plant & Machinery (P&M) cost as per Form-13 submitted along with the petition for computation of Initial Spares. Therefore, Initial Spares allowed in respect of Asset-II for 2019-24 tariff period are as follows:



(₹ in lakh)

Particulars	P&M cost (excluding IDC and IEDC, land cost & cost of civil works) upto cut-off date	Initial Spares claimed	Norms as per the 2019 Tariff Regulations	Initial Spares allowable	Excess Initial Spares	Initial Spares allowed
	A	B	C	$D=(A-B)*C/(100-C)$	$E = B-D$	$F=B-E$
Sub-station (Brownfield) including PLCC	455.14	111.04	6.00%	21.96	89.08	21.96

41. The excess Initial spares are disallowed as per the discharge statement and are as follows:

(₹ in lakh)

Excess spares disallowed	Initial Spares discharged up to COD	Initial Spares discharged during		
		2019-20	2020-21	2021-22
Sub-station (Brownfield)				
69.99	65.22	1.59	1.59	1.59
PLCC				
19.09	19.09	0.00	0.00	0.00
Total				
89.08	84.31	1.59	1.59	1.59

42. The details of capital cost approved as on COD in respect of Asset-II is as follows:

(₹ in lakh)

Capital cost claimed as on COD (A)	IDC discharged after COD (B)	Initial Spares disallowed as on COD (C)	Capital cost allowed as on COD (D = A-B-C)
536.41	4.64	84.31	447.46

Additional Capital Expenditure (“ACE”)

43. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:



“24. Additional Capitalisation within the original scope and upto the cut-off date:

(1) *The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) *Undischarged liabilities recognized to be payable at a future date;*
- (b) *Works deferred for execution;*
- (c) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of these regulations;*
- (d) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) *Change in law or compliance of any existing law; and*
- (f) *Force Majeure events:*

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) *The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”*

“25. Additional Capitalisation within the original scope and after the cut-off date:

(1) *The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*

- a) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) *Change in law or compliance of any existing law;*
- c) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) *Liability for works executed prior to the cut-off date;*
- e) *Force Majeure events;*
- f) *Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.*

(2) *In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

- (a) *The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.*
- (b) *The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*



(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

44. The Petitioner has claimed the following ACE in respect of Asset-II for 2019-24 period in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations on account of undischarged liability towards final payment for works executed and for works deferred for execution within cut-off date:

(₹ in lakh)			
*ACE claimed			
2019-20	2020-21	2021-22	2022-23
41.40	36.49	10.42	5.21

(*Inclusive of discharge of IDC)

45. Further, the Petitioner vide affidavit dated 9.5.2022 has submitted the package-wise and vendor-wise details of ACE claimed in respect of Asset-II during 2019-24 tariff period and the same is as follows:

(₹ in lakh)				
Year	ACE	Party Name	Package	Balance and Retention/ Deferred work
2019-20	6.69	KEC International Limited	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of 2019 Tariff Regulations
	2.86	KEC International Limited	Civil and Building	Deferred work liability as per Regulation 24(1)(b) of 2019 Tariff Regulations
	22.49		Sub-station	
	8.43		PLCC	
	0.93		IT equipment	
2020-21	0.05	KEC International Limited	Civil and Building	Balance and Retention payment as per Regulation 24(1)(a) of 2019 Tariff Regulations
	22.70		Sub-station	
	0.19		PLCC	
	2.32	KEC International Limited	Civil and Building	Deferred work liability as per Regulation 24(1)(b) of 2019 Tariff Regulations
	3.10		PLCC	
	8.13		IT equipment	
2021-22	6.48		Sub-station	



	0.94	KEC International Limited	PLCC	Balance and Retention payment as per Regulation 24(1)(a) of 2019 Tariff Regulations
	0.68	KEC International Limited	Civil and Building	Deferred work liability as per Regulation 24(1)(b) of 2019 Tariff Regulations
	2.32		IT equipment	
2022-23	3.24	KEC International Limited	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of 2019 Tariff Regulations
	0.47		PLCC	
	0.34	KEC International Limited	Civil and Building	Deferred work liability as per Regulation 24(1)(b) of 2019 Tariff Regulations
	1.16		IT equipment	

46. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations, as it is towards undischarged liabilities to be payable at a future date and balance work deferred for execution. ACE allowed in respect of Asset-II for 2019-24 tariff period is as follows:

(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23
ACE as per Auditor's Certificate	41.40	36.49	10.42	5.21
Initial Spares disallowed	1.59	1.59	1.59	0.00
Add: IDC Discharged	3.63	1.01	0.00	0.00
ACE allowed	43.44	35.91	8.83	5.21

47. Accordingly, ACE for 2019-24 tariff period and capital cost as on 31.3.2024 in respect of Asset-II considered for the purpose of tariff determination for 2019-24 tariff period is as follows:

(₹ in lakh)					
Capital cost as on COD	Projected ACE				Capital cost allowed as on 31.3.2024
	2019-20	2020-21	2021-22	2022-23	
447.46	43.44	35.91	8.83	5.21	540.85



Debt-Equity ratio

48. Regulation 18 of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

Explanation-*The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*

(2) *The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.*

(3) *In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:*

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) *In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.*



(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

49. The Petitioner has considered debt-equity ratio of 70:30 as on COD, and for ACE for 2019-24 tariff period, debt-equity ratio of 70:30 has been considered for ACE allowed during 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 tariff period for Asset-II is as follows:

Funding	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	313.22	70.00	65.37	70.00	378.60	70.00
Equity	134.24	30.00	28.02	30.00	162.26	30.00
Total	447.46	100.00	93.39	100.00	540.85	100.00

Depreciation

50. Regulation 33 of the 2019 Tariff Regulations provides as follows:

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year



of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit



thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

51. We have considered the submissions of the Petitioner. Weighted Average Rate of Depreciation (WAROD) at Annexure has been worked out considering the depreciation rates of Asset-II as specified in the 2019 Tariff Regulations. Depreciation has been worked out considering ACE as on COD and ACE in 2019-24 tariff period. Depreciation allowed in respect of Asset-II is as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	447.46	490.90	526.81	535.64	540.85
ACE	43.44	35.91	8.83	5.21	0.00
Closing Gross Block	490.90	526.81	535.64	540.85	540.85
Average Gross Block	469.18	508.86	531.23	538.25	540.85
Weighted average rate of Depreciation (WAROD) (in %)	5.70	5.76	5.84	5.86	5.87
Balance useful life of the asset (Year)	23	23	22	21	20
Lapsed life (Year)	0	0	1	2	3
Depreciable Value	424.13	460.30	480.95	487.45	489.85
Combined Depreciation during the year	13.60	29.31	31.00	31.53	31.73
Cumulative depreciation at the end of the year	13.60	42.91	73.91	105.45	137.17
Remaining Depreciable Value at the end of the year	410.53	417.38	407.04	382.00	352.68



Interest on Loan (“IoL”)

52. Regulation 32 of the 2019 Tariff Regulations provides as follows:

“32. Interest on loan capital: (1) *The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) *The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.*

(6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

(7) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”*

53. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period may be adjusted.



Accordingly, floating rate of interest, if any, shall be considered at the time of truing-up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of Asset-II for 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	313.22	343.63	368.77	374.95	378.60
Cumulative Repayments up to Previous Year	0.00	13.60	42.91	73.91	105.45
Net Loan-Opening	313.22	330.03	325.86	301.04	273.15
Additions due to ACE	30.41	25.14	6.18	3.65	0.00
Repayment during the year	13.60	29.31	31.00	31.53	31.73
Net Loan-Closing	330.03	325.86	301.04	273.15	241.42
Average Loan	321.63	327.95	313.45	287.10	257.29
Weighted Average Rate of Interest on Loan (in %)	7.9436	7.9220	7.9220	7.9204	7.9154
Interest on Loan	12.98	25.98	24.83	22.74	20.37

Return on Equity (“RoE”)

54. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as follows:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:



- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;”

31. Tax on Return on Equity. (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee



paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;
- (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

55. The Petitioner has submitted that MAT rate is applicable to it. Accordingly, MAT rate applicable for 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of Asset-II is as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity	134.24	147.27	158.04	160.69	162.26
Additions due to ACE	13.03	10.77	2.65	1.56	0.00
Closing Equity	147.27	158.04	160.69	162.26	162.26
Average Equity	140.76	152.66	159.37	161.47	162.26
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	13.44	28.67	29.93	30.33	30.47

Operation & Maintenance Expenses (“O&M Expenses”)

56. O&M Expenses claimed by the Petitioner for Asset-II for 2019-24 period are as follows:

Particulars	Asset-II				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
220 kV bay of:					
(i) Muzaffarnagar/ Roorkee: 220 kV Bay at Roorkee					
220 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
O&M Expenses (₹ in lakh)	11.44	23.30	24.12	24.96	25.84
PLCC (@ 2% of capital cost)					
Capital cost for PLCC	80.84	80.84	80.84	80.84	80.84
O&M Expenses (₹ in lakh)	0.82	1.62	1.62	1.62	1.62
Total O&M Expenses (₹ in lakh)	12.26	24.92	25.74	26.58	27.46

57. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provide that:

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (Rs Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for AC and HVDC lines (Rs Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- (i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- (ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- (iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the



normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

(iv) the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

(v) the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

(vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: *The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”*

58. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2019 Tariff Regulations and norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already held that no



separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

59. O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

Particulars	Asset-II				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
220 kV bay of:					
(i) Muzaffarnagar/ Roorkee: 220 kV Bay at Roorkee					
220 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
O&M Expenses (₹ in lakh)	11.44	23.30	24.12	24.96	25.84

Interest on Working Capital (“IWC”)

60. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:

“34. Interest on Working Capital: (1) The working capital shall cover:

.....

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

Operation and maintenance expenses, including security expenses for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of triung-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.



(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions. - In these regulations, unless the context otherwise requires:-

‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

61. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

62. 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, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 and as on 1.4.2022 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon in respect of Asset-II are as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	1.88	1.94	2.01	2.08	2.15
Working Capital for Maintenance Spares (15% of O&M Expenses)	3.38	3.50	3.62	3.74	3.88
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	12.72	13.49	13.80	13.76	13.58
Total Working Capital	17.97	18.92	19.43	19.59	19.61
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	1.10	2.13	2.04	2.06	2.06



Annual Fixed Charges for 2019-24 Tariff Period

63. The transmission charges allowed in respect of Asset-II for 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	13.60	29.31	31.00	31.53	31.73
Interest on Loan	12.98	25.98	24.83	22.74	20.37
Return on Equity	13.44	28.67	29.93	30.33	30.47
O&M Expenses	11.44	23.30	24.12	24.96	25.84
Interest on Working Capital	1.10	2.13	2.04	2.06	2.06
Total	52.56	109.39	111.92	111.62	110.47

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

66. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same has to be borne and



additionally paid by the Respondent(s) to the Petitioner and the same will be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.

67. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Security Expenses

68. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition, and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

69. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

70. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.



Sharing of Transmission Charges

71. The COD of the transmission asset has been approved as 28.9.2019 under Regulation 5(2) of the 2019 Tariff Regulations as the transmission asset was ready and it could not be put to use as the associated transmission line under the scope of PTCUL was not ready.

72. Regulation 6(2) of the 2019 Tariff Regulations provides for the treatment of mismatch in COD of the transmission assets of two transmission licensees of a connected transmission system. Regulation 6(2) of the 2019 Tariff Regulations provides as follows:

“6. Treatment of mismatch in date of commercial operation:

(1) In case of mismatch of the date of commercial operation of the generating station and the transmission system, the liability for the transmission charges shall be determined as under:

(a) Where the generating station has not achieved the commercial operation as on the date of commercial operation of the associated transmission system (which is not before the SCOD of the generating station) and the Commission has approved the date of commercial operation of such transmission system in terms of clause (2) of the Regulation 5 of these regulations, the generating company shall be liable to pay the transmission charges of the associated transmission system in accordance with clause (5) of Regulation 14 of these regulations to the transmission licensee till the generating station or unit thereof achieves commercial operation:

(b) Where the associated transmission system has not achieved the commercial operation as on the date of commercial operation of the concerned generating station or unit thereof (which is not before the SCOD of the transmission system), the transmission licensee shall make alternate arrangement for the evacuation from the generating station at its own cost, failing which, the transmission licensee shall be liable to pay the transmission charges to the generating company as determined by the Commission, in accordance with clause (5) of Regulation 14 of these regulations, till the transmission system achieves the commercial operation.

(2) In case of mismatch of the date of commercial operation of the transmission system and the transmission system of other transmission licensee, the liability for the transmission charges shall be determined as under:

(a) Where an interconnected transmission system of other transmission licensee has not achieved the commercial operation as on the date of commercial operation of the



transmission system (which is not before the SCOD of the interconnected transmission system) and the Commission has approved the date of commercial operation of such transmission system in terms of clause (2) of Regulation 5 of these regulations, the other transmission licensee shall be liable to pay the transmission charges of the transmission system in accordance with clause (5) of Regulation 14 of these regulations to the transmission licensee till the interconnected transmission system achieves commercial operation:

(b) Where the transmission system has not achieved the commercial operation as on the date of commercial operation of the interconnected transmission system of other transmission licensee (which is not before the SCOD of the transmission system), the transmission licensee shall be liable to pay the transmission charges of such interconnected transmission system to the other transmission licensee or as may be determined by the Commission, in accordance with clause (5) of Regulation 14 of these regulations, till the transmission system achieves the commercial operation.”

73. Regulation 13(12) of the 2020 Sharing Regulations provides as follows:

“(12) In case of a transmission system where COD has been approved in terms of proviso (ii) of Clause (3) of Regulation 4 of the Tariff Regulations, 2014 or Clause (2) of Regulation 5 of the Tariff Regulations, 2019 or where deemed COD has been declared in terms of Transmission Service Agreement under Tariff based Competitive Bidding, the Yearly Transmission Charges for the transmission system shall be:

(a) paid by the inter-State transmission licensee whose transmission system is delayed till its transmission system achieves COD, or

(b) paid by the generating company whose generating station or unit(s) thereof is delayed, till the generating station or unit thereof, achieves COD, or

(c) shared in the manner as decided by the Commission on case to case basis, where more than one inter-State transmission licensee is involved or both transmission system and generating station are delayed.”

74. In the instant case, as stated above, the COD of Asset-II has been approved as 28.9.2019 under Regulation 5(2) of the 2019 Tariff Regulations as the non-utilization of Asset-II of the Petitioner was on account of delay in completion of the transmission line under the scope of PTCUL. As per Regulation 6(2)(a) and 6(2)(b) of the 2019 Tariff Regulations, if an inter-connected transmission system of other transmission licensee is not ready on the COD of the transmission asset and if the COD of the transmission asset has been approved under Regulation 5(2) of the 2019 Tariff Regulations, the transmission licensee has to bear the transmission charges of the transmission asset



of the other transmission licensee till the COD of the inter-connected transmission system under its scope.

75. The Regulation 6(2) of the 2019 Tariff Regulations, which provided for treatment of mismatch in the COD of the inter-connected transmission systems was deleted vide second amendment to the 2019 Tariff Regulations dated 19.2.2021. However, a similar provision has been made in Regulation 13(12) of the 2020 Sharing Regulations. Accordingly, the yearly transmission charges of Asset-II is to be borne by PTCUL from COD of the transmission asset i.e. from 28.9.2019 till the COD of the downstream transmission system under the scope of PTCUL as provided in Regulation 6(2) of the 2019 Tariff Regulations and Regulation 13(12) of the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations) and thereafter, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

76. To summarise:

The Annual Fixed Charges (AFC) allowed in respect of Asset-II for 2019-24 tariff period are as follows:

Asset-II

(₹ in lakh)

Particulars	2019-20 (pro-rata 186 days)	2020-21	2021-22	2022-23	2023-24
AFC	52.56	109.39	111.92	111.62	110.47



77. Annexure given hereinafter form part of the order.

78. This order disposes of Petition No. 17/TT/2022 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Annexure

Asset-II

2019-24 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Building Civil Works & Colony	17.93	2.98	2.40	0.68	0.34	6.41	24.34	3.34	0.65	0.74	0.79	0.81	0.81
Sub Station	363.38	30.52	21.92	4.89	3.24	60.57	423.95	5.28	19.99	21.38	22.08	22.30	22.38
PLCC	48.04	8.89	3.42	0.94	0.47	13.72	61.75	6.33	3.32	3.71	3.85	3.89	3.91
IT Equipment (Incl. Software)	18.11	1.05	8.16	2.32	1.16	12.70	30.81	15.00	2.80	3.49	4.27	4.53	4.62
Total	447.46	43.44	35.91	8.83	5.21	93.39	540.85		26.76	29.31	31.00	31.53	31.73
							Average Gross Block (₹ in lakh)		469.18	508.86	531.23	538.25	540.85
							Weighted Average Rate of Depreciation (in %)		5.70	5.76	5.84	5.86	5.87

