

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 35/TT/2021

Coram:

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

Date of Order: 22.03.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and trueing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Ckt 2**: Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Teesta III HEP to LILO Point at Rangpo; **Ckt 1(a)**: Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Dikchu to Teesta III HEP; **Ckt 1(b)**: Section of 400 kV D/C Teesta-III HEP- Kishanganj Transmission Line from Dikchu to LILO Point at Rangpo; **Ckt 2(a)**: Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj; **Ckt 1(c)**: Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj under “400 kV D/C (Quad Moose) Teesta-III HEP-Kishanganj transmission line along with two line bays and two number of 63 MVAR reactors at Kishanganj Switchyard” in Eastern Region.

And in the matter of:

Teesta Valley Power Transmission Limited,
“2nd Floor”, Vijaya Building,
17, Barakhamba Road,
New Delhi-110001

Vs.

.... Petitioner

1. PTC India Limited,
2nd Floor, NBCC Tower, 15, Bhikaji Cama Place,
New Delhi – 110066.



2. Energy and Power Department.,
Government of Sikkim, Kazi Road,
Gangtok – 737101, Sikkim.
3. Teesta Urja Limited,
2nd Floor, Vijaya Building,
17, Barakhamba Road,
New Delhi – 110001.
4. Sneha Kinetic Power Projects Pvt. Limited,
Sonam Complex, Jeevan Theng Marg Development Area,
Near Little Pixel International School,
Gangtok – 737101, Sikkim.
5. Power Grid Corporation of India Limited,
Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk,
Gurgaon – 122001, Haryana.
6. Punjab State Power Corporation Limited,
The Mall,
Patiala – 147001, Punjab.
7. Uttar Haryana Bijli Vitran Nigam Limited,
Vidyut Sadan, Plot No. C16, Sector-6,
Panchkula – 134109, Haryana.
8. Dakshin Haryana Bijli Vitran Nigam Limited,
Vidyut Sadan, Vidyut Nagar,
Hisar – 125005, Haryana.
9. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula – 134109, Haryana.
10. Ajmer Vidyut Vitran Nigam Limited,
Vidyut Bhawan, Panchsheel Nagar,
Makarwali Road,
Ajmer– 305004, Rajasthan.
11. Jaipur Vidyut Vitran Nigam Limited,
Vidyut Bhawan, Janpath,
Jaipur - 302005, Rajasthan.
12. Jodhpur Vidyut Vitran Nigam Limited,
New Powerhouse, Industrial Area,
Jodhpur – 342003, Rajasthan.



13. Rajasthan Urja Vikas Nigam Limited,
Vidyut Bhawan, Janpath, Jyoti Nagar,
Jaipur – 302005, Rajasthan.

14. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226001, Uttar Pradesh.

....Respondent(s)

For Petitioner : Shri Tarun Johri, Advocate, TPTL
Ms. Nehanjali Mishra, TPTL

For Respondents : Ms. Poorva Saigal, Advocate, HPPC
Shri Shubham Arya, Advocate, HPPC
Ms. Tanya Sareen, Advocate, HPPC

ORDER

The instant petition has been filed by the Petitioner, Teesta valley Power Transmission Limited (“TPTL”), a joint venture company of Power Grid Corporation of India Limited (PGCIL) and Teesta Urja Limited (TUL), for truing up of transmission tariff for the period from the date of COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for the period from 1.4.2019 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”) for the following transmission assets under “400 kV D/C (Quad Moose) Teesta-III HEP-Kishanganj Transmission Line along with two line bays and two number of 63 MVAR reactors at Kishanganj Switchyard” (hereinafter referred to as “the transmission project”) in Eastern Region:

Ckt 2: Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line



from Teesta III HEP to LILO Point at Rangpo;

Ckt 1(a): Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Dikchu to Teesta III HEP;

Ckt 1(b): Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Dikchu to LILO Point at Rangpo;

Ckt 2(a): Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj; and

Ckt 1(c): Section of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj.

[**Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a), Ckt 1(c)** have been collectively referred to as "the transmission assets" for 2014-19 tariff period and have been collectively referred to as "Combined Asset" for 2019-24 tariff period].

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

a) Admit the instant petition and approve the Trued-up Transmission Tariff for the tariff block 2014-19 and the transmission tariff for tariff block 2019-24 for the assets covered under this petition, as per Para 1.18 and 1.23 respectively.

b) Allow TPTL to recover the shortfall or refund the excess Annual Fixed Charges after Truing-up exercise as specified under Regulation 8 of Tariff Regulation 2014.

c) Allow O&M expenses as claimed in Para 1.24 above including for 2 no. of switchable reactor bays and to allow availability calculation as per CERC Regulations.

d) Allow TPTL to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of the wage hike, if any, during period 2019-24.

e) Allow the IDC and IEDC which was disallowed in Tariff order dated 15.05.2018 in Petition No. 108/TT2016, as mentioned in Para 1.25 above.

f) Allow the Notional IDC and FC which was disallowed in Tariff order dated 22.01.2020 in Petition No. 368/TT2018, as mentioned in Para 1.26 above.

g) Allow the Notional IDC and FC which was disallowed in Tariff order dated 09.08.2020 in Petition No. 96/TT2019, as mentioned in Para 1.27 above.

h) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on the 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 the petition.

i) Allow TPTL to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70(3) and (4) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

j) Allow TPTL to claim the security expenses and capital spares as mentioned in Para 1.33.

k) Allow TPTL to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on the 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.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”.

Background

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

(a) The Petitioner was granted transmission license vide order dated 14.5.2009 in Petition No. 116/2008. The Standing Committee on Power System Planning in Eastern Region, in its meeting held on 14.9.2009, decided that LILO of 400 kV D/C Teesta-III HEP-Kishenganj Transmission Line was to be done at proposed Mangan Pooling Station at a later date for future generation projects in northern part of Sikkim. Subsequently, the Standing Committee on Power System Planning in its meeting held on 20.9.2010 decided that LILO of 400 kV D/C Teesta-III HEP-Kishenganj transmission line at Rangpo Sub-station (PGCIL) was to be under the scope of PGCIL.

(b) The Commission in order dated 3.12.2014 in Petition No. 157/MP/2014 filed by Sneha Kinetic Power Projects Private Limited (“SKPPPL”) observed the following:

a. The transmission line from the generating station of Teesta Urja Limited (TUL) till Kishanganj is an inter-State transmission system.

b. LILO of one circuit of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line at Dikchu Hydro-Electric Power Project of SKPPPL is



allowed as an interim arrangement and the issue of LTA/ MTOA/ STOA shall be taken up by CTU in Standing Committee/ RPC meeting after system study.

c. There is no technical constraint in the interim arrangement proposed by SKPPPL. SKPPPL is allowed to implement the work of LILO as interim arrangement as a dedicated system which shall be removed once the originally planned scheme is operationalized.

d. The cost of LILO and associated work shall be borne by SKPPPL.

e. The configuration of 400 kV D/C Teesta-III HEP-Kishanganj Transmission Line has undergone some change, though there is no change in the scope of work of the Petitioner's transmission project as envisaged in the transmission license granted by the Commission. Further, against the length of the transmission line envisaged to be 206 km under the license granted by the Commission, the actual length of the transmission line has increased to 215 km due to change in the location of the PGCIL's Sub-station at Kishanganj and due to RoW issues.

(c) The Petitioner has submitted that in view of the developments stated above, the configuration of 400 kV D/C Teesta III HEP-Kishanganj Transmission Line has undergone change, though there has been no change in the scope of work of the Petitioner's Transmission Project as envisaged in the transmission license granted by the Commission. Further, against the length of the transmission line envisaged to be 206 km under the License granted by the Commission, the actual length of the Transmission Line has increased to 215 km. The increase in the line length is due to change in location of PGCIL sub-station at Kishanganj and ROW issues requiring realignment during the course of construction of the said Transmission Line, being reasons not attributable to the Petitioner. Accordingly, 400 kV Teesta III-Kishanganj D/C transmission line is divided into four sections, namely;

a) Teesta III- Rangpo Circuit named Circuit No.2 (36 km)



b) Teesta III- Dikchu Circuit named Circuit No.1(a) (14 km)

c) Dikchu-Rangpo Circuit named Circuit No.1(b) (22 km)

d) Rangpo- Kishanganj D/C Section (179 km)

(d) The Investment approval for the transmission project was accorded by Board of Directors of Petitioner (TPTL) in its 19th meeting held on 9.11.2009 at an estimated cost of ₹70007 lakh including IDC of ₹5874 lakh based on 2nd Qtr, 2008 price level with debt-equity ratio of 75:25 and commissioning schedule of 35 months.

(e) Further, the Board of Directors of the Petitioner on 26.8.2013 approved the revised cost of the transmission project (RCE-I) of ₹103250.00 lakh comprising of hard cost of ₹80220.00 lakh and soft cost of ₹23030 lakh with debt-equity ratio of 75:25. The Petitioner has further submitted vide affidavit dated 18.11.2016 that the Petitioner's Board of Directors, on 5.1.2016, revised cost of the transmission project (RCE-II) to ₹145036.00 lakh for Teesta III-Kishanganj D/C transmission line. Further, the Board of Directors in the meeting held on 24.3.2017 revised and approved the transmission project cost (RCE-III) as ₹162400.00 lakh for the for Teesta III-Kishanganj D/C transmission line. The cost of the transmission project was further revised and approved by the Board of Directors of the Petitioner in the meeting held on 29.3.2019 at ₹174629.00 (RCE-IV) lakh for Teesta III-Kishanganj D/C transmission line.

(f) The scope of work as per Investment Approval under the transmission project is as follows:

Transmission Line

(a) 400 kV D/C transmission line with quad Moose conductor from Teesta-III generating station to LILO Point at Rangpo (36 km)

(b) 400 kV D/C transmission line with quad Moose conductor from LILO Point at Rangpo to Kishanganj Sub-station of CTU (179 km)

Sub-stations Equipment

(a) 2 numbers line bays at Kishanganj Sub-station of PGCIL



(b)2 numbers 63 MVAR Reactors at Kishanganj Sub-station of PGCIL

- (g) The scope was further bifurcated into four sections as follows:
- Teesta III- Rangpo Circuit (Ckt 2) (36 km)
 - Teesta III- Dikchu Circuit (Ckt 1(a)) (14 km)
 - Dikchu- Rangpo Circuit (Ckt 1(b)) (22 km)
 - Rangpo-Kishanganj D/C Section (179 km) along with 2 numbers line bays and 2 numbers Reactors at Kishanganj
- (h) The entire scope of work under the transmission project has been completed and is covered under the instant petition.
- (i) The transmission assets were scheduled to be commissioned within 35 months from the date of financial closure i.e., 31.3.2010. Accordingly, the transmission project was scheduled to be commissioned by 28.2.2013.
- (j) The details of scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:

Asset's nomenclature in the instant petition	SCOD	COD	Time over-run	Time over-run condoned
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Teesta III HEP to LILO Point at Rangpo - Ckt 2	28.2.2013	17.1.2017	1419 days	Period from 1.7.2016 to 14.11.2016 (136 days) is not condoned for Circuit 2 and Circuit 1(a)
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Dikchu to Teesta III HEP - Ckt 1(a)		14.4.2017	1506 days	
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Dikchu to LILO Point at Rangpo - Ckt 1(b)		2.7.2018	1950 days	Fully Condoned
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj - Ckt 2(a)		6.1.2019	2138 days	Fully Condoned
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 Number of bay and 1 No. of 63 MVAR reactor at Kishanganj - Ckt 1(c)		13.2.2019	2176 days	Fully Condoned



(k) The transmission tariff in respect of Ckt 2 and Ckt 1(a) was approved by the Commission, from their respective COD to 31.3.2019, vide order dated 15.5.2018 in Petition No.108/TT/2016.

(l) The Petitioner has filed Review Petition No. 25/RP/2018 seeking review of the Commission's order dated 15.5.2018 in Petition No.108/TT/2016 on the following issues:

(a) Non-condonation of time over run from 1.7.2016 to COD in case of Ckt 2 and Ckt 1(a).

(b) Double deduction of IEDC amounting to ₹858.01 lakh in case of Ckt 2.

(m) The Commission vide order dated 30.12.2019 in Petition No. 25/RP/2018 disallowed the contention of the Petitioner regarding non-condonation of time over-run. However, the Commission allowed the review regarding double deduction of IEDC amounting to ₹858.01 lakh and held that tariff shall be revised at the time of truing up of the tariff of 2014-19 period to the extent of double deduction of IEDC. The relevant extract of the order dated 30.12.2019 is as follows:

“14. The second contention of TPTL was that an amount of ₹858.01 lakh was deducted twice in respect of Circuit No.2, from the hard cost and from the total IDC and IEDC, which is not as per TPTL's Audited Certificate dated 15.9.2017. In response, the Rajasthan Discoms have contended that cost disallowed is justified as IEDC claimed is higher than 5% of the hard cost and there is no discrepancy in concluding the same. On re-examination, it is observed that in the order dated 15.5.2018, inadvertently ₹858.01 lakh was deducted twice, which needs to be corrected. Therefore, review of order dated 15.5.2018 on this account is allowed.

15. Accordingly, the tariff allowed for instant assets shall be revised at the time of truing up of the tariff of 2014-19 period to the extent of double deduction of IEDC. All other terms of the order dated 15.5.2018 shall remain unchanged.”

(n) The transmission tariff for Ckt 1(b) was approved by the Commission from COD to 31.3.2019 vide order dated 22.1.2020 in Petition No.368/TT/2018. Against order dated 22.1.2020, the Petitioner filed Review Petition No. 17/RP/2020 on the issue of erroneous deduction of ₹720.58 lakh from the expenditure on cash basis allowed as on COD while determining the capital cost of the transmission asset. The Petitioner prayed before the Commission to



revise the capital cost and consequential transmission charges of Asset Ckt 1(b).

(o) The Commission vide order dated 16.9.2021 in Petition No. 17/RP/2020 allowed the review regarding erroneous deduction of ₹720.58 lakh from the expenditure on cash basis allowed as on COD while determining the capital cost of the transmission asset. The relevant extracts of the order dated 16.9.2021 is as follows:

“12. The Review Petitioner has submitted that 'Actual Capital Expenditure' of ₹10085.51 lakh as per Form-5, as mentioned in the preceding paragraph, was claimed on 'cash basis' and liability amount of ₹720.58 lakh was excluded from it. In view of this, the Review Petitioner has prayed to reinstate the said amount of ₹720.58 lakh in capital cost and revise the transmission tariff in respect of the transmission asset.

13. In the light of submissions of the Review Petitioner, we notice that liability amount of ₹720.58 lakh was inadvertently deducted in our order dated 22.1.2020 in Petition No.368/TT/2018 and the same is, therefore, liable to be reinstated.

14. The Review Petitioner by way of affidavit dated 4.8.2020 has submitted that it shall claim the discharge of liabilities in computation of tariff during the truing-up stage.

15. The Review Petitioner has already filed Petition No. 35/TT/2021 for truing up of the transmission asset. This petition was heard on 15.6.2021 and in terms of the directions given by the Commission vide RoP dated 15.6.2021 in Petition No. 35/TT/2021, the Review Petitioner has filed revised Form 5 vide affidavit dated 12.7.2021, which reconciles with the figures reflected in the Auditor's Certificate as mentioned in the impugned order dated 22.1.2020 in Petition No.368/TT/2018.

16. Accordingly, the liability amount of ₹720.58 lakh shall be reinstated in the capital cost of the transmission asset with resultant transmission charges in Petition No. 35/TT/2021 filed for truing up of the transmission asset for 2014-19 period. Accordingly, the Review Petitioner shall claim the discharge of liabilities in computation of tariff during the truing-up stage.”

(p) The Transmission tariff for Ckt 2(a) and Ckt 1(c) was approved by the Commission, from their respective COD to 31.3.2019, vide order dated 9.8.2020 in Petition No.96/TT/2019.

(q) The details of the Annual Fixed Charges (AFC) approved by the Commission for the transmission assets from their COD to 31.3.2019 and trued up tariff claimed by the Petitioner in the instant petition are as follows:



(₹ in lakh)

	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2018-19 (Pro-rata for 352 days)	2018-19
AFC approved vide order dated 15.5.2018 in Petition No.108/TT/2016 subject to revision according to order dated 30.12.2019 in Petition No. 25/RP/2018	450.70	2243.12	2329.70	997.48	1049.03
AFC claimed by the Petitioner based on truing up in the instant petition	550.53	2968.23	2776.31	1228.66	1177.29

(₹ in lakh)

Ckt 1(b)	2018-19 (Pro-rata for 273 days)
AFC approved vide order dated 22.1.2020 in Petition No.368/TT/2018 subject to revision according to order dated 16.9.2021 in Petition No.17/RP/2020	1299.99
AFC claimed by the Petitioner based on truing up in the instant petition	1545.70

(₹ in lakh)

	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
AFC approved vide order dated 9.8.2020 in Petition No.96/TT/2019	2739.42	1555.02
AFC claimed by the Petitioner based on truing up in the instant petition	2970.30	1685.54

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

5. The Petitioner has served the copy of the Petition upon the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Haryana Power Purchase Centre (HPPC), Uttar



Haryana Bijli Vitran Nigam Limited and Dakshin Haryana Bijli Vitran Nigam Limited, (collectively referred to as “Haryana Utilities”) have filed combined reply vide affidavit dated 31.5.2021 and have raised the issue of termination of Power Sale Agreements (PSA) and liability to share transmission charges. In response, the Petitioner has filed its rejoinder vide affidavit dated 12.7.2021. The issues raised by Haryana Utilities and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the petition, HPPC’s reply filed vide affidavit dated 31.5.2021, the Petitioner’s rejoinder and the Petitioner’s affidavit dated 12.7.2021.

7. The hearing in this matter was held on 25.11.2021 through video conference and the order was reserved.

8. Having heard the counsels for the Petitioner and HPPC and having perused the material on record, we proceed to dispose of the petition.

Truing up of Annual Fixed Charges for 2014-19 Tariff Period

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Depreciation	148.80	770.65	803.75	318.52	339.22
Interest on Loan	249.28	1221.37	1165.73	523.67	510.53
Return on Equity	136.45	891.17	725.17	352.54	294.10
Interest on working capital	11.87	63.95	59.88	26.03	24.97
O&M Expenses	4.13	21.08	21.78	7.91	8.47
Total	550.53	2968.23	2776.31	1228.66	1177.29

(₹ in lakh)



(₹ in lakh)

Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 273days)	2018-19 (Pro-rata for 85days)	2018-19 (Pro-rata for 47days)
Depreciation	407.81	771.65	437.32
Interest on Loan	713.13	1391.78	791.64
Return on Equity	380.18	692.40	392.40
Interest on working capital	31.65	61.89	35.10
O&M Expenses	9.96	52.57	29.07
Total	1542.73	2970.30	1685.54

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74days)	2017-18	2018-19	2017-18 (Pro-rata for 352days)	2018-19
O&M Expenses	1.70	1.76	1.82	0.68	0.71
Maintenance Spares	3.06	3.16	3.27	1.23	1.27
Receivables	452.58	494.70	462.72	212.34	196.22
Total	457.34	499.62	467.80	214.25	198.19
Rate of Interest (in %)	12.80	12.80	12.80	12.60	12.60
Interest on Working Capital	11.87	63.95	59.88	26.03	24.97

(₹ in lakh)

Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
O&M Expenses	1.11	18.81	18.81
Maintenance Spares	2.00	33.86	33.86
Receivables	343.77	2125.80	2181.64
Total	346.88	2178.48	2234.31
Rate of Interest (in %)	12.20	12.20	12.20
Interest on Working Capital	31.65	61.89	35.10

Date of Commercial Operation

11. The Commission vide its order dated 15.5.2018 in Petition No.108/TT/2016, order dated 22.1.2020 in Petition No.368/TT/2018 and order dated 9.8.2020 in Petition No.96/TT/2019 has approved COD of transmission assets and they are as follows:



Particulars	SCOD	COD
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Teesta III HEP to LILO Point at Rangpo - Ckt 2	28.2.2013	17.1.2017
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Dikchu to Teesta III HEP - Ckt 1(a)		14.4.2017
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Dikchu to LILO Point at Rangpo - Ckt 1(b)		2.7.2018
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj - Ckt 2(a)		6.1.2019
Section of 400 kV D/C Teesta-III HEP - Kishanganj Transmission Line from Rangpo LILO Point to Kishanganj along with 1 No. of bay and 1 No. of 63 MVAR reactor at Kishanganj - Ckt 1(c)		13.2.2019

12. The Commission vide its order dated 15.5.2018 in Petition No.108/TT/2016 directed the Petitioner to submit CEA energization certificate for Ckt 1(a) and CMD certificate for Ckt 2 and Ckt 1(a) at the time of truing up. The Commission also directed that the Petitioner shall be entitled to claim tariff only after it submits CMD Certificate to ERLDC.

13. In response to the above, the Petitioner has submitted the CEA energization Certificate for Ckt 1(a) dated 27.2.2019 and CMD Certificate for Ckt 2 and Ckt 1(a) dated 19.5.2017. Accordingly, we have considered COD of the transmission assets as 17.1.2017, 14.4.2017, 2.7.2018, 6.1.2019 and 13.2.2019 for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c), respectively.

Capital Cost

14. The details of the approved capital cost as on COD and ACE up to 31.3.2019 are as follows:



(₹ in lakh)

Assets	Approved Cost (RCE-IV)	Capital Cost allowed as on COD	ACE			Total Capital Cost as on 31.3.2019
			2016-17	2017-18	2018-19	
Ckt 2	15772.98	11606.73	0.00	649.26	984.23	13240.22
Ckt 1(a)	6542.60	4967.30	0.00	184.96	310.22	5462.48
Ckt 1(b)	10932.77	9940.22*	0.00	0.00	68.71	10008.93
Ckt 2(a)	69529.05	61078.57	0.00	0.00	0.00	61078.57
Ckt 1(c)	71128.61	62643.72	0.00	0.00	0.00	62643.72

*we have allowed ₹720.58 lakh as per Order dated 16.9.2021 in Petition No. 17/RP/2020 and accordingly the capital cost allowed is ₹9219.64 lakh+₹720.58 lakh= ₹9940.22 lakh.

15. The Petitioner in the instant true up petition has submitted capital cost as on COD and estimated ACE incurred or projected to be incurred for the transmission assets as per Auditor's Certificate dated 26.9.2020 as follows:

(₹ in lakh)

Assets	Apportioned Approved Cost (RCE-IV)	Capital Cost as on COD (On cash Basis)	ACE			Total Capital Cost as on 31.3.2019
			2016-17	2017-18	2018-19	
Ckt 2	15772.98	13775.65	249.35	1141.27	112.54	15278.81
Ckt 1(a)	6542.60	6089.58	0.00	331.48	7.12	6428.18
Ckt 1(b)	10932.77	10085.51	0.00	0.00	482.22	10567.73
Ckt 2(a)	69529.05	62552.39	0.00	0.00	409.37	62961.76
Ckt 1(c)	71128.61	64117.56	0.00	0.00	409.37	64526.93

Cost Over-run

16. The Petitioner has claimed capital cost of ₹13775.65 lakh, ₹6089.58 lakh, ₹10085.51 lakh, ₹62552.39 lakh and ₹64117.56 lakh for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c), respectively as on COD.

17. The total completion cost including ACE in respect of the transmission assets is ₹159763.41 lakh and the approved cost as per RCE-IV is ₹173906.01 lakh. Hence, the completion cost in respect of the transmission assets is within the approved FR cost and, therefore, there is no cost over-run.



18. The Commission vide order dated 15.5.2018 in Petition No. 108/TT/2016 has disallowed the cost of ₹268.78 lakh from Asset – Ckt 1(a) and ₹1336.80 lakh from Asset – Ckt 2 on account of Design and Engineering, Erection, Stringing and Civil works including foundation and Audit and accounts. Further, the Commission vide order dated 30.12.2019 in Petition No. 25/RP/2018 in Petition No. 108/TT/2016 has observed that ₹858.01 lakh was deducted twice and the same should be allowed at the time of truing up of 2014-19 period. The details of the cost disallowed as on COD earlier and in the instant order are as follows:

Particulars	Cost disallowed vide order dated 15.5.2018 in Petition No. 108/TT/2016		Cost disallowed in the instant order	
	Ckt-1(a)	Ckt-2	Ckt-1(a)	Ckt-2
Design and Engineering	51.71	132.98	51.71	132.98
Erection, Stringing and Civil works including foundation	217.07	345.81	217.07	345.81
Audit and Accounts	0.00	858.01	0.00	0.00
Total	268.78	1336.80	268.78	478.79

Time Over-run

19. As per the IA, the transmission assets were scheduled to be put under commercial operation within 35 months from the date of financial closure which is 31.3.2010. Accordingly, the scheduled date of commercial operation was 28.2.2013 against which the transmission assets have achieved COD as follows:

Assets	SCOD	COD	Time overrun
Ckt 2	28.2.2013	17.1.2017	1419 days
Ckt 1(a)		14.4.2017	1506 days
Ckt 1(b)		2.7.2018	1950 days
Ckt 2(a)		6.1.2019	2138 days
Ckt 1(c)		13.2.2019	2176 days

20. The complete time over-run in case of Ckt 1(b), Ckt 1(c) and Ckt 2(a) has already been condoned by the Commission and partial time over-run of 136 days in



case of Ckt 2 and Ckt 1(a) was not condoned. The details are shown as under:

Assets	SCOD	COD	Time Over-run	Time Over-run Condoned/ Not Condoned
Ckt 2	28.2.2013	17.1.2017	1419 days	Period from 1.7.2016 to 14.11.2016 (136 days) is not condoned for both Circuit 2 and Circuit 1(a)
Ckt 1(a)		14.4.2017	1506 days	
Ckt 1(b)		2.7.2018	1950 days	Fully Condoned
Ckt 2(a)		6.1.2019	2138 days	Fully Condoned
Ckt 1(c)		13.2.2019	2176 days	Fully Condoned

21. Further, the Commission had observed that IDC and IEDC from 26.11.2016 to 16.1.2017 in case of Ckt 2 shall be borne by TUL and shall not be capitalized in the tariff computation of Ckt 2.

22. The Commission vide order dated 30.12.2019 in Review Petition No. 25/RP/2018 rejected the Petitioner's contentions regarding non-condonation of time over-run of 136 days in case of Ckt 2 and Ckt 1(a). Aggrieved by the order dated 30.12.2019, the Petitioner filed an Appeal before the Hon'ble APTEL being DFR No. 199/2020, which is pending adjudication. The tariff of Ckt 2 and Ckt 1(a) is trued up and tariff for the 2019-24 is determined subject to the Appeal pending before APTEL.

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

23. The Petitioner has claimed IDC in respect of the transmission assets and has submitted Auditor's Certificates dated 26.9.2020 in support of the same.

24. The Commission vide order dated 15.5.2018 in Petition No.108/TT/2016 read with order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019 has approved IDC as on COD on cash



basis as ₹2988.26 lakh, ₹1173.50 lakh, ₹2893.79 lakh, ₹21755.52 lakh and ₹23005.55 lakh for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c), respectively. In addition to the above, IDC of ₹235.62 lakh, ₹23.02 lakh and ₹278.03 lakh for Ckt 2, Ckt 1(a) and Ckt 1(b), respectively, which has been discharged after COD has been added to the year of ACE in which it has been discharged.

25. The Commission vide order dated 15.5.2018 in Petition No.108/TT/2016 had observed as follows:

“51. The balance IDC, which is yet to be discharged by the petitioner as on COD, would be capitalized once the actual payment is made by the petitioner on cash basis. The IDC allowed/ dis-allowed shall be reviewed at the time of truing up, subject to submission of information regarding the actual IDC disbursed/paid against the assets. Further, the petitioner is directed to submit the quarter-wise rates of interest levied on the loans by each of the banks and dates of each drawl for each loan and reconcile the IDC claimed in Auditor’s Certificate, claimed in Form-12B and “IDC working sheet” submitted, for both the assets.

52. There is a difference in the gross loan worked out, as on COD and the gross loan considered for the working of IDC by the Petitioner. The gross loan submitted in “IDC working sheet” has been considered for the calculation of IDC. Therefore, the Petitioner is directed to reconcile the gross loan for the calculation of weighted average Rate of Interest (as in Form-9C) and for the calculation of IDC, which would be reviewed at the time of truing-up.”

26. The Commission vide order dated 22.1.2020 in Petition No.368/TT/2018 had observed as follows:

“35. In view of the above, the IDC (excluding Notional IDC and Financial Charges) of ₹3171.82 lakh as submitted vide Form-5 is being considered in the capital cost which shall be subject to prudence check after submission of detailed calculation/statement of IDC comprising of dates and amount of each drawl of the loans, rate of interest of the loans for each drawl and repayment schedule of the loans deployed for the instant asset based on the revised Auditor’s Certificate and/or Tariff Forms at the time of true up of the tariff of the 2014-19 period.

.....

37. In view of the above, the notional IDC is not being allowed, which shall be considered, on submission of statement of deployment of funds along with detailed calculation/statement of IDC comprising dates and amount of each drawl of the loans, rate of interest of the loans for each drawl and repayment schedule of the loans deployed for the project based on the revised Auditor’s Certificate and/or Tariff Forms, and shall be subject to prudence check at the time of true up of tariff of 2014-19 period.”



27. The Commission vide order dated 9.8.2020 in Petition No. 96/TT/2019 has observed as follows:

“46. In view of above, IDC (excluding notional IDC and financial charges) of ₹23589.86 lakh and ₹22339.83 lakh for Asset-1 and Asset-2, respectively, is being considered for tariff calculation. However, IDC allowed now, shall be subject to prudence check after submission of separate calculation/ statement of IDC comprising of dates and amount of each drawl of the loans, rate of interest of the loans for each drawl and repayment schedule of the loans deployed for the Assets based on the revised Auditor’s Certificate and/or Tariff Forms by the Petitioner at the time of true up of 2014-19.”

28. The Commission directed the Petitioner to submit the detailed computation of IDC along with all the relevant documents and weighted average rate of interest of loan (Form 9-c) along with proof of interest rates at the time of truing up of tariff. The Petitioner has not submitted any documentary evidence regarding the computation of IDC.

29. The allowable IDC has been worked out in previous petitions considering the available information submitted by the Petitioner in respect of the transmission assets separately on cash and accrual basis. In absence of the relevant documents, in the instant petition too, we have considered the same IDC allowed as on COD for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c) vide order dated 15.5.2018 in Petition No.108/TT/2016 read with order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019. Further, in addition to the above, certain IDC has been discharged and allowed in previous orders after COD which has been indicated in the Auditor’s certificate dated 26.9.2020 and it has been considered as ACE during the year in which it has been discharged.

30. Accordingly, IDC claimed, allowed and disallowed as on COD are as follows:



(₹ in lakh)

Assets	IDC as on COD (as per Auditor's Certificate dated 26.9.2020) (on cash Basis)	IDC Admissible as on COD	IDC Disallowed as on COD
	A	B	C=A-B
Asset – Ckt 2	4301.04	2988.26	1312.78
Asset – Ckt 1(a)	1853.47	1173.50	679.97
Asset – Ckt 1(b)	3317.11	2893.79	423.32
Asset – Ckt 2(a)	22597.71	21755.52	842.19
Asset – Ckt 1(c)	23847.74	23005.55	842.19

31. The Petitioner has claimed IEDC of ₹786.48 lakh, ₹356.98 lakh, ₹558.42 lakh, ₹2662.84 lakh and ₹2977.96 lakh for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c) respectively and has submitted Auditor's Certificate in support of the same. Further, it has been indicated in the Auditor's Certificates that IEDC of ₹13.73 lakh, ₹10.03 lakh, ₹42.71 lakh, ₹109.39 lakh and ₹109.39 lakh for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c), respectively, have been un-discharged as on COD which have been added to ACE in the year in which it was discharged.

32. The Petitioner has also submitted that it has filed Appeal No. 356 of 2018 before the APTEL against the Commission's order dated 15.5.2018 in Petition No.108/TT/2016 on account of following disallowances in respect of Ckt 2 and Ckt 1(a):

- a) Deduction of Design & Engineering cost amounting to ₹184.69 lakh (Cash basis).
- b) Deduction of cost pertaining to "Erection, Stringing & Civil Works including Foundation" amounting to ₹217.07 lakh for Ckt 1(a) and ₹345.81 lakh for Ckt 2.
- c) Ceiling of 5% in treatment of Incidental Expenditure during Construction (IEDC), when there are no provisions under the regulations for any such capping.

33. We have considered the submissions of the Petitioner. IEDC disallowed for the



period of time over-run not condoned in case of Ckt 1(a) and Ckt 2 has been adjusted. Accordingly, IEDC of ₹713.54 lakh, ₹308.63 lakh, ₹515.71 lakh, ₹2553.45 lakh and ₹2868.57 lakh has been allowed for Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c), respectively, as shown in the following table.

(₹ in lakh)				
Assets	IEDC claimed as per Auditor's Certificate (on accrual basis)	IEDC claimed as per Auditor's Certificate (on cash basis)	IEDC disallowed due to time over-run	IEDC allowed as on COD
	1	2	3	4=(1-3)
Asset – Ckt 2	786.48	772.75	59.21	713.54
Asset – Ckt 1(a)	356.98	346.95	38.32	308.63
Asset – Ckt 1(b)	558.42	515.71	0.00	515.71
Asset – Ckt 2(a)	2662.84	2553.45	0.00	2553.45
Asset – Ckt 1(c)	2977.96	2868.57	0.00	2868.57

Encashment of Bank Guarantee of the contractor

34. The Petitioner, in Petition No. 108/TT/2016 and Petition No. 368/TT/2018 along with submissions in Auditor's Certificates, has submitted the treatment of termination of contract with the erstwhile contractor DCIL-AIPL JV i.e. Deepak Cables India Limited (DCIL) and Abir Infrastructure Private Limited (AIPL), in the tariff forms/ capital cost. Further, the Commission has also taken cognizance of the same in Petition No. 96/TT/2019 and directed the Petitioner to submit the details of bank guarantee encashed by the Petitioner, at the time of true-up. The Petitioner in this regard, has made the following submissions:

- a) The contracts for construction of 400 kV D/C Teesta-III-Kishanganj Transmission Line were awarded by the Petitioner to DCIL-AIPL in November 2009. Considering the performance of the contractor, the Petitioner issued a default notice on 9.5.2014, seeking remedial measures to be acted upon and, subsequently, the Petitioner invoked Bank Guarantees of the contractor amounting to ₹3830 lakh (Performance Bank Guarantees) and ₹960 lakh (Advance Bank Guarantees) on 14.5.2014. Due to inability of the contractor to



take remedial measures as stipulated in the Default Notice, the contracts were terminated by the Petitioner on 30.5.2014. Subsequently, balance erection works of the contract were awarded to new contractors.

b) Thereafter, the erstwhile contractor, vide letter dated 3.6.2014, issued notice for arbitration citing the dispute resolution clause of the contract and moved the Hon'ble High Court of Delhi against the decision for encashment of Bank Guarantees and termination of the Contracts. Hon'ble High Court of Delhi vide Order dated 6.6.2014 directed to "maintain status quo". Subsequently, the Single Bench of Hon'ble High Court of Delhi vide Order dated 3.9.2014 allowed termination of the contract and invocation of Performance Bank Guarantees (PBGs) of ₹3830 lakh. However, Advance Bank Guarantees (ABGs) of ₹960 lakh (Present value is ₹773 lakh after adjustment of advance of ₹187 lakh against RA Bills) were returned to the Bank to be put in the original position. Thereafter, on an appeal filed by the contractor, the Divisional Bench vide its order dated 15.9.2014 also upheld the order of Single Bench. It is pertinent to mention that PBGs of ₹3830 lakh encashed and ABGs of ₹773 lakh are still alive with the Petitioner.

c) Meanwhile, shareholders of the Petitioner, including Government of Sikkim (GoS) decided to settle the dispute between the Petitioner and its erstwhile contractor and arbitration invoked by the erstwhile contractor as per provision of the contract was kept under suspension.

d) On achievement of COD on 13.2.2019, the Board of the Petitioner decided to proceed with the arbitration. However, the arbitration with the erstwhile contractor could not take place as both the parties under DCIL-AIPL JV i.e. Deepak Cables India Limited (DCIL) and Abir Infrastructure Private Limited (AIPL), went under insolvency proceedings under the Insolvency & Bankruptcy Code, 2016. The NCLT vide its order no. CP (IB) No. 154/BB/2017 dated July 4, 2019 directed to liquidate DCIL, whereas AIPL is under process of Corporate Insolvency Resolution Process (CIRP). Therefore, the matter is still not resolved between the Petitioner and erstwhile contractors.



e) As the matter is sub-judice, PBG amount of ₹3830 lakh has neither been capitalized nor claimed in the instant tariff petition and the Petitioner will approach the Commission upon settlement of the matter.

f) Against the encashment of PBGs of ₹3830 lakh, the Petitioner has incurred following expenses till 31.3.2019:

(₹ in lakh)

Sr. No.	Particular	Amount	Remarks
1.	Advance given to erstwhile contractor	997.76	There was outstanding recoverable advance of ₹1185 lakh from the erstwhile contractor against which petitioner was having ABGs of ₹960 lakh. Subsequently, ₹187 lakh have been adjusted against RA Bills and ABGs has been reduced to ₹773 lakh. Accordingly, balance advance recoverable from the erstwhile contractor is ₹998 lakh.
2.	Shortage of material recoverable from erstwhile contractor	2266.31	During the reconciliation of material, shortage of material recoverable from the erstwhile contractor is assessed at ₹2266.31 lakh.
4.	Losses out of Insurance Claims	300.60	The petitioners had incurred the losses due to theft of Transmission line material & damaged inventory and are recoverable from the erstwhile contractor.
5.	Claims under process with Insurance Company	315.30	
6.	Losses due to obsolescence of inventory (Damaged Material)	75.57	
	Total*	3955.54	

* The amount is neither claimed in the instant tariff petition nor capitalized.

35. We have considered the submissions of the Petitioner. It is observed that the construction contract awarded to DCIL-AIPL was terminated by the Petitioner and the PBGs amounting to ₹3830 lakh was encashed and ABGs amounting to ₹773 lakh are kept alive with the Petitioner. The same was upheld by the Hon'ble High Court of Delhi, and the Petitioner later entered into discussions with the contractors to settle the dispute as per the provisions of the contract. Before any settlement could be arrived at, DCIL-AIPL went into liquidation process. The Petitioner has submitted that against the amount realized on encashment of PBG, certain expenses are to be



recovered from the contractors like advance given to erstwhile contractor, shortage of material recoverable from erstwhile contractor, Losses out of Insurance Claims, Claims under process with Insurance Company and Losses due to obsolescence of inventory (Damaged Material). It is not clear why the Petitioner has entered into discussions with the contractors when their appeal was disposed by the Hon'ble High Court of Delhi. Further, we are not able to agree with the Petitioner's contention that the amount realized on encashment of PBGs has not been capitalized because the matter is sub-judice (insolvency proceedings). The Petitioner has neither filed any documents to show the adjustments made on account of the amount realized on encashment of PBGs nor filed the Auditor's Certificate to this effect. Accordingly, ₹3830 lakh realized on encashment of PBGs has been deducted from the capital cost. It is further observed that the PBGs were encashed after the Hon'ble High Court of Delhi order dated 15.9.2014 and, therefore, the Petitioner is directed to submit the amount of interest earned since 2014 on the PBGs encashed at the time of truing-up of the tariff of the 2019-24 tariff period and the same will also be adjusted in the capital cost. The Petitioner is also directed to furnish the decision taken with regard to the ABGs amounting to ₹737 lakh still alive with the Petitioner at the time of truing up of the tariff of the 2019-24 tariff period.

Deduction from expenditure on cash basis

36. As per Form-5, the Petitioner has claimed ₹720.58 lakh as un-discharged liability as on COD. The Commission vide order dated 22.1.2020 disallowed ₹720.58 lakh in absence of any statement of the undischarged liabilities. Aggrieved by the said order of the Commission, the Petitioner filed Review Petition No. 17/RP/2020 contending wrong deduction of liability of ₹720.58 lakh from the expenditure on cash



basis as on COD. The Petitioner prayed for revision of the capital cost and consequential transmission charges of Ckt 1(b). The Commission admitted the Review Petition and vide its order dated 16.9.2021, allowed review on account of deduction of ₹720.58 lakh from expenditure on cash basis. The same shall be dealt in the relevant section of this order.

Initial Spares

37. Initial Spares are provided in Regulation 13(d) of the 2014 Tariff Regulations subject to the following ceiling norms:

- “(d) *Transmission system*
- (i) *Transmission line – 1.00%*
- (ii) *Transmission Sub-station (Green Field) – 4.00%*
- (iii) *Transmission Sub-station (Brown Field) – 6.00%*
- (iv) *Series Compensation devices and HVDC Station – 4.00%*
- (v) *Gas Insulated Sub-station (GIS) – 5.00%*
- (vi) *Communication system – 3.5%*
-”

38. The Petitioner has claimed the Initial Spares in respect of the transmission assets as shown as follows:

(₹ in lakh)

Assets	Particulars	Initial Spares Claimed(B)
Ckt 2	Transmission Line	78.39
Ckt 1(a)	Transmission Line	30.49
Ckt 1(b)	Transmission Line	47.91
Ckt 2(a)	Transmission Line	1024.30
Ckt 1(c)	Transmission Line	1024.30

39. The Commission vide order dated 9.8.2020 in Petition No. 96/TT/2019 has disallowed the initial spares of ₹1263.30 lakh. Aggrieved with the Commission’s decision to restrict the initial spares to the norms in 2014 Tariff Regulations in order dated 9.8.2020, TPTL filed Review Petition No. 1/RP/2021 contending that the reasons for claiming initial spares more than the norms, given in affidavit dated 28.11.2019 in Petition No. 96/TT/2019, was not considered by the Commission while



passing the order dated 9.8.2020. The Commission vide its order dated 31.7.2021 in Review Petition No. 1/RP/2021 rejected the Review Petition. Thus, we have restricted initial spares amounting to ₹631.65 lakh in case of Asset 2(a) and 1(c), respectively.

40. The Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of Initial Spares towards Ckt 2, Ckt 1(a) and Ckt 1(b) is within ceiling and initial spares of Ckt 2(a) and Ckt 1(a) are restricted to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Assets	Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked Out	Excess Initial Spares
					D = [(A-B) * C / (100-C)]	
Ckt 2	Transmission Line	9344.82	78.39	1.00	78.39	0.00
Ckt 1(a)	Transmission Line	4074.11	30.49	1.00	30.49	0.00
Ckt 1(b)	Transmission Line	6252.68	47.91	1.00	47.91	0.00
Ckt 2(a)	Transmission Line	39896.17	1024.30	1.00	392.65	631.65
Ckt 1(c)	Transmission Line	39896.17	1024.30	1.00	392.65	631.65

Capital cost as on COD

41. Accordingly, capital cost allowed as on COD is as follows:

(₹ in lakh)

Assets	Capital Cost claimed in Auditor's Certificate as on COD on Cash Basis (A)	IDC Disallowed due to time over-run/ computational difference (B)	IEDC Disallowed due to time over-run not condoned (C)	Excess Initial Spares (D)	Hard cost deducted as on COD (E)	PBG Encashment (F)	Expenditure up to COD (G)=(A-B-C-D-E-F)
Ckt 2	13775.65	1312.78	59.21	0.00	478.79	0.00	11924.87
Ckt 1(a)	6089.58	679.97	38.32	0.00	268.78	0.00	5102.51
Ckt 1(b)	10085.51	423.32	0.00	0.00	0.00	0.00	9662.19
Ckt 2(a)	62552.39	842.19	0.00	631.65	0.00	0.00	61078.55
Ckt 1(c)	64117.56	842.19	0.00	631.65	0.00	3830.00	58813.72



Additional Capital Expenditure (ACE)

42. The Commission vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2018 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018 and order dated 9.8.2020 in Petition No.96/TT/2019 had allowed ACE in respect of the transmission assets for the 2014-19 tariff period as follows:

(₹ in lakh)

Asset	2016-17	2017-18	2018-19
Ckt 2	-	649.26	984.23
Ckt 1(a)	-	184.96	310.22
Ckt 1(b)	-	-	68.71
Ckt 2(a)	-	-	-
Ckt 1(c)	-	-	-

43. The Petitioner has claimed the following ACE and has submitted Auditor's Certificate dated 9.4.2020 for the same:

(₹ in lakh)

Asset	2016-17	2017-18	2018-19
Ckt 2	249.35	1141.27	112.54
Ckt 1(a)	-	331.48	7.12
Ckt 1(b)	-	-	482.22
Ckt 2(a)	-	-	409.37
Ckt 1(c)	-	-	409.37

44. The Petitioner has submitted that ACE in 2014-19 has been claimed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations and the same is within the cut-off date. The above said expenditure is majorly for discharge of liabilities or works deferred for execution covered within the scope of work. The asset-wise segregation of ACE under various heads/ works is as follows:

(₹ in lakh)

	Regulation	2016-17	2017-18	2018-19
Ckt 2 (Cut-off date- 31.3.2020)				
Liability Discharge	14(1)(i)	249.35	315.97	0.00
Deferred Works	14(1)(ii)	0.00	825.30	112.54
Total Add- Cap		249.35	1,141.27	112.54
Ckt 1(a) (Cut-off date- 31.3.2020)				



Liability Discharge	14(1)(i)	0.00	144.19	0.00
Deferred Works	14(1)(ii)	0.00	187.29	7.12
Total Add- Cap		0.00	331.48	7.12
Ckt 1(b) (Cut-off date- 31.3.2021)				
Liability Discharge	14(1)(i)	0.00	0.00	409.18
Deferred Works	14(1)(ii)	0.00	0.00	73.04
Total Add- Cap		0.00	0.00	482.22
Ckt 2(a) (Cut-off date- 31.3.2022)				
Liability Discharge	14(1)(i)	0.00	0.00	409.37
Deferred Works	14(1)(ii)	0.00	0.00	0.00
Total Add- Cap		0.00	0.00	409.37
Ckt 1(c) (Cut-off date- 31.3.2022)				
Liability Discharge	14(1)(i)	0.00	0.00	409.37
Deferred Works	14(1)(ii)	0.00	0.00	0.00
Total Add- Cap		0.00	0.00	409.37
Total		249.35	1,472.75	1,420.62

45. With respect to Ckt 1(b), Ckt 2(a) and Ckt 1(c), it has been submitted that ACE are majorly on account of discharge of liabilities accrued on COD and that the details of liabilities have already been submitted in the earlier petitions.

46. We have considered the submissions of Petitioner. The un-discharged IDC as on COD has been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations which pertain to balance and retention payment due to un-discharged liabilities for works executed before cut-off date/work differed for execution. Accordingly, ACE allowed for the 2014-19 tariff period is as follows:

		(₹ in lakh)		
Asset	Particulars	ACE Allowed		
		2016-17	2017-18	2018-19
Ckt 2	Balance & Retention Payment for liabilities	249.35	315.97	0.00
	Work deferred for execution	0.00	825.30	112.54
Ckt 1(a)	Balance & Retention Payment for liabilities	0.00	144.19	0.00
	Work deferred for execution	0.00	187.29	7.12
Ckt 1(b)	Balance & Retention Payment	0.00	0.00	409.18



	for liabilities			
	Work deferred for execution	0.00	0.00	73.04
Ckt 2(a)	Balance & Retention Payment for liabilities	0.00	0.00	409.37
	Work deferred for execution	0.00	0.00	0.00
Ckt 1(c)	Balance & Retention Payment for liabilities	0.00	0.00	409.37
	Work deferred for execution	0.00	0.00	0.00

47. The capital cost allowed as on 31.3.2019 after inclusion of ACE in respect of the transmission assets is as follows:

(₹ in lakh)						
Asset	Particulars	Capital cost as on COD on cash basis	2016-17	2017-18	2018-19	Total Capital cost including ACE as on 31.3.2019
Ckt 2	Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No.25/RP/2018	11606.73	0.00	649.26	984.23	13240.22
	Claimed by the Petitioner in the instant petition	13775.65	249.35	1141.27	112.54	15278.81
	Allowed after truing up in this Order	11924.87	249.35	1141.27	112.54	13428.03
Ckt 1(a)	Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No.25/RP/2018	4967.30	0.00	184.96	310.22	5462.48
	Claimed by the Petitioner in the instant petition	6089.58	0.00	331.48	7.12	6428.18
	Allowed after truing up in this Order	5102.51	0.00	331.48	7.12	5441.11
Ckt 1(b)	Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	9219.64	0.00	0.00	68.71	9288.35
	Claimed by the Petitioner in the instant petition	10085.51	0.00	0.00	482.22	10567.73
	Allowed after truing up in this Order	9662.19	0.00	0.00	482.22	10144.41
Ckt 2(a)	Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	61078.57	0.00	0.00	0.00	61078.57
	Claimed by the Petitioner in the instant petition	62552.39	0.00	0.00	409.37	62961.76
	Allowed after truing up in this Order	61078.55	0.00	0.00	409.37	61487.92



Asset	Particulars	Capital cost as on COD on cash basis	2016-17	2017-18	2018-19	Total Capital cost including ACE as on 31.3.2019
Ckt 1(c)	Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	62643.72	0.00	0.00	0.00	62643.72
	Claimed by the Petitioner in the instant petition	64117.56	0.00	0.00	409.37	64526.93
	Allowed after truing up in this Order	58813.72	0.00	0.00	409.37	59223.09

Debt-Equity Ratio

48. The Petitioner has claimed debt-equity ratio of 75:25 as on COD and for ACE. The debt-equity ratio of 75:25 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and 31.3.2019 are as follows:

Ckt 2	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	8943.65	75.00	10071.02	75.00
Equity	2981.22	25.00	3357.01	25.00
Total	11924.87	100.00	13428.03	100.00
Ckt 1(a)	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	3826.88	75.00	4080.83	75.00
Equity	1275.63	25.00	1360.28	25.00
Total	5102.51	100.00	5441.11	100.00
Ckt 1(b)	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	7246.64	75.00	7608.31	75.00
Equity	2415.55	25.00	2536.10	25.00
Total	9662.19	100.00	10144.41	100.00
Ckt 2(a)	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	45808.91	75.00	46115.94	75.00
Equity	15269.64	25.00	15371.98	25.00
Total	61078.55	100.00	61487.92	100.00
Ckt 1(c)	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)



Debt	44110.29	75.00	44417.31	75.00
Equity	14703.43	25.00	14805.77	25.00
Total	58813.72	100.00	59223.09	100.00

Depreciation

49. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-I, Annexure-II, Annexure-III, Annexure-IV and Annexure-V. WAROD has been worked out after taking into account the depreciation rates of the transmission assets specified in the 2014 Tariff Regulations and the details of the true-up depreciation allowed during the 2014-19 tariff period is as follows:

(₹ in lakh)						
	Particulars	Ckt 2			Ckt 1(a)	
		2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
A	Opening Gross Block	11924.87	12174.22	13315.49	5102.51	5433.99
B	ACE	249.35	1141.27	112.54	331.48	7.12
C	Closing Gross Block (A+B)	12174.22	13315.49	13428.03	5433.99	5441.11
D	Average Gross Block [(A+C)/2]	12049.55	12744.86	13371.76	5268.25	5437.55
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
F	Lapsed useful life of the Asset-at the beginning of the year	0	0	1	0	0
G	Balance useful life of the Asset-at the beginning of the year (Year)	35	35	34	35	35
H	Aggregated Depreciable Value (D*90%)	10844.59	11470.37	12034.59	4741.42	4893.79
I	Depreciation during the year (D*E)	128.99	672.93	706.03	268.26	287.10
J	Remaining Aggregated Depreciable Value	10715.61	10668.46	10526.64	4473.17	4338.43



(₹ in lakh)

	Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
		2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
A	Opening Gross Block	9662.19	61078.55	58813.72
B	ACE	482.22	409.37	409.37
C	Closing Gross Block (A+B)	10144.41	61487.92	59223.09
D	Average Gross Block [(A+C)/2]	9903.30	61283.23	59018.40
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
F	Lapsed useful life of the Asset – at the beginning of the year	0	0	0
G	Balance useful life of the Asset – at the beginning of the year (Year)	35	34	34
H	Aggregated Depreciable Value (D*90%)	8912.97	55154.91	53116.56
I	Depreciation during the year (D*E)	391.10	753.53	401.26
J	Remaining Aggregated Depreciable Value	8521.87	54401.38	52715.30

50. The details of the depreciation allowed in respect of the transmission assets vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Review Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, as claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74days)	2017-18	2018-19	2017-18 (Pro-rata for 352days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No.25/RP/2018	115.06	584.67	627.80	257.64	280.23
Claimed by the Petitioner in the instant petition	148.80	770.65	803.75	318.52	339.22
Approved after true-up in this order	128.99	672.93	706.03	268.26	287.10



(₹ in lakh)

Particulars	Ckt 1(b)
	2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No.368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	365.45
Claimed by the Petitioner in the instant petition	407.81
Approved after true-up in this order	391.10

(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	751.02	425.91
Claimed by the Petitioner in the instant petition	771.65	437.32
Approved after true-up in this order	753.53	401.26

Interest on Loan (IoL)

51. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. The Petitioner has submitted its loan portfolio in the instant Petition. Accordingly, IoL has been calculated based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)

	Particulars	Ckt 2			Ckt 1(a)	
		2016-17 (Pro-rata for 74days)	2017-18	2018-19	2017-18 (Pro-rata for 352days)	2018-19
A	Gross Normative Loan	8943.65	9130.67	9986.62	3826.88	4075.49
B	Cumulative Repayments up to Previous Year	0.00	128.99	801.91	0.00	268.26
C	Net Loan-Opening (A-B)	8943.65	9001.68	9184.70	3826.88	3807.23
D	Addition due to ACE	187.01	855.95	84.41	248.61	5.34
E	Repayment during the year	128.99	672.93	706.03	268.26	287.10
F	Net Loan-Closing (C+D-E)	9001.68	9184.70	8563.08	3807.23	3525.47
G	Average Loan (C+F)/2	8972.67	9093.19	8873.89	3817.06	3666.35
H	Weighted Average Rate of Interest on Loan (in %)	12.965	12.804	12.640	12.804	12.640
I	Interest on Loan (G*H)	235.85	1164.29	1121.64	471.33	463.42

(₹ in lakh)



	Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
		2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
A	Gross Normative Loan	7246.64	45808.91	44110.29
B	Cumulative Repayments up to Previous Year	0.00	0.00	0.00
C	Net Loan-Opening (A-B)	7246.64	45808.91	44110.29
D	Addition due to ACE	361.67	307.03	307.03
E	Repayment during the year	391.10	753.53	401.26
F	Net Loan-Closing (C+D-E)	7217.21	45362.40	44016.05
G	Average Loan [(C+F)/2]	7231.93	45585.66	44063.17
H	Weighted Average Rate of Interest on Loan (in %)	12.640	12.64	12.64
I	Interest on Loan (G*H)	683.70	1341.82	717.17

52. The details of IoL approved vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2019 in Petition No. 25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Review Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Particulars	(₹ in lakh)				
	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No. 25/RP/2018	214.93	1046.02	1046.86	471.19	477.50
Claimed by the Petitioner in the instant petition	249.28	1221.37	1165.73	523.67	510.54
Approved after true-up in this order	235.85	1164.29	1121.64	471.33	463.42

Particulars	(₹ in lakh)
	Ckt 1(b) 2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	629.46
Claimed by the Petitioner in the instant petition	715.96
Approved after true-up in this order	683.70



(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	1314.01	747.94
Claimed by the Petitioner in the instant petition	1391.80	791.65
Approved after true-up in this order	1341.82	717.17

Return on Equity ("RoE")

53. The Petitioner in Form 3 has submitted the calculation of effective tax rate. The Petitioner has stated that as the company has incurred loss during 2014-19 period, no MAT rate is considered. However, in Form 3, the Petitioner has submitted that the tax rate during 2017-18 is 21.34% and the same has been considered. Accordingly, RoE allowed in respect of the transmission assets is as follows:

(₹ in lakh)

	Particulars	Ckt 2			Ckt 1(a)	
		2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
A	Opening Equity	2981.22	3043.56	3328.87	1275.63	1358.50
B	Addition due to ACE	62.34	285.32	28.14	82.87	1.78
C	Closing Equity (A+B)	3043.56	3328.87	3357.01	1358.50	1360.28
D	Average Equity [(A+C)/2]	3012.39	3186.21	3342.94	1317.06	1359.39
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	0.000	21.342	0.000	21.342	0.000
G	Rate of Return on Equity (Pre-tax)	15.500	19.705	15.500	19.705	15.500
H	Return on Equity (Pre-tax) (D*G)	94.66	627.84	518.16	250.28	210.70

(₹ in lakh)

	Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
		2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
A	Opening Equity	2415.55	15269.64	14703.43
B	Addition due to ACE	120.56	102.34	102.34
C	Closing Equity (A+B)	2536.10	15371.98	14805.77
D	Average Equity [(A+C)/2]	2475.83	15320.81	14754.60
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	0.000	0.000	0.000



G	Rate of Return on Equity (Pre-tax)	15.500	15.500	15.500
H	Return on Equity (Pre-tax) (D*G)	287.03	553.02	294.49

54. The details of RoE allowed vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, as claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No. 25/RP/2018	106.83	542.87	582.91	239.22	260.19
Claimed by the Petitioner in the instant petition	136.45	891.15	725.17	352.53	294.10
Approved after true-up in this order	94.66	627.84	518.16	250.28	210.70

(₹ in lakh)

Particulars	Ckt 1(b)
	2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	268.41
Claimed by the Petitioner in the instant petition	380.19
Approved after true-up in this order	287.03

(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	551.17	312.57
Claimed by the Petitioner in the instant petition	692.42	392.42
Approved after true-up in this order	553.02	294.49



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

55. The details of the O&M Expenses claimed by the Petitioner in respect of the transmission assets and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

(₹ in lakh)

Ckt 2			
Particulars	2016-17 (Pro-rata for 74 days)	2017-18	2018-19
Transmission Line:			
Section of 400 kV D/C Teesta-III HEP-Kishanganj TL from Teesta III HEP to LILO point at Rangpo (km)	18.000	18.000	18.000
Norm (₹ lakh/ MVA)			
D/C Bundled with 4 or more sub-conductor)	1.13	1.17	1.21
Total Transmission Expenses	20.39	21.08	21.78
Total O&M Expenses	4.13	21.08	21.78

(₹ in lakh)

Ckt 1(a)		
Particulars	2017-18 (Pro-rata for 352 days)	2018-19
Transmission Line:		
Section of 400 kV D/C Teesta-III HEP-Kishanganj TL from Dikchu to Teesta III HEP (KM)	7.000	7.000
Norm (₹ lakh/ MVA)		
D/C Bundled with 4 or more sub-conductor)	1.17	1.21
Total Transmission Expenses	8.20	8.47
Total O&M Expenses	7.91	8.47

(₹ in lakh)

Ckt 1(b)	
Particulars	2018-19 (Pro-rata for 273 days)
Transmission Line:	
Section of 400 kV D/C Teesta-III HEP-Kishanganj TL from Teesta III HEP to LILO point at Rangpo (KM)	11.000
Norm (₹ lakh/ MVA)	
D/C Bundled with 4 or more sub-conductor)	1.21
Total Transmission Expenses	13.31
Total O&M Expenses	9.96

(₹ in lakh)

Ckt 2(a)	
Particulars	2018-19 (Pro-rata for 85 days)
Transmission Line:	



Section of 400 kV D/C Rangpo Kishanganj line along with one number of bay and one number of 63 MVAR reactor at Kishanganj (km)	89.500
Norm (₹ lakh/ MVA)	
D/C Bundled with 4 or more sub-conductor)	1.21
Total Transmission Expenses	108.30
Sub-station:	
	2
Norm (₹ lakh/ Bay)	
400 kV	58.73
Total Sub-station Expenses	117.46
Total O&M Expenses	52.57

(₹ in lakh)

Ckt 1(c)	
Particulars	2018-19 (Pro-rata for 47 days)
Transmission Line:	
Second Section of 400 kV D/C Rangpo Kishanganj line (km)	89.500
Norm (₹ lakh/ MVA)	
D/C Bundled with 4 or more sub-conductor)	1.21
Total Transmission Expenses	108.30
Sub-station:	
	2
Norm (₹ lakh/ Bay)	
400 kV	58.73
Total Sub-station Expenses	117.46
Total O&M Expenses	29.07

56. The details of O&M Expenses approved vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, O&M expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order are as follows:

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No. 25/RP/2018	4.13	21.08	21.78	7.91	8.47

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Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Claimed by the Petitioner in the instant petition	4.13	21.08	21.78	7.91	8.47
Approved after true-up in this order	4.13	21.08	21.78	7.91	8.47

(₹ in lakh)

Particulars	Ckt 1(b)
	2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	9.95
Claimed by the Petitioner in the instant petition	9.96
Approved after true-up in this order	9.96

(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata or 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	65.65	35.95
Claimed by the Petitioner in the instant petition	52.57	29.07
Approved after true-up in this order	52.57	29.07

Interest on Working Capital ("IWC")

57. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:

i. Maintenance Spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

ii. O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual



transmission charges as worked out above.

iv. Rate of Interest on Working Capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

58. The trued up IWC allowed in respect of the transmission assets is as follows:

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for One month)	1.70	1.76	1.82	0.68	0.71
Working Capital for Maintenance Spares (15% of O&M Expenses)	3.06	3.16	3.27	1.23	1.27
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	389.55	423.50	403.31	176.18	165.13
Total Working Capital	394.31	428.41	408.40	178.09	167.10
Rate of Interest on working capital (in %)	12.80	12.80	12.80	12.60	12.60
Interest on working Capital	10.23	54.84	52.27	21.64	21.05

Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Working Capital for O&M Expenses (O&M Expenses for One month)	1.11	18.81	18.81
Working Capital for Maintenance Spares (15% of O&M Expenses)	2.00	33.86	33.86
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	312.09	1974.24	1906.23
Total Working Capital	315.19	2026.92	1958.91
Rate of Interest on working capital (in %)	12.20	12.20	12.20
Interest on working Capital	28.76	57.59	30.77

59. The details of IWC approved vide order dated 15.5.2018 in Petition



No.108/TT/2016, order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, IWC claimed by the Petitioner and trued up IWC allowed in the instant order is as follows:

(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No. 25/RP/2018	9.74	48.48	50.35	21.52	22.63
Claimed by the Petitioner in the instant petition	11.87	63.95	59.88	26.03	24.97
Approved after true-up in this order	10.23	54.84	52.27	21.64	21.05

(₹ in lakh)

Particulars	Ckt 1(b)
	2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	26.72
Claimed by the Petitioner in the instant petition	31.71
Approved after true-up in this order	28.76

(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	57.57	32.64
Claimed by the Petitioner in the instant petition	61.89	35.10
Approved after true-up in this order	57.59	30.77

Approved Annual Fixed Charges for 2014-19 Tariff Period

60. The trued-up Annual Fixed Charges (AFC) allowed in respect of the transmission assets for the 2014-19 tariff period are as follows:



(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Depreciation	128.99	672.93	706.03	268.26	287.10
Interest on Loan	235.85	1164.29	1121.64	471.33	463.42
Return on Equity	94.66	627.84	518.16	250.28	210.70
Operation and Maintenance	4.13	21.08	21.78	7.91	8.47
Interest on Working Capital	10.23	54.84	52.27	21.64	21.05
Total	473.86	2540.97	2419.88	1019.41	990.75

(₹ in lakh)

Particulars	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 273 days)	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Depreciation	391.10	753.53	401.26
Interest on Loan	683.70	1341.82	717.17
Return on Equity	287.03	553.02	294.49
Operation and Maintenance	9.96	52.57	29.07
Interest on Working Capital	28.76	57.59	30.77
Total	1400.54	2758.53	1472.76

61. Accordingly, the Annual fixed charges allowed vide order dated 15.5.2018 in Petition No.108/TT/2016, order dated 30.12.2019 in Petition No.25/RP/2018, order dated 22.1.2020 in Petition No.368/TT/2018, order dated 16.9.2021 in Petition No. 17/RP/2020 and order dated 9.8.2020 in Petition No.96/TT/2019, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC approved in the instant order are as follows:

(₹ in lakh)

Particulars	Ckt 2			Ckt 1(a)	
	2016-17 (Pro-rata for 74 days)	2017-18	2018-19	2017-18 (Pro-rata for 352 days)	2018-19
Allowed vide order dated 15.5.2018 in Petition No. 108/TT/2016 and 30.12.2018 in Petition No. 25/RP/2018	450.70	2243.12	2329.70	997.48	1049.03
Claimed by the Petitioner in the instant petition	550.53	2968.23	2776.31	1228.66	1177.29
Approved after true-up in this order	473.86	2540.97	2419.88	1019.41	990.75



(₹ in lakh)

Particulars	Ckt 1(b)
	2018-19 (Pro-rata for 273 days)
Allowed vide order dated 22.1.2020 in Petition No. 368/TT/2018 and 16.9.2021 in Petition No. 17/RP/2020	1299.99
Claimed by the Petitioner in the instant petition	1545.70
Approved after true-up in this order	1400.54

(₹ in lakh)

Particulars	Ckt 2(a)	Ckt 1(c)
	2018-19 (Pro-rata for 85 days)	2018-19 (Pro-rata for 47 days)
Allowed vide order dated 9.8.2020 in Petition No. 96/TT/2019	2739.42	1555.02
Claimed by the Petitioner in the instant petition	2970.30	1685.54
Approved after true-up in this order	2758.53	1472.76

Determination of Annual Fixed Charges for 2019-24 Tariff Period

62. The Petitioner has submitted tariff forms combining Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a), and Ckt 1(c) for the 2019-24 tariff period. Accordingly, as per Regulation 8(1)(i), Regulation 14(5) and Regulation 15 of the 2019 Tariff Regulations, tariff for the Combined Asset has been worked out for 2019-24 tariff period.

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

(₹ in lakh)

Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8570.78	8814.97	8923.88	8923.88	8923.88
Interest on Loan	13611.17	12991.72	12114.96	11044.31	9973.66
Return on Equity	6280.15	6459.36	6539.29	6539.29	6539.29
Interest on Working Capital	444.33	443.15	433.37	417.84	401.25
O&M Expenses	374.25	387.30	400.90	415.04	429.50
Total	29280.68	29096.50	28412.40	27340.36	26267.58

64. The Petitioner has claimed the following IWC in respect of the Combined Assets for 2019-24 tariff period:



(₹ in lakh)

Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for One month)	31.19	32.28	33.41	34.59	35.79
Working Capital for Maintenance Spares (15% of O&M Expenses)	56.14	58.10	60.14	62.26	64.43
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	3600.08	3587.24	3502.90	3370.73	3229.62
Total Working Capital	3687.41	3677.61	3596.44	3467.57	3329.84
Rate of Interest on working capital (in %)	12.05%	12.05%	12.05%	12.05%	12.05%
Interest on working Capital	444.33	443.15	433.37	417.84	401.25

Effective Date of Commercial Operation ("E-COD")

65. The Petitioner has claimed E-COD of Combined Asset as 6.10.2018. However, based on the trued-up capital cost and COD of Ckt 2, Ckt 1(a), Ckt 1(b), Ckt 2(a) and Ckt 1(c) the E-COD of Combined Asset has been worked out as follows:

Computation of E-COD					
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weightage of the cost (%)	Number of Days from last COD	Weighted Days
Asset – Ckt 2	17.1.2017	13428.03	8.97	757.00	67.89
Asset – Ckt 1(a)	14.4.2017	5441.11	3.63	670.00	24.35
Asset – Ckt 1(b)	2.7.2018	10144.41	6.78	226.00	15.31
Asset – Ckt 2(a)	6.1.2019	61487.92	41.07	38.00	15.61
Asset – Ckt 1(c)	13.2.2019	59223.09	39.55	0.00	0.00
Total		149724.55	100.00		123.00
Effective COD (Latest COD – Total weighted Days) 13.10.2018					

66. E-COD is used to determine the lapsed life of the project as a whole, which works out as (0) Zero years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).



Weighted Average Life (“WAL”)

67. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the transmission system as a whole.

68. WAL has been determined based on the admitted capital cost of individual elements under the transmission system as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. Accordingly, WAL in respect of the Combined Asset has been worked out as 34 years as follows:

Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Asset Cost (in lakh) (1)	Life in Years (2)	Weighted Cost (3)=[(1)x(2)]	Weighted Average Life of Asset (in years) (4)=[(3)/(1)]
Building	0.00	25	0.00	
Transmission Line	140554.96	35	4919423.69	
Sub-Station Equipment	9169.59	25	229239.70	
PLCC	0.00	15	0.00	
IT Equipment and Software	0.00	7	0.00	
Total	149724.55		5148663.39	34.39 years rounded off to 34.00 Years

69. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, the Effective COD of the assets is 13.10.2018 and the lapsed life of the project as a whole, works out as Zero (0) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 34 years.



Capital Cost

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

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

(1) *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 Asset-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.*

(2) *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 ash disposal and utilization including handling and transportation facility;

(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 up to 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.”

(3) 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.

(4) The following shall be excluded from the capital cost of the existing and new projects:

(a) The asset forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-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 decapitalised 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 asset.

(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.”

71. The Petitioner has claimed the capital cost of individual assets which has been added to arrive at the capital cost claimed during 2019-24 tariff period in respect of the transmission assets as per the following details:



(₹ in lakh)

Assets	Apportioned Approved Capital Cost based on RCE-IV	Capital Cost claimed as on 31.3.2019	ACE		Estimated Completion Cost as on 31.3.2024
			2019-20	2020-21	
Combined Assets – 400 kV D/C Teesta-III – Kishanganj Line	173906.01*	159763.40**	5124.00	4125.42	169012.82

*excluding margin money for working capital but including notional IDC on equity in excess of 30%

**including notional IDC of ₹717.01 lakh on equity in excess of 30%.

72. Against the overall apportioned approved capital cost of ₹173906.01 lakh, the estimated completion cost is ₹169012.82 lakh. The individual capital cost of each transmission asset is also within the respective FR apportioned capital cost. Therefore, there is no cost over-run in respect of the transmission assets.

73. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost as admitted by the Commission as on 31.3.2019 in respect of the transmission assets and has been considered as capital cost of the transmission assets as on 1.4.2019 as per the following details:

(₹ in lakh)

Elements	Ckt 2	Ckt 1(a)	Ckt 1(b)	Ckt 2(a)	Ckt 1(c)	Combined Asset
Transmission Line	13428.03	5441.11	10144.41	56799.86	54741.56	140554.96
Sub-station Equipment	0.00	0.00	0.00	4688.06	4481.53	9169.59
Total	13428.03	5441.11	10144.41	61487.92	59223.09	149724.55

74. Accordingly, the admitted capital cost of ₹149724.55 lakh as on 31.3.2019 has been considered as opening capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (ACE)

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



“24. Additional Capitalization within the original scope and up to 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 cutoff 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

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

76. The Petitioner has claimed projected ACE for 2019-24 period on account of balance and retention payments due to undischarged liability projected for works executed within the cut-off date and unexecuted works within cuff-off date. The details of the projected ACE in respect of the Combined Assets are as follows:

Assets	ACE	
	2019-20	2020-21
Combined Asset	5124.00	4125.42

77. The Petitioner has submitted the estimated ACE during 2019-24 tariff period is on account of the following reasons:

(₹ in lakh)						
	Regulation	2019-20	2020-21	2021-22	2022-23	2023-24
Ckt 2 (Cut-off date- 31.3.2020)						
Liability Discharge	24(1)(a)	30.79	385.93	0.00	0.00	0.00
Deferred Works	24(1)(b)	8.09	69.36	0.00	0.00	0.00
Total Add- Cap		38.88	455.29	0.00	0.00	0.00
Ckt 1(a) (Cut-off date- 31.3.2020)						
Liability Discharge	24(1)(a)	0.00	90.60	0.00	0.00	0.00
Deferred Works	24(1)(b)	6.75	17.06	0.00	0.00	0.00
Total Add- Cap		6.75	107.66	0.00	0.00	0.00



Ckt 1(b) (Cut-off date- 31.3.2021)						
Liability Discharge	24(1)(a)	30.79	280.6	0.00	0.00	0.00
Deferred Works	24(1)(b)	1.34	52.30	0.00	0.00	0.00
Total Add- Cap		32.13	332.9	0.00	0.00	0.00
Ckt 2(a) (Cut-off date- 31.3.2022)						
Liability Discharge	24(1)(a)	2055.04	724.23	0.00	0.00	0.00
Deferred Works	24(1)(b)	468.08	890.56	0.00	0.00	0.00
Total Add- Cap		2523.12	1614.79	0.00	0.00	0.00
Ckt 1(c) (Cut-off date- 31.3.2022)						
Liability Discharge	24(1)(a)	2055.04	724.23	0.00	0.00	0.00
Deferred Works	24(1)(b)	468.08	890.56	0.00	0.00	0.00
Total Add- Cap		2523.12	1614.79	0.00	0.00	0.00
Total Combined		5124.00	4125.42	0.00	0.00	0.00

Liability Discharge

78. The details of liability discharged in 2019-20 and liability to be discharged in 2020-21 are as follows:

(₹ in lakh)

Liability discharged in 2019-20						
	Ckt 2	Ckt 1(a)	Ckt 1(b)	Ckt 2(a)	Ckt 1 (c)	Total
Transmission Line	0.00	0.00	0.00	1280.64	1280.64	2561.28
Sub-station	0.00	0.00	0.00	0.00	0.00	0.00
Compensation	30.79	0.00	30.79	80.69	80.69	222.96
Liability against IDC	0.00	0.00	0.00	584.32	584.32	1168.63
Liability against IEDC	0.00	0.00	0.00	109.40	109.40	218.79
Total	30.79	0.00	30.79	2055.04	2055.04	4171.66
Liability to be discharged in 2020-21						
	Ckt 2	Ckt 1(a)	Ckt 1(b)	Ckt 2(a)	Ckt 1 (c)	Total
Transmission Line	354.21	77.07	250.95	545.51	545.51	1773.25
Sub-station	0.000	0.00	0.00	169.84	169.84	339.68
Compensation	31.72	13.53	29.65	8.88	8.88	92.66
Total	385.93	90.60	280.60	724.23	724.23	2205.59

79. The liability discharge for the transmission line and sub-station is due to the fact that liability of the contractors is to be released after achieving COD of the assets in February 2019 upon issuance of Taking Over Certificates (TOC) to the contractors



and as per the provisions of the Contractual Agreements.

80. Demand for compensation against damage of Standing Properties during construction works prior to COD was raised by the respective District Administration after COD from time to time. Accordingly, liability for compensation has been discharged in 2019-20 and also would be discharged in 2020-21 as and when demand is received from the District Administration.

Deferred Works

81. Works carried out after COD in 2019-20 and works to be carried in 2020-21 are as follows:

(₹ in lakh)

Deferred works carried out 2019-20						
Particular	Ckt 2	Ckt 1(a)	Ckt 1(b)	Ckt 2(a)	Ckt 1 (c)	Total
Transmission Line	8.09	6.75	1.34	450.99	450.99	918.16
Compensation	0.00	0.00	0.00	17.09	17.09	34.18
Total	8.09	6.75	1.34	468.08	468.08	952.34
Deferred works to be carried out in 2020-21						
	Ckt 2	Ckt 1(a)	Ckt 1(b)	Ckt 2(a)	Ckt 1 (c)	Total
Transmission Line	33.75	13.54	20.21	890.56	890.56	1848.62
Compensation	35.61	3.52	32.09	0.00	0.00	71.22
Total	69.36	17.06	52.30	890.56	890.56	1919.84

82. The Petitioner has submitted that some of the works namely revetment walls for protection of towers, procurement of capital spares, procurement of Tools & Plants etc. are being done after COD. Outstanding compensation against damage of properties is being raised by the District Administration and same shall be paid after receipt of such bills.

83. Further, the Petitioner has also informed that initial spares for the sub-station



were not ordered by the Petitioner along with the sub-station equipment and the same is being ordered and expenditure is expected to be incurred in 2020-21. However, the Petitioner has not claimed the same in the instant petition and shall claim the spares at the time of true-up.

84. We have considered the submissions of the Petitioner. ACE claimed on account of balance and retention payments and deferred works is allowed under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations. ACE claimed is also within the cut-off date and, hence, allowed. ACE allowed is summarized below which is subject to true-up:

(₹ in lakh)			
Assets	Particulars	ACE	
		2019-20	2020-21
Combined Asset	Balance & Retention Payment	4171.66	2205.58
	Deferred Works	952.34	1919.84

Capital Cost for the 2019-24 Tariff Period

85. Capital cost of the Combined Asset considered for the 2019-24 tariff period is as follows:

(₹ in lakh)			
Capital Cost as on 1.4.2019	Admitted ACE		Capital Cost as on 31.3.2024
	2019-20	2020-21	
149724.55	5124.00*	4125.42	158973.97

*includes discharge of IDC and IEDC

Debt-Equity Ratio

86. Regulations 18 of the 2019 Tariff Regulations provides as follows:

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

Provided that:

i. where equity actually deployed is less than 30% of the capital



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

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

87. Debt-equity ratio is dealt in accordance with Regulations 18 of the 2019 Tariff Regulations. The details of debt-equity considered for the purpose of computation of tariff for the 2019-24 period for the Combined Asset is as follows:

Funding	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	112293.41	75.00	119230.48	75.00
Equity	37431.14	25.00	39743.49	25.00
Total	149724.55	100.00	158973.97	100.00

Depreciation

88. 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 Asset-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 asset”

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

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

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

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

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the



generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

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

89. We have considered the submissions of the Petitioner. WAROD has been worked out and placed as Annexure-VI after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the Combined Asset for the 2019-24 tariff period s is as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	149724.55	154848.55	158973.97	158973.97	158973.97
B	Addition during the year 2019-24 due to projected ACE	5124.00	4125.42	0.00	0.00	0.00
C	Closing Gross Block (A+B)	154848.55	158973.97	158973.97	158973.97	158973.97
D	Average Gross Block [(A+C)/2]	152286.55	156911.26	158973.97	158973.97	158973.97
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
F	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
G	Balance useful life at the beginning of the year (Year)	34.00	33.00	32.00	31.00	30.00
H	Aggregated Depreciable Value [(D*90%)]	137057.90	141220.13	143076.57	143076.57	143076.57
I	Combined Depreciation during the year (D*E)	8040.73	8284.91	8393.83	8393.83	8393.83
J	Cumulative Depreciation at the end of the year	11649.92	19934.84	28328.66	36722.49	45116.31



		Combined Asset				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
K	Remaining Aggregate Depreciable Value at the end of the year	125407.97	121285.30	114747.91	106354.09	97960.26

Interest on Loan (IoL)

90. 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 asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

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

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

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

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

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

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

(7) *The changes to the terms and conditions of the loans shall be reflected from*



the date of such re-financing”.

91. WAROI on loan has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Assets for the 2019-24 tariff period is as follows:

		(₹ in lakh)				
		Combined Asset				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	112293.41	116136.41	119230.48	119230.48	119230.48
B	Cumulative Repayments up to Previous Year	3609.19	11649.92	19934.84	28328.66	36722.49
C	Net Loan-Opening (A-B)	108684.22	104486.49	99295.64	90901.82	82507.99
D	Addition due to ACE	3843.00	3094.07	0.00	0.00	0.00
E	Repayment during the year	8040.73	8284.91	8393.83	8393.83	8393.83
F	Net Loan-Closing (C+D-E)	104486.49	99295.64	90901.82	82507.99	74114.17
G	Average Loan [(C+F)/2]	106585.36	101891.07	95098.73	86704.90	78311.08
H	Weighted Average Rate of Interest on Loan (%)	11.99	12.00	12.00	12.00	12.00
I	Interest on Loan (G*H)	12779.11	12222.81	11409.54	10402.48	9395.42

Return on Equity (RoE)

92. Regulations 30 and 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 cut- off 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."

93. The Petitioner has submitted that it has adopted New Corporate Tax regime introduced by Gol from FY 2019-20 onwards. As per the provisions under New Corporate Tax regime, the income tax liability during the 2019-24 control period is estimated to be nil. Accordingly, the Petitioner has not claimed any amount towards



the income tax liability/ payment in the instant Petition. The Petitioner has, however, submitted that if any tax liabilities arise in future the same shall be claimed during truing up of tariff.

94. Accordingly, the MAT rate for 2019-24 tariff period has not been considered for the purpose of calculating RoE in the instant order and the same shall be considered at the time of truing up of tariff with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset is as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	37431.14	38712.14	39743.49	39743.49	39743.49
B	Addition due to ACE	1281.00	1031.36	0.00	0.00	0.00
C	Closing Equity (A+B)	38712.14	39743.49	39743.49	39743.49	39743.49
D	Average Equity [(A+C)/2]	38071.64	39227.82	39743.49	39743.49	39743.49
E	Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (%)	0.000	0.000	0.000	0.000	0.000
G	Rate of Return on Equity (Pre-tax)	15.500	15.500	15.500	15.500	15.500
H	Return on Equity (Pre-tax) (D*G)	5901.10	6080.31	6160.24	6160.24	6160.24

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

95. O&M Expenses claimed by the Petitioner for the Combined Asset is as follows:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line:					
400 kV Teesta III-Kishanganj Transmission System (km)	215.000	215.000	215.000	215.000	215.000
Norm (₹ lakh/MVA)	1.322	1.368	1.416	1.466	1.517
Total Transmission Expenses	284.23	294.12	304.44	315.19	326.15
Sub-station:					
Two number of bays and Two number of 63 MVAR reactor bays at Kishanganj	4	4	4	4	4
Norm (₹ lakh/bay)	22.51	23.30	24.12	24.96	25.84



400 kV					
Total Sub-station Expenses	90.02	93.18	96.46	99.85	103.35
Total O&M Expenses	374.25	387.30	400.90	415.04	429.50

96. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

“35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the combined 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-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958



Gazuwaka HVDC Back-to-Back station (₹ 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.”

97. The O&M Expenses allowed for Combined Asset is as follows:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line:					
400 kV Teesta III-Kishanganj Transmission System	215.000	215.000	215.000	215.000	215.000
Norm (₹ lakh/MVA)	1.322	1.368	1.416	1.466	1.517
Total Transmission Expenses	284.23	294.12	304.44	315.19	326.15
Sub-station:					
Two number of bays and Two number of 63 MVAR reactor at Kishanganj	4	4	4	4	4
Norm (₹ lakh/bay)	22.51	23.30	24.12	24.96	25.84
400 kV					
Total Sub-station Expenses	90.02	93.18	96.46	99.85	103.35
Total O&M Expenses	374.25	387.30	400.90	415.04	429.50

Interest on Working Capital ("IWC")

98. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as follows:

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

.....



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

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

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

(2) 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.

(3) 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. Definition - 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;”

99. 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%.

100. 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, whereas ROI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) and from 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on



1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon in respect of the Combined Asset is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for One month)	31.19	32.28	33.41	34.59	35.79
Working Capital for Maintenance Spares (15% of O&M expenses)	56.14	58.10	60.14	62.26	64.43
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	3382.79	3373.77	3294.27	3170.30	3037.93
Total Working Capital	3470.11	3464.14	3387.82	3267.14	3138.15
Rate of Interest on Working Capital (%)	12.05	11.25	10.50	10.50	10.50
Interest on working capital	418.15	389.72	355.72	343.05	329.51

Annual Fixed Charges for the 2019-24 Tariff Period

101. The transmission charges allowed in respect of the Combined Asset for the 2019- 24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8040.73	8284.91	8393.83	8393.83	8393.83
Interest on Loan	12779.11	12222.81	11409.54	10402.48	9395.42
Return on Equity	5901.10	6080.31	6160.24	6160.24	6160.24
Operation and Maintenance	374.25	387.30	400.90	415.04	429.50
Interest on Working Capital	418.15	389.72	355.72	343.05	329.51
Total	27513.35	27365.05	26720.23	25714.64	24708.50

Filing Fee and Publication Expenses

102. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations.

103. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication expenses paid by the Petitioner. Accordingly, 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.

License Fee and RLDC Fees and Charges

104. The Petitioner has claimed reimbursement of RLDC fee and licence fee. The Petitioner is entitled for reimbursement of license fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner is 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

105. 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.

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

Security Expenses

107. The Petitioner has submitted that as per Regulation 35(3)(c) of the 2019 Tariff Regulations, the Security Expenses and Capital Spares for transmission system are be allowed separately after prudence check. A separate petition shall be filed for



claiming the overall Security Expenses and consequential IWC. Consider actual security expenses of 2018-19 for claiming estimated Security Expenses for 2019-20 which will be subject to true up at the end of the year based on actual expenses. Thus, petition for Security Expenses will be filed on a year to year basis with annual true-up. Similarly petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 will be filed on the basis of actual expenses of previous year subject to true up at the end of the year on actual expenses. The difference, if any, between the estimated Security Expenses and actual Security Expenses calculated as per audited accounts, on year to year basis may be allowed to recover from beneficiaries. Further, the Petitioner will claim capital spares at the end of tariff block as per actuals. Accordingly, Security Expenses and capital spares are not claimed in the instant petition and will be claimed separately in a separate petition along with all other assets. The Petitioner has sought liberty to approach the Commission with a separate petition.

108. We have considered the submission of the Petitioner. The Petitioner has submitted that a separate petition will be filed for security expenses and capital spares. Any petition/ application filed by the Petitioner in this regard will be dealt in accordance with the applicable Tariff Regulations.

Capital Spares

109. 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

110. Haryana Utilities submitted that PTC entered into a PPA dated 28.6.2006 with the Petitioner and then entered into a PSA with HPPC on 21.9.2006 for resale of 200 MW of power. The Haryana Utilities did not have any direct agreement with the Petitioner. It has been further submitted by Haryana utilities that since the basis on which the PSA was entered into had completely changed, due to substantial time and cost over-run, the Haryana Utilities terminated the PSA vide termination letter dated 27.3.2018. Therefore, the Haryana Utilities are no more beneficiaries of the instant transmission project and are not even LTA customer. Further, PTC has already relinquished the LTA quantum it was granted for evacuation of power to Haryana Utilities and vide letter dated 30.5.2019 has informed the Haryana Utilities about the relinquishment. Therefore, Haryana Utilities cannot be made liable for payment of transmission charges.

111. In response, the Petitioner has submitted that while several Respondents filed replies in Petition No. 108/TT/2016, no reply was received from Haryana Utilities in any of the petitions for determination of transmission tariff for the instant assets, namely, Petition No. 108/TT/2016, Petition No. 368/TT/2018 and Petition No. 96/TT/2019. Further, the submissions made by the Haryana Utilities in the instant petition do not in any way relate to the present petition and are admittedly the subject matter of Petition No. 110/MP/2019. The 400 kV D/C Teesta III- Kishanganj transmission line along with 2 nos. line bays and 2 nos. 63 MVAR reactors is an ISTS line and the sharing of its transmission charges is not linked with PPAs or LTAs of the Long Term Transmission Customers.



112. We have considered the submissions of the Petitioner and Haryana Utilities. Haryana Utilities have contended that they do not have direct agreement and they have terminated PSA with PTC and, therefore, they are not liable to pay any transmission charges for the transmission assets. The issue of termination of PSA by Haryana Utilities and other issues have already been raised by PTC in Petition No. 110/MP/2019, wherein the arguments were heard by the Commission on 13.1.2022 and order is reserved. As the issues raised by Haryana Utilities will be dealt Petition No. 110/MP/2019, we are not going into those issues in this order. The transmission charges for the transmission assets are already being recovered by the Petitioner under provisions of the applicable Sharing Regulations.

113. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by 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 Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

114. To summarise,



(a) The trued-up AFC allowed in respect of the transmission assets for 2014- 19 tariff period are as follows:

(₹ in lakh)

Particulars	Asset – Ckt 2			Asset – Ckt 1(a)	
	2016-17 (Pro-rata for 74 day)	2017-18	2018-19	2017-18	2018-19 (Pro-rata for 352 days)
Annual Fixed Charges	473.86	2540.97	2419.88	1019.41	990.75

(₹ in lakh)

Particulars	Asset – Ckt 1(b)	Asset – Ckt 2(a)	Asset – Ckt 1(c)
	2018-19 (Pro-rata for 273days)	2018-19 (Pro-rata for 85days)	2018-19 (Pro-rata for 47days)
Annual Fixed Charges	1400.54	2758.53	1472.76

(b) AFC allowed in respect of the Combined Asset for the 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charge	27513.35	27365.05	26720.23	25714.64	24708.50

115. Annexure-I, Annexure-II, Annexure-III, Annexure-IV, Annexure-V and Annexure-VI given hereinafter form part of the order.

116. This order disposes of Petition No. 35/TT/2021 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Petition No.:	35/TT/2021
Period	2014-19 Tariff

Annexure – I

Ckt 2

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
		2016-17	2017-18	2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	11924.87	249.35	1141.27	112.54	13428.03	5.28	-	-	636.22	672.93	706.03
TOTAL	11924.87	249.35	1141.27	112.54	13428.03		-	-	636.22	672.93	706.03
Average Gross Block (₹ in lakh)							-	-	12049.55	12744.86	13371.76
Weighted Average Rate of Depreciation (%)							-	-	5.28	5.28	5.28



Petition No.:	35/TT/2021
Period	2014-19 Tariff

Annexure – II

Ckt 1(a)

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh) 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	5102.51	338.60	5441.11	5.28	-	-	-	278.16	287.10
TOTAL	5102.51	338.60	5441.11		-	-	-	278.16	287.10
Average Gross Block (₹ in lakh)					-	-	-	5268.25	5437.55
Weighted Average Rate of Depreciation (%)					-	-	-	5.28	5.28



Petition No.:	35/TT/2021
Period	2014-19 Tariff

Annexure – III

Asset – Ckt 1(b)

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depre ciation (%)	Annual Depreciation as per Regulations				
		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	9662.19	482.22	10144.41	5.28	-	-	-	-	522.89
TOTAL	9662.19	482.22	10144.41		-	-	-	-	522.89
			Average Gross Block (₹ in lakh)		-	-	-	-	9903.30
			Weighted Average Rate of Depreciation (%)		-	-	-	-	5.28



Petition No.:	35/TT/2021
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Annexure – IV

Asset – Ckt 2(a)

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh) 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	56390.49	409.37	56799.86	5.28	-	-	-	-	2988.22
Sub Station	4688.06	-	4688.06	5.28	-	-	-	-	247.53
TOTAL	61078.55	409.37	61487.92		-	-	-	-	3235.75
Average Gross Block (₹ in lakh)					-	-	-	-	61283.23
Weighted Average Rate of Depreciation (%)					-	-	-	-	5.28



Period	2014-19 Tariff
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Annexure – V

Asset – Ckt 1(c)

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
		2014-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	54332.19	409.37	54741.56	5.28	-	-	-	-	2879.55
Sub Station	4481.53	-	4481.53	5.28	-	-	-	-	236.62
TOTAL	58813.72	409.37	59223.09		-	-	-	-	3116.17
Average Gross Block (₹ in lakh)					-	-	-	-	59018.40
Weighted Average Rate of Depreciation (%)					-	-	-	-	5.28



Petition No.:	35/TT/2021
Period	2019-24 Tariff

Annexure –VI

Combined Asset

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Transmission Line	140554.96	8821.06	149376.02	5.28	7554.23	7787.11	7887.05	7887.05	7887.05
Sub Station	9169.59	428.36	9597.95	5.28	486.50	497.80	506.77	506.77	506.77
TOTAL	149724.55	9249.42	158973.97		8040.73	8284.91	8393.83	8393.83	8393.83
Average Gross Block (₹ in lakh)					152286.55	156911.26	158973.97	158973.97	158973.97
Weighted Average Rate of Depreciation (%)					5.28	5.28	5.28	5.28	5.28

