

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 34/TT/2021

Coram:

Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri P.K. Singh, Member

Date of Order: 08.03.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-I:** Combined Asset consisting of: a) 765 kV D/C Ajmer (New)-Bikaner (New) line along with 240 MVAR, 765 kV switchable line reactor and associated bays at Ajmer end and 330 MVAR, 765 kV switchable line reactor and associated bays at Bikaner end; b) 2 Nos. of 765/400 kV 3*500 MVA ICT along with associated bays at Bikaner Sub-station; c) 1 No. 765 kV, 3*110 MVAR Bus Reactor along with associated bays at Bikaner (New) Sub-station; d) 1 no. of 400 kV, 125 MVAR Bus Reactor along with associated bay at Bikaner (New) Sub-station ; e) LILO of one ckt. of 400 kV Badhla (RVPNL) - Bikaner (RVPNL) D/C line at Bikaner (New) along with associated Bays; and **Asset-II:** 765 kV D/C Bikaner (New)-Moga line along with 2 Nos. 330 MVAR, 765 kV switchable line reactor and associated bays at Bikaner end and 2 Nos. 330 MVAR, 765 kV switchable line reactor and associated bays at Moga end under "Green Energy Corridor ISTS-Part-D" in Northern Region.

And in the matter of:

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

.....**Petitioner**

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005 (Rajasthan).



2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur (Rajasthan)
4. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia, Near 22 Phatak,
Patiala-147001 (Punjab).
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 (UP).
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,



NDPL House, Hudson Lines, Kingsway Camp,
Delhi-110 009

14. Chandigarh Administration,
Sector -9,
Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad (Uttar Pradesh).
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

.....Respondent(s)

For Petitioner: Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri D.K Biswal, PGCIL

For Respondent: Shri R.B. Sharma, Advocate, BRPL
Shri Aman Malik, Advocate, RRVPNL
Ms. Megha Bajpeyi, BRPL

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for determination of tariff for the period from the date of commercial operation (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 the following assets:

Asset-I: Combined Asset consisting of: a) 765 kV D/C Ajmer (New)- Bikaner (New) line along with 240 MVAR, 765 kV switchable line reactor and associated bays at Ajmer end and 330 MVAR, 765 kV switchable line reactor and associated bays at Bikaner end; b) 2 Numbers of 765/400 kV 3*500 MVA ICT along with associated bays at Bikaner Sub-station; c) 1 Number 765 kV,



3*110 MVAR Bus Reactor along with associated bays at Bikaner (New) Sub-station; d) 1 Number of 400 kV, 125 MVAR Bus Reactor along with associated bay at Bikaner (New) Sub-station; e) LILO of 1 ckt. of 400 kV Badhla (RVPNL) - Bikaner (RVPNL) D/C line at Bikaner (New) along with associated bays; and

Asset-II: 765 kV D/C Bikaner (new)-Moga line along with 2 Numbers 330 MVAR, 765 kV Switchable line reactor and associated bays at Bikaner end and 2 Numbers 330 MVAR, 765 kV switchable line reactor and associated bays at Moga end (hereinafter referred to as the “transmission assets”) under “Green Energy Corridor ISTS-Part-D” in the Northern Region (hereinafter referred to as the “transmission project”).

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 –8.3 above.

3) 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.

4) 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.

5) 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.

6) 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.

7) 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.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual. Allow the initial spare as procured in the current petition in full as given in para-6 under



Regulation 76 of the CERC (Terms and Condition of Tariff) Regulation, 2019, "Power to Relax".

9) 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.

10) 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 under:

a) Investment Approval (IA) of the transmission project was accorded by the Board of Directors of the Petitioner's Company on 5.5.2016 vide Memorandum Ref.: C/CP/GEC-D dated 9.5.2016, at an estimated cost of ₹351959.00 lakh including IDC of ₹22359.00 lakh based on December, 2015 price level.

b) The scope of work covered under the transmission project broadly includes:

Transmission Lines

1. Ajmer (New) – Bikaner (New) 765 kV D/C
2. Bikaner (New) – Moga (PG) 765 kV D/C
3. LILO of one circuit of 400 kV Bhadla (RVPN)–Bikaner (RVPN) D/C line at Bikaner (New)

Sub-station

a) 765/400 kV Bikaner Sub-station (New)

765 kV

- | | |
|---|-------------|
| – Line Bays | : 4 Numbers |
| – Transformer bays | : 2 Numbers |
| – 1500 MVA, 765/400 kV transformer | : 2 Numbers |
| – 330 MVAR Switchable Line reactor bays | : 4 Numbers |
| – 330 MVAR Switchable Line reactors | : 4 Numbers |
| – Bus reactor bay | : 1 Number |
| – 330 MVAR Bus reactor | : 1 Number |



400 kV

- Transformer bays : 2 Numbers
- Line Bays : 2 Numbers
- Bus reactor bay : 1 Number
- 125 MVAR Bus reactor : 1 Number

b) 765/400 kV Ajmer Sub-station Extn.

765 kV

- Line Bays : 2 Numbers
- 240 MVAR Switchable Line reactor bays : 2 Numbers
- 240 MVAR Switchable Line reactors : 2 Numbers

c) 765/400 kV Moga (PG) Sub-station Extn.

765 kV

- Line Bays : 2 Numbers
- 330 MVAR Switchable Line reactor bays : 2 Numbers
- 330 MVAR Switchable Line reactors : 2 Numbers

Reactive Compensation

• **Line Reactors**

Sl. No.	Transmission Line		
		From end (each ckt)	To end (each ckt)
1	Ajmer (New) –Bikaner (New) 765 kV D/C line	1x240 (switchable) (each ckt.)	1x330 (switchable) (each ckt.)
2	Bikaner (New) – Moga (PG) 765 kV D/C line	1x330 (switchable) (each ckt.)	1x330 (switchable) (each ckt.)

• **Bus Reactors**

Sl. No.	Bus	Reactor (MVAR)
1.	765/400 kV Bikaner (New)	1X330 MVAr (765 kV Bus) 1x125 MVAr (400 kV Bus)

c) As per IA dated 5.5.2016, the transmission assets were scheduled to be commissioned within 36 months from the date of IA i.e. by 4.5.2019. The details of the transmission assets including scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:

Assets	SCOD	COD	Time over-run
Asset-I	4.5.2019	7.7.2019	64 days
Asset-II		11.3.2020	312 days



4. The Respondents are distribution licensees and power departments, mainly from the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No.9, has filed its reply dated 6.5.2021. UPPCL has raised issues of scope of the project, cost variation, apportionment of cost, rationale behind splitting of the transmission assets, capital cost of the project, time over-run and cost over-run. Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPNL), Respondent No.1, has filed its reply *vide* affidavit dated 29.6.2021 and has raised the issue of time over-run. The Petitioner *vide* affidavits dated 15.6.2021 and 23.7.2021 has filed rejoinder to the replies received from UPPCL and RRVPNL respectively. The issues raised by UPPCL and RRVPNL and clarifications thereto given by the Petitioner have been dealt in the relevant portions of this order.

6. UPPCL has submitted that scope of work under the Detailed Project Report (DPR) was conceived as one project and the same was approved by the Standing Committee, NRPC and agreed by the members. At no stage, the project was subdivided or split into assets. The Investment Approval is for whole project with single cost without any apportionment or splitting of assets into different assets. UPPCL has further submitted that the Petitioner has split the scope of the work into two sub-projects or assets, assigned them different costs by apportionment and different dates of commercial operation without the approval of any competent authority or committee. As a corporate practice, the project cost is determined by the Petitioner



through competitive bids invited for whole of the project. As such, after selection of the successful bidder, there is no relevance of the original cost approved on 9.5.2016. Since the bids are invited for whole project, the tariff for whole project should be considered by the Petitioner with single SCOD, COD and cut-off date instead of two different SCODs, CODs and cut-off dates for each transmission asset. In this scenario, evaluation of cost over-run and time over-run becomes complicated due to entry of several petitions for different assets and the task becomes complex when all assets are merged into one asset at the time of truing-up. Due to this, information with reference to transmission assets remains scattered and it is a very difficult to catch hold of all the information with reference to the subject-matter of the petition. UPPCL has also submitted that original cost estimates in DPR is quite high in comparison to what was approved by the Board of the Petitioner and nowhere in the Petition, the Petitioner has submitted details of bidding and price quoted by successful bidder and time for completion of the project.

7. In response, the Petitioner has reiterated the details of the scope of work as set out in the IA. The Petitioner has clarified that it has nowhere claimed that entire scope of work covers only one asset and it is claiming tariff for two transmission assets only by combining various assets covered in the transmission project. The Petitioner has declared COD of both the transmission assets as per the 2019 Tariff Regulations. Relying on the definition of word 'element' as propounded under clause 20 of Regulation 3 of the 2019 Tariff Regulations, the Petitioner has submitted that the contentions of UPPCL are wrong and baseless.

8. We have considered the submissions made by UPPCL and clarifications thereto submitted by the Petitioner. Regulation 3(20) and Regulation 3(50) of the 2019 Tariff Regulations define 'element' and 'project' and the same are as follows:



“(20) ‘Element’ means an asset which has been distinctively defined under the scope of the transmission project in the Investment Approval such as transmission lines including line bays and line reactors, substations, bays, compensation device, Interconnecting Transformers;”

“(50) ‘Project’ means:

i) in case of thermal generating station, all components of the thermal generating station and includes integrated coal mine, biomass pellet handling system, pollution control system, effluent treatment plan, as may be required;

ii) in case of hydro generating station, all components of the hydro generating station and includes dam, intake water conductor system, power generating station, as apportioned to power generation; and

iii) in case of transmission, all components of the transmission system including communication system; ”

9. Regulation 8 deals with determination of tariff and Regulation 9 deals with application for determination of tariff provide as follows:

“8 Tariff determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or unit thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or element thereof or associated communication system:

Provided that:

(i) In case of commercial operation of all the units of a generating station or all elements of a transmission system prior to 1.4.2019, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmission system for the purpose of determination of tariff for the period 1.4.2019 to 31.3.2024:

(ii) In case of commercial operation of units of generating station or elements of the transmission system on or after 1.4.2019, the generating company or the transmission licensee shall file a consolidated petition, in accordance with the provisions of the Procedure Regulations, combining all the units of the generating station or all elements of the transmission system which are anticipated to achieve commercial operation during the next two months from the date of application:

(iii) Tariff of the associated communication system forming part of transmission system which has achieved commercial operation prior to 1.4.2014 shall be as per the methodology approved by the Commission prior to 1.4.2014.

(2) Where only a part of the generation capacity of a generating station is tied up for supplying power to the beneficiaries through long term power purchase agreement, the units for such part capacity shall be clearly identified and in such cases, the tariff shall be determined for such identified capacity. Where the unit(s) corresponding to such part capacity cannot be identified, the tariff of the generating station may be determined with reference to the capital cost of the entire project, but tariff so determined shall be applicable corresponding to the part capacity contracted for supply to the beneficiaries.



(3) In case of expansion of existing generating station, the tariff shall be determined for the expanded capacity in accordance with these regulations:

Provided that the common infrastructure of existing generating station, shall be utilized for the expanded capacity and the benefit of new technology in the expanded capacity, as determined by the Commission, shall be extended to the existing capacity.

(4) Assets installed for implementation of the revised emission standards shall form part of the existing generation project and tariff thereof shall be determined separately on submission of the completion certificate by the Board of the generating company.

(5) Energy charge component of tariff of the generating station sourcing coal or lignite from the integrated mine shall be determined based on the input price of coal or lignite, as the case may be, from such integrated mines:

Provided that the generating company shall maintain the account of the integrated mine separately and submit the cost of integrated mine, in accordance with these regulations, duly certified by the Auditor.

(6) Tariff of generating station using coal washery rejects developed by Central or State PSUs or Joint Venture between a Government Company and company other than Government Company shall be determined in accordance with these regulations:

Provided that in case of Joint Venture between a Government Company and a Company other than Government Company, the shareholding of the company other than Government Company either directly or through any of its subsidiary company or associate company shall not exceed 26% of the paid up share capital:

Provided further that the energy charge component of the tariff of such generating station or unit thereof shall be determined based on the fixed cost and the variable cost of the coal washery project:

Provided also that the Gross Calorific Value of coal rejects shall be as measured jointly by the generating company and the beneficiaries.

(7) In case of multi-purpose hydro schemes, with irrigation, flood control and power components, the capital cost chargeable to the power component of the scheme only shall be considered for determination of tariff.

(8) If an existing transmission project is granted licence under section 14 of the Act read with clause (c) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of grant of Transmission Licence for inter-State Transmission of electricity and related matters) Regulations, 2009, the tariff of such project shall be applicable from the date of grant of transmission licence or from the date as indicated in the transmission licence, as the case may be. In such cases, the applicant shall file petition as per Annexure-I (Part III) to these regulations, clearly demarcating the assets which form part of the business of generation and transmission, the value of such assets, source of funding and other relevant details after adjusting the cumulative depreciation and loan repayment, duly certified by the Auditor.

9. Application for determination of tariff



(1) The generating company or the transmission licensee may make an application for determination of tariff for new generating station or unit thereof or transmission system or element thereof in accordance with the Procedure Regulations within 60 days of the anticipated date of commercial operation:

Provided that where the transmission system comprises various elements, the transmission licensee shall file an application for determination of tariff for a group of elements on incurring of expenditure of not less than 70% of the cost envisaged in the Investment Approval or Rs. 200 Crore, whichever is lower, as on the anticipated date of commercial operation:

Provided further that the generating company or the transmission licensee, as the case may be, shall submit Auditor Certificate and in case of non-availability of Auditor Certificate, a Management Certificate duly signed by an authorised person, not below the level of Director of the company, indicating the capital cost incurred as on the date of commercial operation and the projected additional capital expenditure for respective years of the tariff period 2019-24:

Provided also that where interim tariff of the generating station or unit thereof and the transmission system or element thereof including communication system has been determined based on Management Certificate, the generating company or the transmission licensee shall submit the Auditor Certificate not later than 60 days from date of granting interim tariff.

(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 31.10.2019, based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2019-24 along with the true up petition for the period 2014-19 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2014.

(3) In case of emission control system required to be installed in existing generating station or unit thereof to meet the revised emission standards, an application shall be made for determination of supplementary tariff (capacity charges or energy charge or both) based on the actual capital expenditure duly certified by the Auditor.

(4) Where the generating company has the arrangement for supply of coal or lignite from an integrated mine(s) to one or more of its generating stations, the generating company shall file a petition for determination of the input price for determining the energy charge along with the tariff petitions for one or more generating stations in accordance with the provision of Chapter 9 of these regulations.”

10. On perusal of above provisions of the 2019 Tariff Regulations, we are of the view that the present tariff petition filed by the Petitioner satisfies the conditions laid down in Regulation 8 and Regulation 9 of the 2019 Tariff Regulations. Further, the Commission considers allowing the transmission tariff only after prudence check and taking into consideration all aspects of the matter as per applicable regulations. In



view of this, the contentions of UPPCL are rejected. We are, therefore, considering the present tariff petition for determination of tariff after due prudence check of the required documents submitted by the Petitioner.

11. This order is issued considering the submissions made by the Petitioner *vide* affidavits dated 28.8.2020, 14.6.2021, 21.6.2021 and 9.7.2021, reply of UPPCL dated 6.5.2021, reply of RRVPNL filed *vide* affidavit dated 29.6.2021 and Petitioner's rejoinder affidavits to the replies of UPPCL and RRVPN dated 15.6.2021 and 23.7.2021 respectively.

12. Hearing in this matter was held on 22.6.2021 through video conference and order was reserved.

13. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

Determination of Annual Fixed Charges for 2019-24 Tariff Period

14. The Petitioner has claimed the following transmission charges in respect of the transmission assets for 2019-24 tariff period:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	5345.47	7874.53	8384.85	8493.99	8538.21
Interest on Loan	2980.07	4174.62	4134.03	3837.53	3497.84
Return on Equity	5721.67	8453.31	9027.52	9149.21	9198.16
O&M Expenses	1829.07	2575.30	2666.15	2761.50	2857.88
Interest on Working Capital	290.95	421.52	441.22	444.39	443.87
Total	16167.23	23499.28	24653.77	24686.62	24535.96



Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	475.22	8601.45	8986.32	9182.36	9260.79
Interest on Loan	250.24	4384.20	4258.29	4018.86	3707.53
Return on Equity	506.27	9164.65	9578.96	9793.75	9880.05
O&M Expenses	48.54	875.36	906.03	938.00	970.74
Interest on Working Capital	20.64	372.21	383.70	387.69	385.91
Total	1300.91	23397.87	24113.30	24320.66	24205.02

15. The Petitioner has claimed the following IWC in respect of the transmission assets for 2019-24 tariff period:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	207.39	214.61	222.18	230.13	238.16
Maintenance Spares	373.30	386.30	399.92	414.23	428.68
Receivables	2704.56	2897.17	3039.51	3043.56	3016.72
Total Working Capital	3285.25	3498.08	3661.61	3687.92	3683.56
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	290.95	421.52	441.22	444.39	443.87

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	70.48	72.95	75.50	78.17	80.89
Maintenance Spares	126.86	131.30	135.90	140.70	145.61
Receivables	2787.63	2884.67	2972.87	2998.44	2976.03
Total Working Capital	2984.97	3088.92	3184.27	3217.31	3202.54
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	20.64	372.21	383.70	387.69	385.91

Data of Commercial Operation ("COD")

16. The Petitioner has claimed actual dates of commercial operation in respect of Asset-I as 7.7.2019 and for Asset-II as 11.3.2020. 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.”*

17. In support of COD of Asset-I, the Petitioner has submitted CEA Energisation Certificates dated 17.5.2019, 24.5.2019 and 29.6.2019 under Regulation 43 of Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010; RLDC Charging Certificate dated 30.7.2019; self-declaration COD letter dated 23.8.2019; and CMD certificate as required under the Grid Code.

18. In support of COD of Asset-II, the Petitioner has submitted CEA Energisation Certificates dated 20.2.2020 and 3.3.2020 under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010; RLDC Charging Certificate



dated 19.3.2020; self-declaration of COD letter dated 13.3.2020; and CMD certificate as required under the Grid Code.

19. Taking into consideration CEA Energisation Certificates, RLDC Charging Certificates, self-declaration of COD letter and CMD Certificates, COD of Asset-I and Asset-II is approved as 7.7.2019 and 11.3.2020 respectively.

Capital Cost

20. Regulation 19 of the 2019 Tariff Regulations provides as under:

“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.”*

21. The Petitioner vide Auditor’s Certificate dated 25.2.2021 has claimed capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission assets as follows:

(₹ in lakh)

Assets	Apportioned Approved Cost (As per FR)	Expenditure up to COD	Projected ACE				Estimated completion cost
			2019-20	2020-21	2021-22	2022-23	
Asset-I	172433.23	135481.65	5643.82	17799.57	2582.13	1737.24	163244.41
Asset-II	179525.77	156561.84	1963.56	9196.95	4560.39	3063.30	175346.04

Cost Over-run

22. UPPCL has submitted that original cost estimates of the Petitioner in DPR is quite high in comparison to what was approved by the Board of the Petitioner and, therefore, the Petitioner may be directed to provide the reasons for reduction of ₹41875.00 lakh in cost with reference to what was estimated in DPR.

23. The Petitioner with reference to cost variation has submitted that it is a Government enterprise and follows a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/ services as per detailed designing are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, design and site requirements. The estimates are prepared by the Petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/ general practice.



24. The Petitioner has submitted that variation in the cost of individual item is due to the fact that packages under the scope of work comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. The lowest bidder is evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

25. The Petitioner has submitted revised Auditor's certificates in respect of the transmission assets vide affidavit dated 14.6.2021. As per revised Auditor's certificates cost details and details of cost variation are as follows:

Asset	Approved Cost (A) (₹ in lakh)	Estimated completion Cost (B) (₹ in lakh)	Difference (C)=(A-B) (₹ in lakh)	% Variation [(C/A)*100]
Asset-I	172433.23	163244.41	9188.82	5.33
Asset-II	179525.77	175346.04	4179.73	2.33
Total	351959.00	338590.45	13368.55	3.80

26. The Petitioner has submitted that from the above table, it is evident that percentage cost variation/ cost under-run for Asset-I and Asset-II is 5.33% and 2.33%, respectively which is due to competitive bidding process followed by the Petitioner.

27. We have considered the submissions of the Petitioner and UPPCL. The Petitioner has submitted that against total apportioned approved cost of ₹172433.23 lakh for Asset-I, the estimated completion cost is ₹163244.41 lakh and that as against the total apportioned approved cost of ₹179525.77 lakh for Asset-II, the estimated completion cost is ₹175346.04 lakh. We note that estimated completion cost claimed in respect of Asset-I and Asset-II is within the apportioned approved cost as per FR.



Time over-run

28. As per the IA dated 5.5.2016, the transmission project was scheduled to be put to commercial operation within 36 months from the date of IA i.e. by 4.5.2019.

However, the actual COD of the transmission assets is as follows:

Assets	SCOD	Actual COD	Time over-run
Asset-I	4.5.2019	7.7.2019	64 days
Asset-II	4.5.2019	11.3.2020	312 days

29. There is delay of 64 days and 312 days in COD of Asset-I and Asset-II respectively.

30. UPPCL has submitted that transmission assets have been claimed to have been delayed due to ROW issues. The transmission project may be considered as one without splitting of the transmission assets and delay in execution be re-determined and evaluated and based on this, time over-run may be allowed or rejected. Therefore, IDC and IEDC as claimed for the duration of delay may not be allowed.

31. In response, the Petitioner has submitted that detailed justifications for delay have been given in the petition and prayed to condone the delay in COD of the transmission assets as per Regulation 22(2) of the 2019 Tariff Regulations.

32. The reasons submitted by the Petitioner for time over-run in case of Asset-I and Asset-II are as follows:

- Asset-I

33. With regard to delay in commissioning of Asset-I, the Petitioner has submitted that entire delay of 64 days is due to Right of Way (ROW) problems at various locations of Ajmer-Bikaner Transmission Line. The Petitioner has further submitted that Letter of Award (LOA) was issued in August 2016 immediately after the IA. The



working gangs were timely mobilized to achieve the scheduled completion target. Proactive actions involving various adaptive and mitigative steps were taken to overcome the hurdles associated with construction of transmission line in compressed time schedule. However, in spite of the best efforts of the Petitioner, the completion of work stretched beyond its schedule completion date due to ROW issue. The details of ROW issues are as follows:

Correspondence with Local Administration for ROW at 29/03 and 29/04 for Ajmer-Bikaner Transmission Line					
Sl. No.	Work	Letter From	Letter Ref. No. with Date	Letter to	Remarks
1	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	164 dated 6.12.2017	SDM, Degana	Letter marked to Tehsildar, Degana.
2	Foundation Loc. Nos. 29/03 & 29/04	Tehsildar, Degana	68 dated 11.12.2017	SHO, Padukalan	Order to provide police protection.
3	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	188 dated 4.1.2018	SHO, Padukalan	Request to provide police protection.
4	Foundation Loc. Nos. 29/03 & 29/04	SHO, Padukalan	57-58 dated 5.1.2018	SDM, Degana	Request for availability of administration at the spot.
5	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	203 dated 5.2.2018	SDM, Degana	Request for availability of administration and police protection at the spot.
6	Foundation Loc. Nos. 29/03 & 29/04	SDM, Degana	176 dated 5.2.2018	Tehsildar, Degana	Deputation of Tehsildar, Degana for completion of work.
7	Foundation Loc. Nos. 29/03 & 29/04	Tehsildar, Degana	07 dated 6.3.2018	Powergrid, Merta	Seeking information.
8	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Merta Sub-station	215 dated 8.3.2018	Tehsildar, Degana	To provide the information sought and request to provide police protection.
9	Foundation Loc. Nos. 29/03 & 29/04	Tehsildar, Degana	19 dated 23.3.2018	SHO, Padukalan	Order to provide police protection.
10	Foundation Loc. Nos. 29/03 & 29/04	SHO, Padukalan	1084-85 dated 23.3.2018	Tehsildar, Degana	Assessment of requirement of police protection.
11	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Merta Sub-station	237 dated 3.5.2018	SDM, Degana	Request to provide police protection after assessment.



12	Foundation Loc. Nos. 29/03 & 29/04	POWERGRID, Ajmer Sub-station	Nil dated 3.5.2018	DM, Nagaur	Request for completion of work.
13	Foundation Loc. Nos. 29/03 & 29/04	DM, Nagaur	1643 dated 14.5.2018	SP, Nagaur	Order to take immediate action and work completed on 18.5.2018.
14	TE Loc. Nos. 81/0, 80/4-81/0, 81/1 and 81/3	POWERGRID, Bikaner Sub-station	1856 dated 3.8.2018	DM, Bikaner	Request to resolve ROW issue.
15	TE Loc. Nos. 81/0, 80/4-81/0, 81/1 and 81/3	Tahsildar, Bikaner	4641 dated 9.8.2018	POWERGRID Bikaner	Information with regard to police protection.
16	TE Loc. No. 81/3	POWERGRID, Bikaner	11.8.2018	SHO, Bikaner	Request to provide Police Protection.
17	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	335 dated 12.10.2018	SDM, Degana	Request to provide police protection.
18	TE Loc. Nos. 29/03 & 29/04	SDM, Degana	936 dated 22.10.2018	Tehsildar, Degana	Order to take action.
19	TE Loc. Nos. 29/03 & 29/04	Tehsildar, Degana	85 dated 12.11.2018	SHO, Padukalan	Order to provide police protection.
20	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	359 dated 16.11.2018	SHO, Padukalan	Request to provide police protection.
21	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	365 dated 30.11.2018	SDM, Degana	Request to provide police protection.
22	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	394 dated 8.1.2019	SHO, Padukalan	Request to visit site jointly with Tehsildar Degana and to do assessment of police protection required.
23	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	409 dated 21.1.2019	ASP, Degana	Request to provide police protection.
24	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	413 dated 31.1.2019	SP, Nagaur	Request to provide police protection after assessment.
25	TE Loc. Nos. 29/03 & 29/04	SP, Nagaur	265 dated 31.1.2019	ASP, Degana	Order to provide police protection.
26	TE Loc. Nos. 29/03 & 29/04	POWERGRID, Merta	Nil dated 1.2.2019	Tehsildar, Degana	Police protection for 5.2.2019 finalized.
27	TE Loc. Nos. 29/03 & 29/04	ASP, Degana	634 dated 2.2.2019	SHO, Padukalan; SHO, Degana; SHO, Thanwla; SHO, Gachchhipura	Order to provide police force for 5.2.2019 and work started on 5.2.2019.



34. 40.The Petitioner has also submitted CPM/PERT chart for the transmission assets vide affidavit dated 21.6.2021. The Petitioner has submitted that ROW issues were resolved in February 2019 and the Petitioner completed remaining work in subsequent months and finally commissioned Asset-I on 7.7.2019. The Petitioner has submitted the relevant documents along with the petition.

35. We have considered the submissions of the Petitioner. The submissions of the Petitioner show that delay was on account of RoW issues. The Petitioner has submitted detailed chronology of events supported by documentary evidence and it is observed that final resolution of RoW issues took considerable time which impacted the timely execution of the asset. The above reasons of delay in execution of the transmission asset were beyond the control of the Petitioner. Hence, entire delay of 64 days in completion of Asset-I is condoned.

- Asset-II

36. Asset-II has been put under commercial operation w.e.f. 11.3.2020 with time over-run of 312 days. The Petitioner has submitted that delay of 312 days is mainly due to ROW issues, delay in getting NOC from Air Force and delay in getting shut-down approval.

From July 2017 to April 2018 - ROW issues

37. The Petitioner has submitted that local villagers near Khuprisar and Lunkarnsar had created severe hindrance at various locations. The villagers did not allow the Petitioner to do survey work for a long period. The Petitioner has submitted that several attempts were made by the Petitioner's officials to persuade land-owners for completion of work. Numerous public meetings with villagers were also conducted by the Petitioner to apprise them of the importance of the project. The details submitted by the Petitioner are as follows:



Sl. No.	Description of Activity	Date
1	Request for resolving issue was made to SDM (Bikaner) and after intervention of local police authorities, assurance was given for execution of work.	18.7.2017
2	SDM, Lunkarnsar was informed that villagers were hampering excavation/foundation work at Loc No. 28/8. Administrative help was requested from SDM Lunkaransar and SDM instructed the Tehsildar, Lunkarnsar to take necessary action. Subsequently, Tehsildar Lunkarnsar informed to Patwari, Khuprisar to look into the matter.	2.8.2017
3	Foundation work stopped by land-owner: Request for resolving the issue was made to SDM (Bikaner) after intervention of local police authorities, assurance was given for execution of work.	9.8.2017
4	Letter given to SDM- Lunaksar, Bikaner for hampering the foundation work.	29.8.2017
6	SDM, Rawatsar was informed that villagers were hampering the erection work at Loc No. 35/6	1.9.2017
7	SDM, Rawatsar instructed SHO Rawatsar to take necessary action.	1.9.2017
8	SHO, Rawatsar requested villagers for starting work but they did not allow the work and, POWERGRID sought police protection from the SHO.	11.9.2017
9	SHO, Rawatsar provided police protection for start of work.	15.9.2017
10	Villagers were hampering foundation work at Loc. No. 40/4	2.4.2018
11	Tesildar, Rawatsar was informed that villagers were hampering the foundation work.	6.4.2018
12	Tehsildar, Rawatsar instructed the SHO, Rawatsar to take necessary action.	6.4.2018
13	Till 15.4.2018, villagers did not allow the work at location.	15.4.2018
14	Villagers did not allow the work at location. Finally, the work started on 16.4.2018.	15.4.2018
15	Rawatsar again instructed the SHO, Rawatsar for providing police protection to help start the construction activities.	16.4.2018

From July 2017 to April 2019 - Delay on account of approval/ NOC from Air Force

38. The Petitioner has submitted that it awarded tower contract in August 2016 after IA dated 5.5.2016. As per the contract, L2 network survey for the transmission line was supposed to be conducted by December 2017. Accordingly, the Petitioner proactively completed survey on 27.5.2017 and subsequently submitted proposal to Air Force authorities in July 2017 by de-marking the route on topological sheet. The route was reviewed at Air Force office and conditional NOC was given to the Petitioner on 31.5.2018. The condition was reduced tower height in order to safeguard the airdrome area.



39. The Petitioner has submitted that the condition to reduce the tower height could not be complied with due to tower design. The condition was that tower heights were not to exceed 315.91 meters for Location No. 1 to 176 & 306-370 and 251 meters for Location No. 177 to 205. However, towers with such reduced height were not available in the instant configuration. Therefore, revised route was proposed on 10.6.2018 to Air Force authorities after taking into consideration the fact that no tower falls within the airdrome range with permissible height limits as per Air Force requirement to provide NOC. Hence, after regular follow-up, final NOC was received on 23.4.2019. Overall process took about 650 days (from 12.7.2017 to 23.4.2019). The detailed chronology submitted by the Petitioner is as follows:

Sl. No.	Hindrance/Communication	Date	From	To
1	Date of Award/NOA Date	10.8.2016	--	--
2	Preliminary Survey approval (NK Enterprises).	8.9-2016	--	--
3	Detailed Survey / Check Survey completed.	27.5.2017	--	--
4	Proposal to grant NOC from Air Force.	12.7.2017	PGCIL.	Director Operations, Air Head Quarters, New Delhi.
5	Granting Conditional NOC for construction of 765 kV D/C BMTL from Air Headquarters.	31.5.2018	Group Captain, Director. Operations ATS Air Head Quarters, New Delhi.	PGCIL.
6	To re-examine the issues conditional for NOC dated 31.5.2018 and issue a fresh NOC.	10.6.2018	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.
7	Reminder to grant fresh NOC	24.7.2018	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.
8	Request to grant NOC including reduction in height of 29 towers from (AP43/3 to AP52/0)	28.8.2018	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.



9	Regarding review of NOC issue	18.10.2018	Air Force.	PGCIL.
10	Regarding review of NOC issue	16.11.2018	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.
11	Regarding review of NOC issue	20.11.2018	Director of Operations, Air Head Quarters.	PGCIL.
12	Submission of revised case for issuance of NOC for 41 towers to be installed in the diverted part of 765 kV D/C BMTL from (AP43/1 to AP52/4).	31.12.2018	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.
13	Office memorandum (OM) issued by Ministry of Defence	31.12.2018	Ministry of Defence.	--
14	NOC by Air Force dated 31.5.2018 is in order	9.1.2019	Ministry of Power.	PGCIL.
15	Request to inform status of NOC case submitted for 41 towers to be installed in the diverted part from (AP43/1 to AP52/4) of 765 kV BMTL.	12.4.2019	PGCIL.	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.
16	Grant of NOC from Air Headquarters for construction of 765 kV D/C BMTL including additional 41 towers with conditions.	23.4.2019	Group Captain, Director Operations ATS Air Head Quarters, New Delhi.	PGCIL.

From 22.7.2019 to 25.2.2020 - ROW issue

40. The Petitioner has submitted that after obtaining NOC from Air Force authorities, the Petitioner faced another ROW issue in July 2019. The matter was resolved in November 2019. The details submitted by the Petitioner are as follows:

Sl. No.	Description of Activity	From
1	Letter received from Farmer's union, Lunkaransar to stop work.	22.7.2019
2	SDM, Tibbi was informed that villagers were hampering the tower erection work.	3.9.2019
3	Erection work stopped by land owner. Request for resolving issue was made to Tehsildar, Lunkaransar.	12.9.2019
4	Erection work stopped by land owner. Request for resolving the issue was made to Tahsildar (Bikaner).	01-10-2019
5	The Petitioner communicated to SHO, Sangeria and informed that villagers were hampering the stringing work.	13.10.2019



6	SHO, Talwara was informed that villagers were hampering the stringing work.	1.11.2019
7	Stringing work was stopped by the local villagers. Request for resolving the issue was made to Tehsildar (Bikaner).	19.11.2019
8	Stringing work was stopped by the local villagers. Request for Resolving issue was Made to SHO (Bikaner).	26.12.2019
9	Stringing work was stopped by the local villagers. Request for resolving the issue was made to SHO (Tibbi, Hanumangarh).	2.2.2020
10	Stringing work was stopped by the local villagers. Request for resolving the issue was made to ADM (Hanumangarh).	24.2.2020 & 25.2.2020

Time Over-run on account of delay in shut-down accorded by concerned SLDCs

41. The Petitioner has submitted that another reason of delay was due to delay in obtaining approval of shut-down needed for line crossing from concerned SLDCs. The shut-down is generally provided in phases for 4 to 5 hours in a day. However, in this case, concerned SLDCs took considerable time in providing the shut-down.

42. The Petitioner has submitted that shut-down for 33 kV Jokhsar distribution line at Location No. 45 B/5 was applied on 9.4.2018 and was granted on 22.5.2018. The Petitioner has submitted following chronology of events:

Sl. No.	Description of Activity	Date	Remarks
1	Shut down of 33 kV Jokhsar Dhanasar feeder applied to the Executive Engineer, Shawa, Churu for stringing work but shut down was not provided by JDVNL at Loc No. 45B/5.	9.4.2018	Total time taken in shutdown is 43 days
2	Again, shut down of 33 kV Jokhsar Dhanasar feeder applied to the Executive Engineer, Shawa, Churu for stringing work but shut down was not provided by JDVNL at Loc No. 45 B/5.	17.5.2018	
3	Shut down of 33 kV Jokhsar Dhanasar feeder issued to Executive Engineer, Shawa, Churu JDVNL for stringing work from 21.5.2018 to 27.5.2018 only for 5 hours (9:00 AM to 02:00 PM) at Loc No. 45B/5.	22.5.2018	

43. The Petitioner has submitted that shut down of 33 kV Jokhsar was requested from JDVNL on 8.3.2019 for crossing location at 40/0-40/1 while it was granted on 4.4.2019. The Petitioner has submitted following chronology of events:



Sl. No.	Description of Activity	Date	Remarks
1	On 8.3.2019 shut down of 33 kV was applied to the Assistant Engineer Jokhsar for stringing work, but shut down was not provided by JDVNL.	8.3.2019	Total time taken in shutdown is 27 days
2	On 16.3.2019 again the shutdown of 33 kV was applied to the Assistant Engineer Jokhsar for stringing work, but shut down was not provided by JDVNL.	16.3.2019	
3	On 4.4.2019 and 5.4.2019 shut down of 33 kV was provided for stringing work at Loc. Nos. 40/0-40/1.	4.4.2019	

44. The Petitioner has submitted that approval of shut down (applied on 16.4.2019) of 400 kV D/C Talwandi Saboo-Muktsar TL (PSTCL) at Location No. 57/0-58/0 took about 53 days. The follow-up was done continuously until June 2019. The matter was also discussed with PSTCL in CEA meeting. The season of paddy crop cultivation started in the State of Punjab after June 2019 and work could only be started after harvesting the crop in the month of October 2019. During the paddy crop cultivation, movement of heavy loaders, man, machines and materials was not possible. The persuasion for shut down was initiated again at the end of harvesting of paddy field crops in the month of October 2019 and finally shut down was given in the month of November 2019. The Petitioner has submitted following chronology of events:

Sl. No.	Description of Activity	Date	Remarks
1	Shutdown for 400 kV D/C Talwandi Saboo-Muktsar Transmission Line (PSTCL) was applied for the first time.	16.4.2019	Total time taken in shutdown is 199 days
2	NRLDC approved the shutdown from 22.4.2019-24.4.2019 on daily basis vide order no. 21103 dated 18.4.2019.	18.4.2019	
3	RTAMC informed that PC PSTCL did not agree with plan and approved shutdown from 22.4.2019 to 24.4.2019.	19.4.2019	
4	Letter to PC, PSTCL was written from Sr. DGM to provide shutdown, but no response was received from PSTCL.	22.4.2019	
5	A meeting with Director (Tech) PSTCL was called by the Petitioner. During meeting, it was decided that PSTCL shall allow shutdown.	25.4.2019	
6	Shutdown request from 10.5.2019-12.5.2019 was sent to PC, PSTCL through RTAMC with reference to the meeting with Director (Tech) PSTCL.	30.4.2019	
7	After continuous follow up, PC PSTCL did not give consent for shutdown.	3.5.2019	



8	Issue discussed with PSTCL at meeting with CEA.	16.5.2019	
9	Shutdown request from 7.6.2019-9.6.2019 was sent to PC, PSTCL through RTAMC as per direction.	17.5.2019	
10	As conveyed by RTAMC-PC, PSTCL asked for MoM signed during the meeting with regard to shutdown on PSTCL line and no positive response was received from PSTCL's end.	23.5.2019	
11	It was informed during Standing Committee meeting that PSTCL had agreed for shutdown of their lines, shutdown request was sent to PC, PSTCL through RTAMC.	25.5.2019	
12	Upon follow-up for shut-down, PC, PSTCL agreed to give shutdown as conveyed by RTAMC through telephone, but PSTCL informed that the shutdown should be attended today, which was not possible as the gang had been shifted to other site. Accordingly, site requested RTAMC to arrange shutdown as per schedule i.e. 7.6.2019-9.6.2019 provided in earlier email dated 17.5.2019.	28.5.2019	
13	No positive response with reference to shutdown was received from PC, PSTCL. Further, PSTCL did not provide shutdown on any their 132/220/400 kV lines.	6.6.2019	
14	Work halted due to paddy cultivation in the State of Punjab and work was resumed only after paddy harvesting.	June-October, 2019	
15	From November, 2019 i.e. after paddy harvesting in Punjab, shutdown of 132/220/400 kV HV/EHV lines was allowed and granted by PSTCL.	November, 2019	

45. The Petitioner has submitted that shut-down of 132 kV Suratgarh-Jokhsar at Location No. 46/0-47/0 was requested on 15.5.2019 from RRVPNL. However, approval was granted on 29.11.2019 and this took about 193 days. As foundation and erection works had already been completed at this location, continuous persuasion was done with RRVPNL to provide shut-down. However, RRVPNL did not provide the shut-down due to various limitation of maintaining the power flow to the essential load connected on this feeder. The Petitioner has submitted the following chronology of events:

SI. No.	DESCRIPTION OF ACTIVITY	Date	Remarks
1	On 15.5.2019, shut-down of 132 S/C Suratgarh Jokhsar was applied to S.E. Churu for stringing work location 46/0-47/0 from 20.5.2019 to 21.5.2019 but was not provided by RVPNL due to unknown reasons.	15.05.2019	Total time taken in shutdown is 193 days
2	On 21.10.2019, again shut-down of 132 S/C Suratgarh Jokhsar was applied to S.E. Churu for	21.10.2019	



	stringing work form 22.10.2019 to 23.10.2019 but the same was not provided by RVPNL due to unknown reason 46/0-47/0.		
3	On 24.10.2019, again shut-down of 132 S/C Suratgarh Jokshar was applied for stringing work form 30.10.2019 to 30.10.2019 but was not provided by RVPNL due to unknown reason 46/0-47/0.	24.10.2019	
4	On 5.11.2019, again shut down of 132 S/C Suratgarh Jokshar was applied for stringing work form 8.11.2019 to 9.11.2019 but was not provided by RVPNL due to unknown reason 46/0-47/0.	5.11.2019	
5	On 20.11.2019, again shut-down of 132 S/C Suratgarh Jokshar was applied for stringing work form 24.11.2019 but was not provided by RVPNL due to unknown reason 46/0-47/0.	20.11.2019	
6	Shut-down provided on 24.11.2019	23.11.2019	

46. In response, RRVPNL has submitted that delay caused, if any, is due to lapses on part of the Petitioner and not on account of RRVPNL. RRVPNL has further submitted that 132 kV line from Suratgarh to Jokhasar feed supply to 132 kV Jokhasar and 132 kV GSS Jokhasar is a dedicated GSS under deposit work and supply from 132 kV GSS Jokhasar is fed to various 33 kV feeders for water supply schemes of Indira Gandhi Nahar Project ("IGNP") and Public Health and Engineering ("PHED"). Therefore, consent was required to be taken from IGNP and PHED authority before allowing any shut-down. RRVPNL has submitted that for availing shut down on 30.10.2019 from 08:00 hrs to 18:00 hrs and on 8.11.2019 to 9.11.2019 from 08:00 hrs to 18:00 hrs, consent was not given by IGNP and PHED authority. Therefore, shut-downs were not allowed. RRVPNL has submitted that the Petitioner was well aware of the fact that shut-down was not allowed due to consent not received from IGNP and PHED authority.

47. In response, the Petitioner with regard to contention of RRVPNL has submitted that shut down of "132 kV Suratgarh to Jokhasar Line" was originally applied to RRVPNL, Hanumangarh for overhead crossing of 765 kV D/C Bikaner Moga Line. However, RRVPNL denied shut-down and suggested the Petitioner to obtain



clearance from PHED and IGNP as this feeder was connected to PHED and IGNP for power supply. Therefore, the Petitioner applied shut-down on the basis of suggestion of RRVPNL to PHED and IGNP for availing the outage for two days from 20.5.2019 (8:00 hrs to 18:00 hrs) to 21.5.2019 (8:00 hrs to 18:00 hrs). The Petitioner applied shut-down request to PHED and IGNP on behalf of RRVPNL. The Petitioner in its letter dated 15.5.2019 which is submitted along with the petition, mentioned the following:

“As per information of RRVPNL, Hanumangarh water supply feeder is connected to said GSS so required the clearance at your end.Therefore, it is requested the permission to RRVPNL for shutdown of 132 kV S/c Suratgarh to Jokhasar line connected to 132 kV Jokhasar for construction of 765 kV Bikaner-Moga Transmission line.....”

48. However, consent was not given by PHED and IGNP for the required period. The Petitioner requested RRVPNL for shut-down of the 132 kV Suratgarh to Jokhasar Line vide letter dated 21.10.2019, 24.10.2019 and 5.11.2019. However, the shut-down was not given as sought. The Petitioner has submitted that contention of RRVPNL that for shut-down, only PHED and IGNP are responsible authorities, is wrong and baseless.

49. RRVPNL has submitted that the Petitioner was aware that consent was required from PHED and IGNP and absence of consent from the said authorities is a lapse on the part of the Petitioner which resulted in delay and, therefore, no delay can be attributed to RRVPNL. RRVPNL has further submitted that from various letters of IGNP and PHED, it is apparent that they were ready to give permission for shut-down for day time on day to day basis but the Petitioner wanted continuous shut-down for two days over-night which was denied by IGNP and PHED. RRVPNL has further submitted that the Petitioner was not having enough resources to complete the work on day-to-day basis without over-night shut down and RRVPNL cannot be held



accountable for the said delay. RRVPNL has submitted that ultimately shut-down was permitted for one day only on 24.11.2020 and the Petitioner carried out the work in one day. Apparently, if the same could have been done by the Petitioner in one day based on earlier letters/ consents and delay caused by the lapses of the Petitioner could have been avoided.

50. RRVPNL has cited the letters of the Petitioner and has also given its clarification against them and the same are as follows:

Sl. No.	Description of Activity (As submitted by Petitioner in its petition)	Date	Correct factual position and Response/Reply on behalf of answering Respondent -"RVPN"
1	On 15.5.2019 shut down of 132 S/C Suratgarh-Jokhasar was applied to SE Churu for stringing work of location Nos. 46/0-47/0 from 2.5.2019 to 21.5.2019 but not provided by RVPNL due to reasons not known.	15.5.2019	On 15.5.2019 shut down was applied by Manager, PGCIL to SE (PHED), Churu, Rajasthan not to RVPN for 132 kV S/C Suratgarh-Jokhasar Transmission Line. The marginal remarks made by SE (PHED), Churu on this letter that shut-downs were not allowed continuously for two days and ready for only one day on 20.5.2019 from 10:00 AM to 5:00 PM. True copy of the letter dated 15.5.2019 of PGCIL has been submitted along with the reply.
2	On 21.10.2019 again shut down of 132 S/C Suratgarh-Jokhasar applied to SE Churu for stringing work from 22.10.2019 to 23.10.2019 but not provided by RVPNL due to unknown reason at Loc. Nos. 46/0-47/0.	21.10.2019	On 21.10.2019 shut down was applied by Manager, PGCIL to XEN (IGNP), Rawatsar, Rajasthan not to SE, Churu and RVPN for 132 kV S/C Suratgarh-Jokhasar Transmission Line. A true copy of the letter dated 21.10.2019 of PGCIL has been submitted alongwith the reply.
3	On 24.10.2019 again shut down of 132 S/C Suratgarh-Jokhasar applied for stringing work from 30.10.2019 to 30.10.2019 but not provided by RVPNL due to unknown reasons at Loc. Nos. 46/0-47/0.	24.10.2019	On 24.10.2019 shut down was applied by Manager, PGCIL, Hanumangarh to XEN (IGNP), Rawatsar, Rajasthan & SE, RVPNL, Hanumangarh, Rajasthan for 132 kV S/C Suratgarh-Jokhasar Transmission Line. The XEN (RVPNL), Hanumangarh forwarded this letter to XEN (220 kV GSS), Suratgarh and AEN (132 kV GSS) Jokhsar to issue shut down with the consent of XEN (IGNP), Rawatsar and XEN (PHED), Churu and directed AEN (T&C) Hanumangarh to be present during the crossing work on



			30.10.2019. As per telephonic conversation of AEN (132 kV GSS), Jokhasar, RVPN with the concerned, clearances from various authorities i.e. XEN (S&I), IGNP, Rawatsar & XEN (PHED), Karamsana, Nohar were not received due to 33 kV O/G feeders at 132 kV GSS Jokhasar are dedicated feeders for drinking water supply in large area of Hanumangarh & Churu District. A true copy of the letter dated 24.10.2019 of PGCIL to Executive Engineer IGNP has been submitted along with the reply. A true copy of the letter dated 24.10.2019 of PGCIL to SE (RVPN) Hanumangarh has been submitted along with the reply.
4	On 5.11.2019 again shut down of 132 S/C Suratgarh-Jokhasar was applied for stringing work from 8.11.2019 to 9.11.2019 but not provided by RVPNL due to unknown reasons at Loc. Nos. 46/0-47/0.	05.11.2019	On 5.11.2019 shut down was applied by Manager, PGCIL, Hanumangarh to SE, RVPN, Hanumangarh, Rajasthan for 132 kV S/C Suratgarh-Jokhasar Transmission Line. The above letter was forwarded by SE (RVPN), Hanumangarh to XEN (T&C), Hanumangarh for further necessary action. The AEN, Jokhasar, RVPN was intimated via e-mail dated 7.11.2019 that as per telephonic conversation with XEN (Civil) IGNP and PGCIL representative, the shut-down on 8.11.2019 & 9.11.2019 of 132 kV Suratgarh-Jokhasar Line was cancelled. A true copy of the letter dated 5.11.2019 of PGCIL to SE, RVPN Hanumangarh has been submitted along with reply. A true copy of the e-mail dated 7.11.2019 of RVPN has been submitted along with the reply.
5	On 20.11.2019 again shut down of 132 S/C Suratgarh-Jokhasar was applied for stringing work for 24.11.2019 but not provided by RVPNL due to unknown reasons at Loc. Nos. 46/0-47/0.	20.11.2019	On 22.11.2019 shut down was applied by Manager, PGCIL, Hanumangarh to SE, RVPNL, Hanumangarh, Rajasthan for 132 kV S/C Suratgarh-Jokhasar Transmission Line. Consent was given by XEN (PHED), Karamsana on 22.11.2019 and XEN (S&I), IGNP, Rawatsar on 23.11.2019 and after receiving consent from PHED & IGNP, shut-down was given by RVPN on 24.11.2019. A true copy of the letter dated 22.11.2019 of PGCIL to SE, RVPN Hanumangarh has been submitted along with the reply. A true copy along with English translation of consent letter dated 22.11.2019 of XEN PHED has been submitted along with the reply. A true



			copy along with English translation of the consent letter dated 23.11.2019 of XEN (S&I) IGNP Rawatsar has been submitted along with the reply.
6	On 15.5.2019 shut down of 132 S/C Suratgarh-Jokhasar was applied to SE Churu for stringing work at Location Nos. 46/0-47/0 from 20.5.2019 to 21.5.2019 but not provided by RVPNL due to unknown reasons.	15.5.2019	Reply is same as is given at Sl. No.1 of the present table.
7	On 21.10.2019 again shut down of 132 S/C Suratgarh-Jokhasar was applied to SE Churu for stringing work from 22.10.2019 to 23.10.2019 but not provided by RVPNL due to unknown reasons at Loc. Nos. 46/0-47/0.	21.10.2019	Reply is same as is given against Sl. No.2 of the present table.
8	On 24.10.2019 again shut down of 132 S/C Suratgarh-Jokhasar was applied for stringing work from 30.10.2019 to 30.10.2019 but not provided by RVPNL due to unknown reasons at. Loc. Nos. 46/0-47/0.	24.10.2019	Reply is same as is given against Sl. No. 3 of the present table.
9	On 5.11.2019 again shut down of 132 S/C Suratgarh-Jokhasar was applied for stringing work from 8.11.2019 to 9.11.2019 but not provided by RVPNL due to unknown reasons at Loc. Nos. 46/0-47/0.	5.11.2019	Reply is same as is given against Sl. No. 4 of the present table.
10	Shutdown provided on 24.11.2019	23.11.2019	Shut-down was provided by RVPN on 24.11.2019 after receiving consent from PHED & IGNP department as aforementioned. A true copy of the permit to work issued by RVPN at 132 KV Suratgarh-Jokhsar line dated 24.11.2019 has been submitted along with the reply.



51. In response, the Petitioner has submitted that two days of shut-down (on daily basis, day to day) was necessarily required for crossing of 132 kV through overhead by 765 kV D/C line in view of safety and crossing work in all respects and additional work due to OPGW installation in 132 kV line. The work of crossing of 132 kV line which was having OPGW was really tough to complete in one day. Finally, despite various efforts made by the Petitioner, outage of said line was given by PHED, RRVPNL and IGNP for only one day. As Bikaner-Moga line was almost complete and commissioning target was also near, by putting extra efforts, the Petitioner made the arrangements typically to complete the stringing work in given time.

52. We have considered the submissions of the Petitioner and the Respondents. The Petitioner has placed on record the supporting documents along with the petition with reference to time over-run. The submissions of the Petitioner show that delay from July 2017 to April 2019 was on account of approval/ NOC from Air Force Authorities. The Petitioner has submitted detailed chronology of events supported by documentary evidence. It is observed that final resolution of approval took around 650 days which impacted timely execution of the transmission asset. The above reasons of delay in execution of the transmission asset were beyond the control of the Petitioner. Hence, the entire delay of 312 days in completion of Asset-II is condoned. Since entire delay of 312 days has been condoned, we have not gone into merits of time over-run on account of ROW issues and delay in grant of shut down.

Interest During Construction (IDC)/ Incidental Expenditure During Construction (IEDC)

53. The Petitioner has claimed IDC in respect of the transmission assets and has submitted the statement showing claim of IDC, discharge of IDC liability as on the date of commercial operation and the same is as follows:



(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC Discharged up to COD	IDC discharged during 2019-20	IDC discharged during 2020-21
Asset-I	4387.50	4105.03	282.47	0.00
Asset-II	7393.31	6444.72	0.00	948.59

54. With reference to methodology adopted and applicable rate of interest used for computation of IDC in case of loans obtained with 'floating rate', the Petitioner *vide* affidavit dated 14.6.2021 has submitted that:

(a) IDC is calculated for loan with 'floating rate' of interest by multiplying the loan amount with prevailing interest rate for a particular time period. Changed rate of interest is applied for the next particular time period for which rate of interest is changed. The calculation is done from the date of drawl of the loan to COD. The Petitioner has further submitted that it avails the loans periodically after pooling the fund requirements of all projects which are under different stages of construction. Fund requirements for all the on-going projects are anticipated for next two to three months and accordingly funds are raised through Domestic Borrowings (Bonds/ CP/ Bank Loans) or Borrowing in Foreign Currency-ECB (Through World Bank, Asian Development Bank etc.).

(b) As per the Petitioner Company's policy, out of total loans taken for pooled requirements of all the construction transmission projects, loans are earmarked to a particular project/ element based on actual fund out-flow for that particular project/ element. Interest (IDC) paid on such loan (taken for pooled requirements of the transmission projects under construction) is allocated to a particular project/ element in the proportion of loan so earmarked to that project. In addition to interest on loan (IDC), other expenses covered under Borrowing Cost (i.e. Guarantee Fee, Commitment Charges, front end fee etc. in respect of foreign currency loan) are also allocated to individual project/ element in proportion of the loan amount earmarked to a particular project/ element. The foreign currency loans are also contracted for a basket of projects. Loan (Foreign Currency) Agreement speaks for overall limit of the loan amount, name of foreign currency and projects for which lender (WB, ADB etc.) has agreed to fund. These loans are also availed (drawn) by the Petitioner's Company based on



actual out-flow of funds during a certain period, for all projects under construction covered in loan agreement. Loans are accumulated with every drawl up to the sanctioned limit. Such loans as well as debt service (repayment of loan and interest payment thereon) is also done in the foreign currency. Repayments of loan and payment of interest has to be released to the lender as per schedule of repayment agreed for the loan as a whole consisting of entire basket of projects. The total foreign currency loan drawn in first stage was allocated to different projects based on actual utilisation of loan for respective projects. Accordingly, interest and other financial charges against a particular loan is allocated to different projects in proportion of loan utilised by respective projects periodically. The interest and financial charges so allocated are accumulated till COD of the project/element (part of the project). In case of COD of a particular element (part of the project), foreign currency loan drawn for a specific project is apportioned to individual elements of that project in proportion of the expenses related to that element, to total expenses of the project (related to foreign currency loan part). Foreign currency loans are considered, in tariff forms, equivalent to ₹ value taking exchange rate as on COD date.

(c) The necessity of availing loan for pooled-fund requirement of all the ongoing projects, then earmarking of drawn loan amount to a particular project/element is based on actual cash outflow for that project/ element, enforces to allocate interest (IDC) of entire loan to project/ element to which loan amount is earmarked. IDC thus allocated to a particular project/ element is shown in the cost certificate. This imperative practice leads to a situation where providing details showing actual calculation of IDC for a particular project/ element is not practical. Accrued IDC as on COD was not considered while calculating the tariff as the same was un-discharged up to COD. The accrued IDC has been taken out of COD cost and added in ACE, when it has been discharged in case of the transmission assets covered in the instant petition.

55. We have considered the submissions of the Petitioner. IDC on cash basis up to COD has been worked out on the basis of loan details given in the statement showing discharge of IDC and Form-9C for the transmission assets. 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 subject to revision at the time of truing up is as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	Computational difference	IDC Allowed	IDC discharged up to COD	Un-discharged IDC as on COD	IDC discharged during 2019-20	IDC discharged during 2020-21
Asset-I	4387.50	1.45	4385.05	4103.58	282.47	282.47	0.00
Asset-II	7393.31	21.07	7372.24	6414.39	948.59	0.00	948.59

56. The Petitioner has claimed IEDC for transmission assets as per the Auditor's Certificate. The Petitioner vide affidavit dated 14.6.2021 has submitted that entire amount of IEDC for the transmission assets has been discharged up to COD. Accordingly, IEDC claimed and considered as on COD for the purpose of tariff determination is as under:

(₹ in lakh)

Assets	IEDC as per Auditor's certificate	IEDC allowed
Asset-I	2848.74	2848.74
Asset-II	6792.92	6792.92

Initial Spares

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

“(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%”*

58. The Initial Spares as claimed by the Petitioner are as follows:



(₹ in lakh)

Particulars	Plant and machinery cost as on cut-off date	Initial Spares Capitalised as per Books of Account up to cut-off date	Ceiling as mentioned as per Regulation	Allowable Initial Spares as per Regulations	Excess Initial Spares
	A	B	C	$D=[(A-B)*C/(100-C)]$	$E=(B-D)$
Asset-I					
Transmission Line	107596.75	946.78	1.00%	1077.27	-130.49
Sub-station Green field	34988.87	1445.19	4.00%	1397.65	47.54
Sub-station Brown Field	7680.48	160.58	6.00%	479.99	-319.41
Communication System	1179.69	25.39	3.50%	41.87	-16.48
Asset-II					
Transmission Line	140752.90	2015.61	1.00%	1401.39	614.22
Sub-station Green field	9144.78	260.62	4.00%	370.17	-109.55
Sub-station Brown Field	8041.90	191.68	6.00%	501.08	-309.40
Communication System	2032.80	18.77	3.50%	73.05	-54.28
Combined Asset-I & Asset-II					
Transmission Line	248349.65	2962.39	1.00%	2478.66	483.73
Sub-station Green field	44133.65	1705.81	4.00%	1767.82	-62.02
Sub-station Brown Field	15722.38	352.26	6.00%	981.07	-628.81
Communication System	3212.49	44.16	3.50%	114.92	-70.75

59. The Petitioner has submitted discharge statement for Initial Spares (Form-13) vide affidavit dated 14.6.2021. The discharge of Initial Spares in respect of the transmission assets is as follows:

Particulars	Initial Spares Claimed	Initial Spares Discharge			
		As on COD	2019-20	2020-21	2021-22
Asset-I					
Transmission Line	946.78	12.32	311.49	311.49	311.49
Sub-station Green field	1445.19	265.47	393.24	393.24	393.24
Sub-station Brown Field	160.58	65.21	31.79	31.79	31.79
Communication System	25.39	25.39	-	-	-



Asset-II					
Transmission Line	2015.61	662.44	451.06	451.06	451.06
Sub-station Green field	260.62	83.72	58.97	58.97	58.97
Sub-station Brown Field	191.68	61.58	43.37	43.37	43.37
Communication System	18.77	18.77	-	-	-

60. The Petitioner has submitted that it has claimed Initial Spares for the whole project based on the judgement of APTEL dated 14.9.2019 in Appeal No. 74 of 2017.

61. The Petitioner has further submitted that Initial Spares procured are essential spares for smooth functioning of the grid and may be allowed in full under Regulation 76 of the 2019 Tariff Regulations, "Power to Relax"

76. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

62. We have considered the submissions of Petitioner. APTEL in its judgment dated 14.9.2019 in Appeal No. 74 of 2017 observed that the Commission, for the purpose of prudence check, may restrict the Initial Spares to the cost of the individual asset initially and later at the time of truing up allow Initial Spares as per the ceiling on the overall project cost.

63. In the instant case, the transmission assets have been put into commercial operation during 2019-24 period. However, the transmission assets have not been combined in 2019- 24 tariff period. Accordingly, Initial Spares are allowed on the basis of individual capital cost of the transmission assets in 2019-24 tariff period. The Initial Spares will be allowed on the basis of the project cost after all the transmission assets covered in the transmission project are put into commercial operation and combined by the Petitioner.



64. It is further observed that the Petitioner has claimed Initial Spares separately for PLCC under the head “Communication System” in this petition. The Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 observed that PLCC is a part of Sub-station and, accordingly, did not allow separate O&M Expenses for PLCC. In view of findings of the Commission recorded in order dated 24.1.2021 in Petition No. 126/TT/2020, we are of the view that PLCC has to be considered as a part of Sub-station. Therefore, cost of PLCC has been clubbed with the cost of Sub-station while computing Initial Spares. Initial Spares allowed in respect of the transmission assets are as follows:

Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost & cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Excess Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
	A	B	C	D=[(A-B)*C/(100-C)]	E=(B-D)	
Asset-I						
Transmission Line	107596.75	946.78	1.00	1077.27	0.00	946.78
Sub-station Green Field and PLCC	35956.22	1466.01	4.00	1437.09	28.92	1437.09
Sub-station Brown Field and PLCC	7892.82	165.15	6.00	493.26	0.00	165.15
Asset-II						
Transmission Line	140752.90	2015.61	1.00	1401.39	614.22	1401.39
Sub-station Green Field and PLCC	10226.40	270.61	4.00	414.82	0.00	10226.40
Sub-station Brown Field and PLCC	8993.08	200.46	6.00	561.23	0.00	200.46

65. Since the Petitioner’s claim of Initial Spares for green Field Sub-station in respect of Asset-I and for transmission line in Asset-II is exceeding the ceiling, the cost of Initial spares has been restricted by ₹28.92 lakh in respect of Asset-I and ₹614.22 lakh in respect of Asset-II in the respective years of discharge.



66. The capital cost allowed in respect of the transmission assets as on COD is as follows:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC Disallowed (B)	Un-discharged IDC (C)	Estimated completion cost (D)=(A-B-C)
Asset-I	135481.65	1.45	282.47	135197.73
Asset-II	156561.84	21.07	948.59	155592.18

Additional Capital Expenditure (“ACE”)

67. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:

“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 23 of 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.”

68. The Petitioner has claimed that ACE incurred/ projected to be incurred within the cut-off date is mainly on account of balance and retention payments/ deferred liabilities and ACE projected to be incurred after the cut-off date is mainly on account of balance and retention payments for the works which have been completed within the cut-off date. The Petitioner has claimed the following ACE in respect of the transmission assets:

(₹ in lakh)

Projected ACE 2019-24			
2019-20 (Including Un-discharged IDC)	2020-21 (Including Un-discharged IDC)	2021-22	2022-23
5926.29	17799.57	2582.13	1737.24
1963.56	10145.54	4560.39	3063.60

69. The Petitioner vide affidavit dated 14.6.2021 has submitted package-wise and vendor-wise details for ACE claimed in 2019-24 tariff period.

70. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner for Asset-I has been allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations on account of balance and retention payments for works already



executed, under Regulation 24(1)(b) of the 2019 Tariff Regulations on account of works deferred for execution and under Regulation 25(1)(d) of the 2019 Tariff Regulations for ACE beyond the cut-off date on account of balance and retention payments for works executed within the cut-off date. ACE claimed by the Petitioner for Asset-II has been allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations on account of balance and retention payments for works already executed and Regulation 24(1)(b) of the 2019 Tariff Regulations on account of works deferred for execution. Accordingly, ACE allowed in respect of the transmission assets for 2019-24 period is as follows:

(₹ in lakh)

ACE 2019-24					
Assets	Particulars	2019-20	2020-21	2021-22	2022-23
Asset-I	ACE claimed as per Auditor's certificate	5643.82	17799.57	2582.13	1737.24
	Add: IDC discharged	282.47	0.00	0.00	0.00
	Less: Excess Initial Spares	0.00	0.00	28.92	0.00
	ACE Allowed	5926.29	17799.57	2553.21	1737.24
Asset-II	ACE claimed as per Auditor's certificate	1963.56	9196.95	4560.39	3063.30
	Add: IDC discharged	0.00	948.59	0.00	0.00
	Less: Excess Initial Spares	0.00	163.16	451.06	0.00
	ACE Allowed	1963.56	9982.38	4109.33	3063.30

71. The capital cost considered for the transmission assets for 2019-24 tariff period is as follows:

(₹ in lakh)

Assets	Capital Cost as on COD	ACE 2019-24				Capital cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	
Asset-I	135197.73	5926.29	17799.57	2553.21	1737.24	163214.04
Asset-II	155592.18	1963.56	9982.38	4109.33	3063.30	174710.75

Debt-Equity ratio

72. Regulation 18 of the 2019 Tariff Regulations provides as under:

“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.”



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

Asset-I

Particulars	Capital Cost as on COD (₹ in lakh)	(In %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(In %)
Debt	94638.41	70.00	114249.83	70.00
Equity	40559.32	30.00	48964.21	30.00
Total	135197.73	100.00	163214.04	100.00

Asset-II

Particulars	Capital Cost as on COD (₹ in lakh)	(In %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(In %)
Debt	108914.52	70.00	122297.52	70.00
Equity	46677.65	30.00	52413.22	30.00
Total	155592.18	100.00	174710.75	100.00

Depreciation

74. 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 up to 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.”

75. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Weighted Average Rate of Depreciation (WAROD) has been worked out and given in Annexure-I for Asset-I and in Annexure-II for Asset-II as per the rates of depreciation prescribed in the 2019 Tariff Regulations. Depreciation allowed in respect of the transmission assets is as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	135197.73	141124.02	158923.59	161476.80	163214.04
Projected ACE (B)	5926.29	17799.57	2553.21	1737.24	0.00
Closing Gross Block (C)=(A+B)	141124.02	158923.59	161476.80	163214.04	163214.04
Average Gross Block (D) = [(A+C)/2]	138160.88	150023.81	160200.20	162345.42	163214.04
Freehold Land	91.25	389.25	687.25	687.25	687.25
Weighted Average Rate of Depreciation (WAROD) (In %) (E)	5.26	5.25	5.23	5.23	5.23
Balance useful life at the beginning of the year (Year)	32	32	31	30	29
Lapsed life of the asset at the beginning of the year (Year)	0	0	1	2	3
Depreciable Value	124271.62	134684.15	143579.22	145511.65	146293.98
Depreciation during the year (F)=[(D)*(E)]	5345.42	7874.45	8384.00	8492.38	8536.61
Cumulative Depreciation at the end of the year	5345.42	13219.87	21603.87	30096.25	38632.86
Remaining Depreciable value at the end of the year.	118926.20	121464.28	121975.35	115415.40	107661.13



Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	155592.18	157555.74	167538.12	171647.45	174710.75
Projected ACE (B)	1963.56	9982.38	4109.33	3063.30	0.00
Closing Gross Block (C)=(A+B)	157555.74	167538.12	171647.45	174710.75	174710.75
Average Gross Block (D) = [(A+C)/2]	156573.96	162546.93	169592.78	173179.10	174710.75
Weighted Average Rate of Depreciation (WAROD) (In %) (E)	5.29	5.29	5.29	5.28	5.28
Balance useful life at the beginning of the year (Year)	34	34	33	32	31
Lapsed life of the asset at the beginning of the year (Year)	0	0	1	2	3
Depreciable Value	140919.10	146295.03	152636.62	155864.40	157242.91
Depreciation during the year (F)=[(D)*(E)]	475.15	8596.02	8964.68	9148.82	9227.25
Cumulative Depreciation at the end of the year	475.15	9071.17	18035.85	27184.67	36411.92
Remaining Depreciable Value at the end of the year	140443.95	137223.86	134600.77	128679.73	120831.00

Interest on Loan (“IoL”)

76. 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 up to 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.”

77. UPPCL has submitted that in line with the Commission's order dated 30.12.2015 in Petition No. 435/TT/2014, the Petitioner may be allowed only 'weighted average rate' of interest based on loan prevailing as on 1.4.2014 while floating rate of interest, if any, may be considered at the time of truing up for 2019-24 tariff period.

78. In response, the Petitioner has submitted that in the calculation of tariff for 2019-24 period, IoL has been calculated on the basis of rate prevailing as on COD/1.4.2019 for respective loans. Change in interest rate due to floating rate of interest applicable, if any, for the transmission project needs to be claimed/ adjusted over the tariff block of five years directly from /with the beneficiaries and the Petitioner may be allowed to bill and adjust impact on IoL due to change in interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.

79. We have considered the submissions of the Petitioner and UPPCL. The Weighted Average Rate of Interest on Loan (WAROI) 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 will be adjusted. Accordingly, floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission assets is as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	94638.41	98786.81	111246.51	113033.76	114249.83
Cumulative Repayments up to Previous Year	0.00	5345.42	13219.87	21603.87	30096.25
Net Loan-Opening	94638.41	93441.39	98026.65	91429.89	84153.58
Additions	4148.40	12459.70	1787.25	1216.07	0.00
Repayment during the year	5345.42	7874.45	8384.00	8492.38	8536.61
Net Loan-Closing	93441.39	98026.65	91429.89	84153.58	75616.97
Average Loan	94039.90	95734.02	94728.27	87791.74	79885.28
Weighted Average Rate of Interest on Loan (In %)	4.3116	4.3606	4.3636	4.3702	4.3776
Interest on Loan	2980.06	4174.54	4133.54	3836.64	3497.03

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	108914.52	110289.02	117276.68	120153.21	122297.52
Cumulative Repayments up to Previous Year	0.00	475.15	9071.17	18035.85	27184.67
Net Loan-Opening	108914.52	109813.86	108205.51	102117.37	95112.86
Additions	1374.49	6987.67	2876.53	2144.31	0.00
Repayment during the year	475.15	8596.02	8964.68	9148.82	9227.25
Net Loan-Closing	109813.86	108205.51	102117.37	95112.86	85885.61
Average Loan	109364.19	109009.69	105161.44	98615.11	90499.23
Weighted Average Rate of Interest on Loan (In %)	3.9873	4.0193	4.0389	4.0588	4.0801
Interest on Loan	250.20	4381.42	4247.33	4002.63	3692.50

Return on Equity ("RoE")

80. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide 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.”

81. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable in 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 in respect of the transmission assets has been worked out and allowed as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	40559.32	42337.21	47677.08	48443.04	48964.21
Additions (B)	1777.89	5339.87	765.96	521.17	0.00
Closing Equity (C) = (A+B)	42337.21	47677.08	48443.04	48964.21	48964.21
Average Equity (D) = [(A+C)/2]	41448.26	45007.14	48060.06	48703.63	48964.21
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	5721.62	8453.24	9026.64	9147.52	9196.46

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	46677.65	47266.72	50261.43	51494.23	52413.22
Additions (B)	589.07	2994.71	1232.80	918.99	0.00
Closing Equity (C) = (A+B)	47266.72	50261.43	51494.23	52413.22	52413.22
Average Equity (D) = [(A+C)/2]	46972.19	48764.08	50877.83	51953.73	52413.22
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	506.20	9158.87	9555.87	9757.95	9844.25

Operation & Maintenance Expenses ("O&M Expenses")

82. The O&M Expenses claimed by the Petitioner for the transmission assets for the 2019-24 period are as follows:

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
9.15 km Double Circuit (bundle conductor with 4 sub conductors)	8.69	12.52	12.96	13.41	13.88



263 km Double Circuit (six conductors)	255.54	359.78	372.41	385.56	398.97
11 Number of 765 kV bay	363.88	512.60	530.53	549.23	568.48
5 Number of 400 kV bay	118.15	166.40	172.25	178.30	184.55
2 Number 765 kV 1500 MVA ICT	1082.61	1524.00	1578.00	1635.00	1692.00
Total O&M expenses	1829.07	2575.30	2666.15	2761.50	2857.88

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
367.67 km Double Circuit (six conductors)	27.87	502.56	520.19	538.56	557.30
8 Number of 765 kV bay	20.67	372.80	385.54	399.44	413.44
Total O&M Expenses	48.54	875.36	906.03	938.00	970.74

83. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

“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 (₹ 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 (₹ 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
Norms for AC and HVDC lines (₹ 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-	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 (₹ 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 (2000 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.”

84. O&M Expenses allowed in respect of the transmission assets are as follows:

Asset-I

(₹ in lakh)

	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
272.15 km Double Circuit (bundle conductor with 4 sub conductors and 6 conductors)					
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Total	359.78	372.30	385.36	398.97	412.85
11 Number of 765 kV bay					
Norms (₹ lakh/Bay)	45.01	46.6	48.23	49.93	51.68
Total	495.11	512.60	530.53	549.23	568.48
5 Number of 400 kV bay					
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Total	160.75	166.40	172.25	178.30	184.55
2 Number of 765 kV 1500 MVA ICT					
Norms (₹ lakh/MVA)	0.491	0.508	0.526	0.545	0.564
Total	1473.00	1524.00	1578.00	1635.00	1692.00
Total O&M Expenses allowed (₹ in lakh)	1829.08	2575.30	2666.14	2761.50	2857.88



Asset-II**(₹ in lakh)**

	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
367.67 km Double Circuit (6 conductors)					
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Total	485.66	502.56	520.19	538.56	557.30
8 Number of 765 kV bay					
Norms (₹ lakh/Bay)	45.01	46.6	48.23	49.93	51.68
Total	360.08	372.80	385.84	399.44	413.44
Total O&M Expenses allowed (₹ in lakh)	48.53	875.36	906.03	938.00	970.74

Interest on Working Capital (“IWC”)

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

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

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;
- (iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;



- (iv) *Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and*
- (v) *Operation and maintenance expenses, including water charges and security expenses, for one month.*

(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*
- (iii) *Operation and maintenance expenses, including security expenses for one month.*

(2) *The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(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 truing-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:-*

(7) **‘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;”*

86. 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%.



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

Asset-I

(₹ in lakh)

Particulars	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	207.39	214.61	222.18	230.13	238.16
Working Capital for Maintenance Spares (15% of O&M Expenses)	373.30	386.30	399.92	414.23	428.68
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2704.54	2893.64	3032.14	3035.89	3009.09
Total Working Capital	3285.22	3494.55	3654.24	3680.24	3675.93
Rate of Interest (In %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	290.95	393.14	383.70	386.43	385.97

Asset-II

(₹ in lakh)

Particulars	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	70.48	72.95	75.50	78.17	80.89
Working Capital for Maintenance Spares (15% of O&M Expenses)	126.86	131.30	135.90	140.70	145.61
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2787.24	2879.83	2959.75	2981.52	2959.33
Total Working Capital	2984.58	3084.08	3171.16	3200.39	3185.84
Rate of Interest (In %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	20.64	346.96	332.97	336.04	334.51



Annual Fixed Charges for 2019-24 Tariff Period

88. Transmission charges allowed in respect of the transmission assets for 2019-24 tariff period is as follows:

Asset-I

Particulars	(₹ in lakh)				
	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	5345.42	7874.45	8384.00	8492.38	8536.61
Interest on Loan	2980.06	4174.54	4133.54	3836.64	3497.03
Return on Equity	5721.62	8453.24	9026.64	9147.52	9196.46
O & M Expenses	1829.08	2575.30	2666.14	2761.50	2857.88
Interest on Working Capital	290.95	393.14	383.70	386.43	385.97
Total	16167.14	23470.67	24594.02	24624.46	24473.95

Asset-II

Particulars	(₹ in lakh)				
	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	475.15	8596.02	8964.68	9148.82	9227.25
Interest on Loan	250.20	4381.42	4247.33	4002.63	3692.50
Return on Equity	506.20	9158.87	9555.87	9757.95	9844.25
O & M Expenses	48.53	875.36	906.03	938.00	970.74
Interest on Working Capital	20.64	346.96	332.97	336.04	334.51
Total	1300.71	23358.63	24006.89	24183.45	24069.25

Filing Fee and the Publication Expenses

89. 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

90. The Petitioner shall be entitled for reimbursement of licence fee 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 fee and charges in accordance with Regulations 70 (3) of the 2019 Tariff Regulations for 2019-24 tariff period.

Goods and Services Tax

91. 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 shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall 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.

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

Security Expenses

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

94. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, 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

95. 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

96. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, “the 2020 Sharing Regulations”). Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent period, 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.

97. To summarise, the AFC allowed for the transmission assets for 2019-24 tariff period in this order are as follows:

Asset-I

Particulars	(₹ in lakh)				
	2019-20 (Pro-rata 269 days)	2020-21	2021-22	2022-23	2023-24
AFC	16167.14	23470.67	24594.02	24624.46	24473.95



Asset-II

Particulars	(₹ in lakh)				
	2019-20 (Pro-rata 21 days)	2020-21	2021-22	2022-23	2023-24
AFC	1300.71	23358.63	24006.89	24183.45	24069.25

98. Annexure-I and Annexure-II to this order form part of the order.

99. This order disposes of Petition No. 34/TT/2021 in terms of the above findings and discussions.

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

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

sd/-
(P.K. Pujari)
(Chairperson)



ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24	
Land – Freehold	91.25	-	596.00	-	-	596.00	687.25	-	-	-	-	-	-	-
Building Civil Works & Colony	1917.97	130.20	1244.96	456.52	228.26	2059.94	3977.91	3.34%	66.23	89.20	117.61	129.05	132.86	
Transmission Line	97581.96	3283.53	9744.98	1141.07	1070.53	15240.11	112822.06	5.28%	5239.01	5582.96	5870.36	5928.74	5957.00	
Sub Station	34339.93	2459.01	6140.80	923.08	422.19	9945.08	44285.00	5.28%	1878.07	2105.10	2291.59	2327.10	2338.25	
PLCC	1184.17	39.35	5.27	9.55	4.77	58.94	1243.11	6.33%	76.20	77.62	78.08	78.54	78.69	
IT Equipment (Including Software)	82.46	14.21	67.56	22.99	11.49	116.25	198.71	15.00%	13.43	19.57	26.36	28.94	29.81	
Total	135197.73	5926.29	17799.57	2553.21	1737.24	28016.31	163214.04		7272.95	7874.45	8384.00	8492.38	8536.61	
Average Gross Block (₹ in lakh)									138160.88	150023.81	160200.20	162345.42	163214.04	
Weighted Average Rate of Depreciation									5.26%	5.25%	5.23%	5.23%	5.23%	



ANNEXURE-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24	
Building Civil Works & Colony	420.02	-	154.52	379.43	271.71	805.66	1225.68	3.34%	14.03	16.61	25.53	36.40	40.94	
Transmission Line	136278.26	1647.73	9393.63	2768.54	2457.33	16267.23	152545.49	5.28%	7238.99	7530.48	7851.57	7989.53	8054.40	
Sub Station	16981.92	315.83	303.12	798.77	302.96	1720.68	18702.60	5.28%	904.98	921.32	950.41	979.50	987.50	
PLCC	1886.57	-	126.03	161.29	30.65	317.97	2204.54	6.33%	119.42	123.41	132.50	138.58	139.55	
IT Equipment (Including Software)	25.40	-	5.07	1.30	0.65	7.02	32.43	15.00%	3.81	4.19	4.67	4.82	4.86	
Total	155592.18	1963.56	9982.38	4109.33	3063.30	19118.57	174710.75		8281.23	8596.02	8964.68	9148.82	9227.25	
									Average Gross Block (₹ in lakh)	156573.96	162546.93	169592.78	173179.10	174710.75
									Weighted Average Rate of Depreciation	5.29%	5.29%	5.29%	5.28%	5.28%

