

BEFORE

THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

Petition No. ____ /TT/ ____

IN THE MATTER OF: Petition for determination of tariff under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for **Asset-1:** 765/400 kV, 1x1500 MVA ICT-3 along with associated 765 & 400 kV ICT bays at Banaskanta Substation, **Asset-2:** 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO) under **“Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C”**.

Power Grid Corporation of India Ltd

---PETITIONER

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

Vs

**Madhya Pradesh Power Management Company
Ltd.**

---RESPONDENTS

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

and Others

Place: Gurugram

Petitioner

Date: 01.07.2025

(Angaru Naresh Kumar)

Dy. General Manager (Commercial)

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FILED BY
POWER GRID CORPORATION OF INDIA LTD.

Place: Gurugram

REPRESENTED BY

DATED: 01.07.2025

Angaru Naresh Kumar
Dy. General Manager (Commercial)

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Vs

Madhya Pradesh Power Management Company Ltd.

---RESPONDENTS

Shakti Bhawan, Rampur
Jabalpur - 482 008
Represented by Its MD
and Others

To
The Secretary
Central Electricity Regulatory Commission
New Delhi 110001

Sir,

The present tariff Petition is filed under Section 79 (1) (d) read with Section 62 of Electricity Act 2003, Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for the determination of

Transmission tariff from DOCO to 31.03.2029 and same may be pleased to be registered and taken on record by the Hon'ble Commission.

Place: Gurugram
DATED: 01.07.2025

FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

Angaru Naresh Kumar
Dy. General Manager (Commercial)

BEFORE

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Vs

Madhya Pradesh Power Management Company Ltd.

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

---RESPONDENTS

and Others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

Registered office: B-9, Qutab Institutional Area,
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Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

---PETITIONER

VERSUS

1. **MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.**
SHAKTI BHAWAN, RAMPUR, JABALPUR - 482 008
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REPRESENTED BY ITS MD
2. **MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.**
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REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)
5. **DNHDD POWER DISTRIBUTION CORPORATION LIMITED**
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EMAIL- BHAVIKSHAH@TORRENTPOWER.COM
CONTACT NO- 9227758405
REPRESENTED BY ITS SECRETARY (FIN.)
6. **CHHATTISGARH STATE POWER DISTRIBUTION COMPANY LIMITED**
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EMAIL- CECOMCSEB@REDIFFMAIL.COM
CONTACT NO- 982618253
REPRESENTED BY ITS CHAIRMAN

7. **GUJARAT ENERGY TRANSMISSION CORPORATION (GETCO)**

SARDAR PATEL VIDYUT BHAVAN, RACECOURSE, VADODARA-390007

EMAIL-STU.GETCO@GEBMAIL.COM

CONTACT NO- 0265-2353086

REPRESENTED BY ITS MANAGING DIRECTOR

8. **CENTRAL TRANSMISSION UTILITY OF INDIA LTD. (CTUIL)**

SAUDAMINI, PLOT NO. 02, SECTOR 29

GURUGRAM – 122001

REPRESENTED BY ITS CHIEF GENERAL MANAGER

FILED BY

POWER GRID CORPORATION OF INDIA LTD

REPRESENTED BY:

PLACE: Gurugram

DATE: 01.07.2025

Angaru Naresh Kumar

Dy. General Manager (Commercial)

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Represented by Its MD

and Others

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, Executive Director (Commercial & RC), POWERGRID
2. Shri. V.C. Sekhar, Senior General Manager, POWERGRID
3. Shri. Zafrul Hasan, General Manager, POWERGRID
4. **Shri Angaru Naresh Kumar, Dy. General Manager, POWERGRID**
5. Shri Vishal Sagar, Dy. General Manager, POWERGRID
6. Shri Arjun Malhotra, Manager (Law), POWERGRID

I, Angaru Naresh Kumar, the Petitioner above named do hereby nominate to act, plead and appear on my behalf in the aforesaid matter.

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this **01st day of July 2025.**

PETITIONER

POWER GRID CORPORATION OF INDIA LTD.

GURGAON

Angaru Naresh Kumar

DATED: 01.07.2025

Dy. General Manager (Commercial)

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A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as **“POWERGRID/Petitioner”**) is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated

and economical interstate transmission system (“**ISTS**”). POWERGRID operates and functions within the regulatory control of this Hon’ble Central Electricity Regulatory Commission (hereinafter referred to as “**Hon’ble Central Commission**”). Tariff for the transmission system established by POWERGRID is required to be determined by this Hon’ble Central Commission in accordance with the Tariff Regulations as notified by this Hon’ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

(ii) Brief background of the Respondent(s):

POWERGRID has impleaded distribution licensees and Government department of the respective states which are engaged in distribution of electricity in Western Region of India. The respondents are also ‘Designated Inter State Transmission Customer’ (hereinafter referred to as ‘DICS’) in terms of the 2020 Sharing Regulations from Western Region.

(iii) Background of Transmission Assets:

2. POWERGRID is filing the present petition for determination of tariff for the following Assets which have been implemented under “**Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C**” for the following:

Asset No	Asset Name	SCOD	DOCO
Asset-1	765/400 kV, 1x1500 MVA ICT-3 along with associated 765 & 400 kV ICT bays at Banaskanta Substation	31.03.2025	21.11.2024
Asset-2	400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO)	31.03.2025	03.04.2025

(iv) Brief description of important events relevant to the Petition:

S.No	Event	Description	Date
1	7 th NCT Minutes of Meeting	Approval of Scheme	03.12.2021
2	CEA minutes of meeting regarding modification of scope of work	For modification of scope	05.01.2023
3	11 th NCT Minutes of Meeting	Approval towards modification of scope	28.12.2022

S.No	Event	Description	Date
4	585 th OCC meeting of WRPC	Approval of early commissioning of ICT-3 at Banaskanta substation	22.11.2024
5	CEA MOM	Termination of 400 kV D/C Banaskantha – Prantij line	19.03.2025 & 21.03.2025
6	GETCO Letter for Interim Arrangement	Proposed Interim arrangement of termination at Sankhari Substation	13.03.2025

(v) Summary of Claims:

- POWERGRID is seeking determination of tariff for aforesaid transmission assets on estimated capital cost comprising of capital cost incurred up to Commercial Operation Date (“**COD**”) and projected additional capital expenditure in accordance with terms of Regulation 24 & 25 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (“**Tariff Regulations, 2024**”).
- The details of FR approved cost vis-à-vis claimed capital cost as on COD and projected additional capital expenditure are as under:

₹ in Lakhs						
Asset No	Approved Cost (FR)	Expenditure Up to DOCO	Projected Expenditure for FY			Estimated Completion Cost
			2024-25	2025-26	2026-27	
Asset 1	9230.12	1613.76	193.41	6250.17	948.03	9005.38
Asset-2	9389.31	6524.28	--	1709.10	643.42	8876.80
TOTAL	18619.43	8091.22	193.41	7959.27	1591.45	17882.18

- Details of Time- Overrun:** There is no time overrun in the commissioning of the above assets, as the schedule is aligned with the establishment of the 400/220 kV Prantij substation and the 400 kV Sankhari-Prantij D/C line by GETCO.
The 400 kV D/C Sankhari-Prantij transmission line is still under construction along with the 400/220 kV Prantij substation. According to GETCO's letter dated 13.03.2025 to CEA, the 400 kV D/C Prantij-Sankhari transmission line is expected to be completed by March 2027.
- It is prayed to Hon'ble commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expenses and RLDC fee & charges etc.

7. Details of tariff claimed are as under:

₹ in Lakhs

Sl. No.	Name of the Asset	2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	271.51	1270.02	1826.75	1896.08	1895.42
2	Asset-2	--	1220.48	1386.81	1410.62	1384.12

B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:

8. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003.
9. POWERGRID being transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the Tariff Regulations, 2024.
10. That the present petition covers approval of transmission tariff for following Asset:

Sl. No	Asset Name	COD
1	765/400 kV, 1x1500 MVA ICT-3 along with associated 765 & 400 kV ICT bays at Banaskanta Substation	21.11.2024
2	400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO)	03.04.2025

C. Approval of the Scheme

11. The scheme has been approved in the 7th NCT meeting of CEA held on 03.12.2021 with scope of work as follows:

- i) Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA along with associated bays.
- ii) Establishment of Banaskantha -Sankhari 400 kV 2nd D/c line along with associated bays at both ends.

The SCOD was March-2025.

Subsequently, CTUIL vide OM Ref No: CTUIL/OM/03, dated 23.12.2021 has conveyed the implementation of the above ISTS Transmission Scheme in line with the NCT letter dt: 22.12.2021 under RTM mode by POWERGRID (implementing agency). Accordingly, investment approval was accorded vide memorandum dated 07.07.2022 considering implementation schedule as 31st March' 2025.

Copy of relevant extracts of 7th NCT meeting and CTUIL OM are enclosed as **Encl.- 1 & 2** respectively.

D. Implementation Schedule

12. That the petitioner has been entrusted with the implementation of "**Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C**". The investment approval of the project was accorded by the Committee on Investment on Projects in its 130th meeting held on 6th July 2022 vide Memorandum dated 07.07.2022 at an estimated cost of ₹ 186.19 crores including Interest During Construction (IDC) of ₹ 10.40 crores based on March 2022 price level; a copy whereof is attached hereto as **Encl.-3**.

E. SCOPE OF WORK:

The scope of work covered under the project **Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C** " is as follows:

a) Transmission Line:

- i) **Banaskanta- Sankhari 400 kV 2nd D/C line -26 Kms**

b) Substation:

- i) **765/400 kV Banaskanta S/Stn (PG) Extension**

765 kV

- a) Transformer bays: 1 No.
- b) 1x1500 MVA, 765/400 kV ICT: 1 No.

400kV

- a) Transformer bays: 1 No.
- b) Line Bays: 2 Nos

ii) 400/220 kV Sankhari S/Stn (GETCO) Extension.

400 kV

- a) Line bays: 2 Nos.

The SLD and DPR extract of the scheme is attached hereto as **Encl. – 4 & 5** respectively

It is submitted that as per Regulation 9 of the CERC (Terms and Conditions of Tariff) Regulations, 2024, the following condition has to be fulfilled while filing the Tariff petition for 2024-29 tariff block: -

Quote

“Provided that where the transmission system comprises various elements, the transmission licensee shall file an application for determination of tariff for a group of elements on incurring of expenditure of not less than 100 Crore or 70% of the cost envisaged in the Investment Approval, whichever is lower, as on the anticipated date of commercial operation”

Unquote

The entire scope of the project has been completed in the instant petition. Accordingly, the instant petition is being filed in compliance with the Regulation 9 of CERC Regulations, 2024.

13. Modification in scope of work of “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C” scheme

In a meeting amongst CTUIL & GETCO on 09.11.2022, GETCO requested CTU to review the Banaskantha -Sankhari 400 kV 2nd D/c line considering the issue of high fault level at 400 kV level of Sankhari (Veloda) S/s (~45 kA in 2026-27 time-frame) as well as RE connectivity to the tune of 700-800 MW which has been granted by GETCO at 220 kV level of Sankhari S/s. Further, the matter was deliberated in meetings held

on 16.11.2022 & 18.11.2022 amongst CEA, CTUIL, POSOCO & GETCO wherein following emerged:

- GETCO informed that Sankhari – Prantij 400kV D/c line along with Prantij 400/220kV S/s is currently under tendering stage with target completion by March 2025.
- POWERGRID informed that they have already awarded the Banaskantha – Sankhari 400 kV 2nd D/c line.
- To resolve the issues raised by GETCO, it was decided that instead of establishing Banaskantha -Sankhari 400 kV 2nd D/c line under ISTS and Sankhari – Prantij 400kV D/c (twin AL-59) line under Intra-state, Banaskantha – Prantij 400 kV D/c direct line (~150 km.) along with 63 MVAR, 420 kV switchable line reactors on each ckt at Prantij S/s end may be established. This would reduce the fault level at Sankhari to below 40 kA and would also help to feed load in Prantij area directly from Banaskantha (PG) S/s thereby relieving overloading issues on Banaskantha – Sankhari 400 kV D/c line.
- POWERGRID and GETCO were requested to coordinate with each other and confirm the modalities of implementation of Banaskantha – Prantij 400 kV D/c direct line.

In this direction, POWERGRID vide e-mail dated 25.11.2022 informed that although they have awarded transmission Line and S/s Extension packages at both sides (i.e. Banaskantha & Sankhari ends) and construction work is in progress, they are ready to implement Banaskantha – Prantij 400 kV D/c line along with 63 MVAR, 420 kV switchable line reactor on each ckt at Prantij S/s end (instead of earlier scope of Banaskantha – Sankhari 400 kV 2nd D/c line).

Subsequently, GETCO vide e-mail dated 20.12.2022 informed that in order to avoid sectionalization arrangement at Sankhari or bypassing of lines at later stage (i.e. idle bays at Sankhari substation), it would be advisable to review the planned scheme at this stage itself. In view of the same, GETCO requested that the Banaskantha - Prantij 400 kV D/c line may be implemented under ISTS and 400 kV D/C Sankhari - Prantij line under Intra-State scheme may be dropped.

Accordingly, a meeting was held on 05.01.2023 (**Enclosed as Encl-6**) under the chairmanship of Chairperson, CEA, to discuss the proposal. Representatives of CTUIL, GETCO & POWERGRID participated in the meeting. In the meeting, the following were agreed:

- i) Banaskantha-Sankhari 400 kV 2nd D/c line (being implemented by POWERGRID under RTM) may not be terminated at Sankhari S/s, instead it may be terminated on the tower outside Sankhari S/s.
- ii) GETCO to implement the Prantij-Sankhari 400kV D/c line and connect it with Banaskantha- Sankhari 400 kV 2nd D/c line being implemented by POWERGRID.
- iii) 400 kV line bays (2 Nos.) at Sankhari S/s may be deleted from the scope of POWERGRID.
- iv) POWERGRID and GETCO would finalize the type of conductor and tower configuration within two weeks to ensure compatibility of the transmission lines being implemented by them.
- v) POWERGRID and GETCO would implement the complete scope of work in matching timeframe so that no asset remains unutilized.

CTUIL informed that POWERGRID vide email dated 16.01.2023 has forwarded the Minutes of the meeting held on 10.01.2023 between POWERGID and GETCO in this regard. In the meeting, the implementation modality, location of interconnection and timeframe of the proposed arrangement had been mutually agreed between POWERGRID & GETCO.

NCT noted the same and approved the following revised scope of works of “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C”:

SI No.	Original Scope of the Transmission Scheme	Modified scope of the transmission scheme
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA 765/400 kV, 1500 MVA ICT: 1 Nos 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA 765/400 kV, 1500 MVA ICT: 1 Nos 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No
2	Banaskantha -Sankhari 400 kV 2nd D/c line (26 km) Line Length: 26 km 400 kV line bays- 4 Nos. (2 Nos. at Banaskantha and 2 Nos. at Sankhari)	Banaskantha- Sankhari section of Banaskantha – Prantij 400 kV D/c line (Quad ACSR/AAAC/AL59 moose equivalent) Route length: 26 km 400 kV line bays - 2 Nos. (at Banaskantha)

***The implementation timeframe** was set to align with the establishment of the Prantij 400/220 kV substation and the Prantij-Sankhari section of the Banaskantha-Prantij 400 kV D/C line, which was kept as March 2025.*

The approval towards modification of scope of the assets under subject transmission system have been discussed in the 11th NCT meeting held on 28th December 2022 (1st Sitting) and 17th January 2023 (2nd Sitting) and minutes issued on 01.02.2023. The relevant extract of minutes of the meeting is enclosed as **Encl-7**.

Subsequently, during the 585th OCC meeting of the Western Region Power Committee (WRPC) held on 22.11.2024, POWERGRID informed that the 765/400 kV ICT-3 at Banaskantha successfully completed a 24-hour trial run operation. The transformer has significantly contributed to improving system performance, safety, and grid reliability, operating within a load range of 600–700 MW and supporting the N-1 reliability criterion. Accordingly, WRPC is requested to grant consent for the declaration of DOCO for ICT-3 at Banaskantha.

In view of the improved system performance, security, and grid reliability following the synchronization of the 765/400 kV ICT-3 at Banaskantha, the OCC Subcommittee approved the proposal. Consequently, the DOCO was declared on 21.11.2024, ahead of the scheduled commissioning date of 31.03.2025. Accordingly, the DOCO has been declared as 21.11.2024. The CMD, CEA, RLDC and DOCO certificates of Asset-1 are enclosed as **Encl-8** and the extract of 585th OCC minutes of WRPC dt: 02.01.2025 is enclosed as **Encl-9**.

“Furthermore, a meeting was convened by CEA on 19.03.2025 & 21.03.2025 to discuss the interim termination of the 400 kV D/C Banaskantha–Prantij line at the 400 kV Veloda substation, until the completion of the 400 kV D/C Sankhari (Veloda)–Prantij line section by GETCO. In this meeting, GETCO proposed utilizing the Banaskantha–Sankhari (Veloda) section—up to the tower located outside the Sankhari substation—by extending the line to the 400 kV Sankhari substation. This interim arrangement would use the two available 400 kV feeder bays at the Sankhari substation for termination. The relevant discussions from the meetings held on 19.03.2025 and 21.03.2025 are summarized below:

QUOTE

1. CTUIL and GETCO were in agreement with the proposal as it would provide relief in the line loadings, however, the fault level observed at Sankhari S/s with the termination of Banaskantha -Sankhari 400 kV D/c line at Sankhari S/s was about 43 kA as per studies, whereas the S/s has been designed for 40 kA. GETCO informed that the substations equipment are rated for 63 kA for 1 sec and 40 kA for 3 sec. In case of any fault, the faulty section is isolated within milliseconds and hence, the proposal may be agreed to. WRLDC opined that the protection settings need to be reviewed so that any fault is cleared well within one second.
2. GETCO stated that all the cost incurred in this interim arrangement and further in final arrangement would be borne by GETCO. It was deliberated that till the interim arrangement is in place, GETCO should not connect any new generation at Sankhari S/s as it would increase the fault level. GETCO agreed to the same.
3. On a query, GETCO stated that 2 Nos. of 400 kV spare bays are already available at Sankhari S/s wherein the Banaskantha – Sankhari 2nd D/c line can be terminated. Also, the line termination can be done within 10 days of approval (i.e. by March 2025 end).

After detailed discussions, the following was agreed:

After deliberations, the proposal was agreed subject to the following:

Protection settings need to be reviewed and should be deliberated in the Protection Committee Meeting of Western Region Power Committee (WRPC).

All the cost incurred in termination of the line at Sankhari S/s would be borne by GETCO. GETCO should expedite the construction of Prantij -Sankhari line and restore the system to the original agreed configuration (Banaskantha – Prantij 400 kV D/c line) at the earliest. The associated cost of restoration of final line configuration would have to be borne by GETCO.

Till the interim arrangement (Banaskantha- Sankhari 400 kV D/c line terminated at Sankhari S/s) is in place, GETCO should not connect any new generation at Sankhari S/s as it would increase the fault level.

UNQUOTE

Since the 400 kV Banaskantha–Sankhari D/C transmission line (up to the tower outside the Sankhari substation) and the associated bays at Banaskantha were idle-charged from 19.11.2024 (Bay-1) and 04.12.2024 (Bay-2) respectively, the line was synchronized on 01.04.2025 with the two spare 400 kV bays available at the Sankhari substation. This was done following GETCO's confirmation to extend the line to the 400 kV Sankhari substation as an interim arrangement, until the system is restored to the originally agreed configuration at GETCO's own cost.

Accordingly, the DOCO of Asset-2 has been declared as 03.04.2025 after successful completion of trial operation of 24 hrs. The CMD, CEA, RLDC and DOCO certificates of Asset-2 are enclosed as **Encl-10** and the relevant extract of minutes of meeting convened by CEA on 19.03.2025 & 21.03.2025, issued on 24.03.2025 is enclosed as **Encl-11**.

F. Investment Approval

As per the investment approval dated 07.07.2022, the subject project was scheduled to be commissioned by March' 2025. Against which the subject assets were put under commercial operation as under:

Asset	SCOD	DOCO	Delay (in days)
Asset-1	31.03.2025	21.11.2024	NIL
Asset-2	31.03.2025	03.04.2025	NIL*

The delay is NIL, as the line has to be commissioned in coordination with the establishment of the Prantij substation and the 400 kV Sankhari-Prantij D/C line by GETCO (as per IA). According to GETCO's letter dated 13.03.2025 to CEA, the commissioning is now expected by March 2027 (Encl-12**).*

It is submitted that the entire scope of the instant project is completed and covered under the instant petition.

G. Estimated Completion Cost:

The present Petition for determination of tariff is filed in line with provision 9(1) of tariff Regulation 2024 applicable for the 2024-29 period. The capital cost incurred up to DOCO and projected to be incurred during 2024-25, 2025-26, is duly certified in Auditor Certificate. Copy of the said Auditor Certificate(s) is enclosed and marked as **Encl-13**.

₹ in Lakhs						
Asset No	Approved Cost (FR)	Expenditure Up to DOCO	Projected Expenditure for FY			Estimated Completion Cost
			2024-25	2025-26	2026-27	
Asset 1	9230.12	1613.76	193.41	6250.17	948.03	9005.38
Asset-2	9389.31	6524.28	-	1709.10	643.42	8876.80
TOTAL	18619.43	8138.04	193.41	7959.27	1591.45	17882.18

Hence, it may be seen from the above that against the approved cost of ₹ 18619.00 Lakhs as per FR, the estimated completion cost is ₹17882.17 Lakhs. Thus, there is no cost overrun in commissioning of the above assets w.r.t the cost considered in the FR.

14. Cost variation:

The variation between estimated completion cost vis-à-vis approved cost for the Assets covered under instant petition is given as hereunder:

₹ in Lakhs			
Asset No.	Approved Cost as per FR (a)	Estimated completion Cost (b)	Cost Variation (d=b-a)
Asset-1	9230.12	9005.37	(-) 224.75
Asset-2	9389.31	8876.80	(-) 512.51

The item-wise cost variation between FR approved cost and estimated completion cost have been given in Form-5.

a. Reasons for Variation in Cost Estimate

It may be seen from the above table that there is a variation of Rs 8.41 crore (i.e. - 4.51 %) from the approved cost of Rs 186.19 crore. The head wise variation in cost is explained hereunder:

Description	FR Cost		Actual Cost		Cost variation	
	Asset-1	Asset-2	Asset-1	Asset-2	Asset-1	Asset-2
Equipment cost	7818.6	8129.9	8761.98	8231.26	943.38	101.36
IEDC	861.90	769.06	164.87	184.98	-697.03	-584.08
IDC	549.61	490.39	78.52	460.57	-471.09	-29.82
Total	9230.12	9389.31	9005.37	8876.80	-224.75	-512.51

On detailed examination, it may further be seen that the variation in equipment's cost of Rs 9.43 crore in Asset-1 and Rs 1.01 Cr in Asset-2 has been incurred from the time

of Investment approval of project till award of contract (DPR to LOA) for approved scope based on prices received as per transparent competitive bidding process.

It is submitted that through the open competitive bidding process, the lowest possible market prices for required product/services/as per detailed designing is obtained and contracts are awarded on the basis of the lowest evaluated eligible bidder on an overall basis. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements. Whereas the estimates are prepared by the petitioner as per well-defined procedures for cost estimate. The FR cost estimate is a broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. It is submitted that the cost estimate of the project is on the basis of March' 2022 price level.

Further, regarding variation in cost of individual item in Substation & Transmission line packages, it is submitted that the packages under subject scope of works comprise of a large no. of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the petitioner.

b. Variation in IEDC and IDC (Net decrease of Rs. 17.82 crore: (-) 66.72 %)

Total IDC and IEDC under the project have decreased by Rs. 17.82 crore in comparison to the approved cost, which works out to (-) 66.72 % as per the following break-up-

b.1 Decrease in IEDC

As per the investment approval, the IEDC including contingencies for the project was estimated at Rs. 16.30 Crore on total DOCO cost (i.e. IEDC 10.75% & contingency 3% on total DOCO cost) whereas on the basis of actual expenditure, IEDC incl. contingencies works out to Rs.3.49 Crore. Thus, there is a decrease of Rs. 12.81 crore in IEDC.

b.2 Decrease in IDC

Interest during Construction (IDC) for the project as per approved DPR cost was estimated at Rs. 10.40 crore whereas based on the actual funds flow, the IDC for the project in actual works out to Rs. 5.39 Crore (including notional IDC). Thus, there is a decrease of Rs. 5 crore in IDC.

Considering the above, it is humbly prayed that full tariff may be allowed from DOCO based on estimated completion cost of the subject asset.

DETAILS OF THE INITIAL SPARES:

H. The Initial spares for the Assets have been calculated as per Regulation 23(d) of the Tariff Regulations, 2024 which provides as under:

“23. Initial Spares: Initial spares shall be capitalized as a percentage of the Plant and Machinery cost, subject to following ceiling norms:

.....

(d) Transmission system

(i) Transmission line - 1.00%

(ii) Transmission Sub-station

- Green Field- 4.00%

- Brown Field- 6.00%

(iii) Series Compensation devices and HVDC Station- 4.00%

(iv) Gas Insulated Sub-station (GIS)

- Green Field-5.00%

- Brown Field-7.00%

(v) Communication system - 3.50%

(vi) Static Synchronous Compensator - 6.00%

.....

Provided that:

(i) Plant and Machinery cost shall be considered as the original project cost excluding IDC, IEDC, Land Cost and Cost of Civil Works. The generating company and the transmission licensee, for the purpose of estimating Plant and Machinery Costs, shall submit the break-up of head-wise IDC and IEDC in its tariff application

.....

- I. Considering the aforesaid Regulation, the initial spares are calculated as under:

(₹ in Lakhs)

Asset	Type	Plant and Machinery cost for calculation of initial spares (A)	Initial Spares Claimed	Ceiling Limit	Initial Spares Worked out	Excess
			(B)	(C)	$D = [A-B] * C / (100-C)$	[B-D] If B>D
Asset- 1	AIS	8291.36	157.46	6%	519.18	(361.72)
Asset-2	AIS (S/Stn)	1459.03	52.93	6%	89.76	(36.83)
	AIS (TL)	4644.08	24.63	1%	46.66	(22.03)

It is submitted that the Initial Spares for the instant project are within the specified limit under Regulation 23 of the Tariff Regulations, 2024.

Further, it may be mentioned that in the Auditor Certificate, initial spares discharged upto DOCO are included in DOCO cost, whereas initial spares discharged after DOCO are included in the ADD-CAP expenditure of the respective year.

Therefore, it is prayed to this Hon'ble Central Commission to allow the initial spares as claimed in the present petition.

Initial spares discharge details are enclosed at **Encl-14**.

DETAILS OF THE ADDITIONAL CAPITALIZATION

- J. The details of additional capitalization (Add Cap) claimed during 2024-29 tariff block is given as hereunder:

The admissibility of additional capital expenditure (Add Cap) incurred after the Anticipated DOCO is to be dealt with in accordance with the provisions of Regulation 24 of CERC Tariff Regulations, 2024. The extract of Regulation 24 of the Tariff Regulations, 2024 is reproduced as under:

“Additional Capitalization”

(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) Payment made towards admitted liabilities for works executed up to the cut-off 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) Payment against the award of arbitration or for compliance with the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance with any existing law which is not provided for in the original scope of work;
- (f) For uninterrupted and timely development of Hydro projects, expenditure incurred towards developing local infrastructure in the vicinity of the power plant not exceeding Rs. 10 lakh/MW shall be considered as part of capital cost and in case the same work is covered under budgetary support provided by Government of India, the funding of such works shall be adjusted on receipt of such funds;
Provided that such expenditure shall be allowed only if the expenditure is incurred through Indian Governmental Instrumentality; and
- (g) 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.

Add cap for 2024-29 block:

Asset	Add cap detail (₹ in Lakhs)			
	2024-25	2025-26	2026-27	2028-29
Asset-1	193.40	6250.18	948.03	-
Asset-2	-	1709.10	643.42	-
	Claimed under regulation 24(1)(a) & 24(1)(b)			

15. TRANSMISSION TARIFF for 2024-29 BLOCK:

- K.** That as per regulation 8(1) (i) & (ii), 14 (5) and regulation 15 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, the tariff for transmission of electricity on Inter-State transmission system (ISTS) shall comprise transmission charges for recovery of annual fixed cost consisting of (a) Return on Equity, (b) Interest on Loan Capital, (c) Depreciation, (d) Interest on Working Capital and (e) Operation and maintenance expenses.

Calculations for working out the tariff for the asset are tabulated below:

The details of actual expenditure upto DOCO and add-cap are summarized below: -

ASSET-1

₹ in Lacs

Sl.No	Expenditure	Building & Civil Works	Substation	Communication	I.T. Equipment	Total
1	As per Auditor Certificate as on 20.11.2024	0.00	1547.66	3.31	80.78	1631.74
2	Less : Accrual IDC upto DOCO*	0.00	23.68	0.05	1.24	24.97
3	Add Notional IDC up to DOCO*	0.00	6.63	0.01	0.35	6.99
6	Capital Cost considered as on 20.11.2024	0.00	1530.60	3.27	79.89	1613.76
7	Expenditure for FY 2024-25 As per auditor certificate	0.00	161.50	0.35	8.43	170.27
8	Add: Accrual IDC Discharge in 2024-25	0.00	21.94	0.05	1.15	23.13
12	Expenditure 2024-25	0.00	183.44	0.39	9.57	193.40
13	Expenditure for 2025-26 as per auditor certificate	207.97	6,032.17	0.33	7.86	6248.34
14	Add: Accrual IDC Discharge in 2025-26	0.00	1.75	0.00	0.09	1.84
16	Expenditure 2025-26	207.97	6033.92	0.33	7.95	6250.18
17	Expenditure 2026-27	138.65	809.38			948.03
20	Completion Cost	346.62	8557.33	4.00	97.42	9005.37

**Cost includes notional IDC of Rs. 6.99 Lakhs claimed as per Regulation 19 (2) (b) and 21 (1) of CERC tariff Regulations, 2024.*

ASSET-2**₹ in Lacs**

Sl.No	Expenditure	Transmission Line	Substation	OPGW	Comm unication	I.T. Equipment	Total
1	As per Auditor Certificate as on 02.04.2025	4639.95	1522.14	61.52	108.64	88.32	6420.56
2	Less : Accrual IDC upto DOCO*	23.34	7.66	0.31	0.55	0.44	32.30
3	Add Notional IDC up to DOCO*	98.30	32.25	1.30	2.30	1.87	136.02
6	Capital Cost considered as on 02.04.2025	4714.90	1546.73	62.51	110.39	89.75	6524.28
7	Expenditure for FY 2025-26 As per auditor certificate	1563.88	67.49	0.00	37.50	7.94	1676.80
8	Add: Accrual IDC Discharge in 2025-26	23.34	7.66	0.31	0.55	0.44	32.30
12	Expenditure 2025-26	1587.22	75.14	0.31	38.04	8.39	1709.10
13	Expenditure for 2026-27 as per auditor certificate	630.25	0.00	0.00	13.17	0.00	643.42
14	Add: Accrual IDC Discharge in 2026-27	0.00	0.00	0.00	0.00	0.00	0.00
16	Expenditure 2026-27	630.25	0.00	0.00	13.17	0.00	643.42
20	Completion Cost	6932.37	1621.87	62.82	161.61	98.14	8876.80

**Cost includes notional IDC of Rs. 136.02 Lakhs claimed as per Regulation 19 (2) (b) and 21 (1) of CERC tariff Regulations, 2024.*

16. The tariff for block 2024-29 has been worked out as per Regulation 10 of the CERC (Terms and Conditions of Tariff) Regulations, 2024. In the present petition the transmission tariff has been calculated taking actual Expenditure upto DOCO and Actual/estimated expenditure from DOCO to 31.03.2029. The tariff Formats for block 2024-29 has been worked out as per Annexure-I, Part III of the tariff regulations for period 2024-29 and the Calculations for working out the tariff along with supporting documentation are attached hereto as **Encl-15 A & 15 B** for Asset-1 & Asset-2 respectively.

17. Further, for the instant asset, details of accrual IDC as considered under add cap during the year of discharge is tabulated below:

DOCO	IDC as per certificate	IDC Discharged upto DOCO	IDC to be discharged during	
			2024-25	2025-26
21.11.2024	71.53	46.56	23.13	1.84
03.04.2025	324.55	292.25	-	32.30

18. The Hon'ble Commission is requested to kindly allow the IDC on the basis of cash out flow.
19. In respect of IDC calculation, it is submitted that the IDC statement showing details of loans deployed along with the interest rates has been submitted along with the petition. For the purpose of supporting documents for rate of interest, the interest rate proofs upto 31 March 2024 have already been submitted before the Hon'ble Commission vide petition diary no. 716/2024 and interest rate proofs for loans deployed in the subject asset for April 2024 onwards are enclosed as **Encl-16**.
20. It is submitted that the entire amount of IEDC for the instant asset has been discharged as on DOCO.
21. The transmission tariff has been calculated based on audited cost to be discharged thereafter. The Tariff calculations for working out the tariff along with supporting documentation are enclosed as **Encl-17**. The annual transmission tariff for the tariff period 2024-29 is summarized as below:

(Rs in lakhs)						
Sl. No.	Asset	2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	271.51	1270.02	1826.75	1896.08	1895.42
2	Asset-2	--	1220.48	1386.81	1410.62	1384.12

22. That, it is submitted that the petitioner being liable to pay income tax at MAT rate prescribed vide the taxation laws (Amendment) ordinance 2019 published in the Gazette dt. 20th September 2019. The ROE has been calculated @ 18.782% after grossing up

the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at regulation 31(2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 of the above regulation, the grossed-up rate of ROE at the end of every financial year shall be trued up 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 IT authorities pertaining to the tariff period 2024-29 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 ROE 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. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year-to-year basis on receipt of Income Tax assessment order.

- 23.** Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 – Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969 “Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 7 above is exclusive of GST. Further, 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 & billed separately by the petitioner. Further additional taxes, if any, are to be paid by the petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.
- 24.** In the tariff calculation for 2024-29 period, Interest on Loan has been calculated on the basis of rate prevailing as on DOCO / 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.
- 25.** The transmission charges at para-7 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as

specified under regulation 36 (3) (a, b & c) of the tariff regulations for block 2024-29 but excludes security expenses, Insurance and capital spares as provided in the Regulation.

- 26.** That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than 10 Lakh for transmission system shall be allowed separately after prudence check.

Security Expenses:

In this regard, it is submitted that a separate petition no. 260/MP/2020 was filed before Hon'ble Commission for claiming the overall Security Expenses and consequential Interest on Working Capital (IOWC) on the same wherein it was proposed to consider actual Security Expense incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per annum and estimated additional Security Expenses for new sub-stations to be commissioned in future, for arriving at the Estimated Security Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29. Hon'ble Commission vide order dated 03.08.2021 allowed the petitioner to recover the estimated Security Expenses from beneficiaries as per provisions of 2020 Sharing Regulations. 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/refund from beneficiaries.

Insurance:

In this regard, it is submitted that a separate petition shall be filed before Hon'ble Commission for claiming the overall Insurance Expenses and consequential Interest on Working Capital (IOWC) on the same considering actual Insurance expenses incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per for arriving at the Estimated Insurance Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29.

Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the same under Tariff Regulations 2019. Further, as per Tariff Regulations, 2024, Capital spares consumes and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner at the end of tariff block as per actual through a separate petition.

Accordingly, these expenses are not claimed in the subject petition through the relevant Tariff Form and shall be claimed separately in a separate petition along with all other assets.

- 27.** That as per Regulation 99 of CERC Tariff Regulations, 2024, the fees and charges of Central Transmission Utility of India Limited ('CTUIL') shall be allowed separately by the Commission through a separate regulation. Further, it provides that that until such regulation is issued by the Commission, the expenses of CTUIL shall be borne by POWERGRID which shall be recovered by POWERGRID as additional O&M expenses through a separate petition.

Accordingly, the expenses of CTUIL borne by POWERGRID shall be claimed through a separate petition.

- 28.** The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 94 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- 29.** The Transmission Charges and other related Charges indicated at para 7 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

Sharing Transmission Charges

- 30.** Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per above para shall be recovered on monthly basis and same shall be borne by MSETCL from assets COD, i.e., 30.09.2024 to till COD of downstream transmission system. The billing, collection and disbursement of the transmission charges after COD of downstream transmission system shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time.
- 31.** In the circumstances mentioned above it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-7 may please be treated as an integral part of this petition.**

32. PRAYER

- 33.** It is respectfully prayed that the Hon'ble Commission may be pleased to
- a) Approval of the DOCO as claimed in the instant petition.
 - b) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.
 - c) Approve the Transmission Tariff for the tariff block 2024-29 block for the asset covered under this petition, as per para –21 above.
 - d) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2024 as per para -22 above for respective block.

- e) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- f) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- g) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the beneficiaries.
- h) Allow the petitioner to claim the overall security expenses and consequential IOWC on that security expenses as mentioned at para 26 above.
- i) Allow the petitioner to claim the insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 26 above.
- j) Allow the petitioner to claim the capital spares consumed at the end of tariff block as per actual at para 26 above.
- k) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition on year to year/ at the end of tariff block as mentioned at para 27 above.
- l) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- m) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for purpose of inclusion in the PoC charges.

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

GURGAON

DATED: 01.07.2025

**FILED BY
POWER GRID CORPORATION OF INDIA LTD.**

REPRESENTED BY

**Angaru Naresh Kumar
Dy. General Manager (COMMERCIAL)**

BEFORE

THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

Petition No. ____ /TT/ ____

IN THE MATTER OF: Petition for determination of tariff under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for **Asset-1:** 765/400 kV, 1x1500 MVA ICT-3 along with associated 765 & 400 kV ICT bays at Banaskanta Substation, **Asset-2:** 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO) under **"Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C"**.

Power Grid Corporation of India Ltd

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

---PETITIONER

Vs

Madhya Pradesh Power Management Company Ltd.

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD,

and Others

---RESPONDENTS

AFFIDAVIT VERIFYING THE PETITION

I, Angaru Naresh Kumar, S/O Late Sh. Angaru Yanadi, working as Dy. General Manager (Commercial) in the Power Grid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110016, do hereby solemnly affirm and state as under: -



1. That the deponent is the Dy. General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 1 to 32 of the facts mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 1 to 32 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute

VERIFICATION

Solemnly affirmed at Gurugram on this 01st day of July 2025 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.


(DEPONENT)



(DEPONENT)


ATTESTED
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India
NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
GOVT. OF INDIA
07/25

Ref: CC/Commercial/2024

Date: 28.08.2024


LETTER OF AUTHORIZATION

In reference to the POWER OF ATTORNEY dated 14.08.2024 and in supersession of letter of authorization dated 13.12.2022 I hereby authorize following executives to sign Petitions, Appeals, Vakalatnama, Affidavits, etc. and to represent POWERGRID before various forums/ courts / tribunals i.e Central Electricity Regulatory Commission, State Electricity Regulatory Commission, Appellate Tribunal for Electricity, High courts and Supreme Court etc. :

1. Sh. Mohd. Mohsin, Chief General Manager
2. Sh. V. C. Sekhar, Senior General Manager
3. Sh. Zafrul Hasan, General Manager

Further, following executives are authorised to represent cases before Central Electricity Regulatory Commission and Appellate Tribunal for Electricity

1. Sh. Angaru Naresh Kumar, Deputy General Manager
2. Smt. Suchitra Gautam, Deputy General Manager
3. Sh. Vishal Sagar, Deputy General Manager
4. Sh. G. Vijay, Deputy General Manager
5. Sh. Vivek Kumar Singh, Deputy General Manager
6. Sh. Amit Kumar Chachan, Deputy General Manager
7. Smt. Supriya Singh, Chief Manager (Law)
8. Sh. Arjun Malhotra, Manager (Law)
9. Smt. Tanushree Rao, Deputy Manager (Law)


28/08/2024

Dilip Nagesh Rozekar
Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIP ROZEKAR

Executive Director (Commercial & Regulatory Cell)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)



केन्द्रीय कार्यालय : 'सौदामिनी' प्लॉट सं. 2, सेक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरभाष : 0124-2571700-719
Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2571700-719

पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 011-26560112, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121
Registered Office : B-9, Qutab Institution Area, Katwaria Sarai, New Delhi-110016; Tel: 011-26560112, 26564812, 26564892, C.IN: L40101DL1989GOI038121
Website : www.powergridindia.com



पावरग्रिड
POWERGRID

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

LETTER OF AUTHORISATION

Ref: CC/COMML/POA/LOA/2025-01

Date: 24.01.2025

In reference to the POWER OF ATTORNEY dated 14.08.2024 I hereby authorize Sh. Naresh Kumar Angaru, Deputy General Manager (Commercial) to sign Petitions, Appeals, Vakalatnama, Affidavits, etc. and to represent POWERGRID before various forums/ courts / tribunals i.e. Central Electricity Regulatory Commission, State Electricity Regulatory Commission, Appellate Tribunal for Electricity, High courts and Supreme Court etc.


24/1/2025

Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIP ROZEKAR
Executive Director (Commercial & Regulatory Cell)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)



केन्द्रीय कार्यालय : "सौदामिनी", प्लॉट नं. 2, सेक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरभाष : 0124-2622012

Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana), Tel.: 0124-2622012

जोड़ित कार्यालय : सी-8, कृतुव इंस्टीट्यूशनल एरिया, कटवाहिया सराय, नई दिल्ली - 110 016 दूरभाष : 011-26560112, 26560115, 26560193, सीआईएन : L40101DL1988GOI038121

Registered Office : B-8, Qutab Institutional Area, Kalwaria Sarai, New Delhi-110 016 दूरभाष : 011-26560112, 26560115, 26560193, CIN : L40101DL1988GOI038121

I/19355/2021



Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन - I प्रभाग

Power System Planning & Appraisal - I Division

सेवा में / To

-As per enclosed list-

विषय: "ट्रांसमिशन पर राष्ट्रीय समिति" (एनसीटी) की 7th बैठक के कार्यवृत्त।

Subject: Minutes of the 7th meeting of "National Committee on Transmission (NCT)"

महोदया / महोदय / Sir / Madam,

The 7th meeting of the "National Committee on Transmission" (NCT) was held on 03/12/2021 under the chairmanship of Chairperson, CEA & Chairman, NCT, through Video Conferencing (Microsoft Teams). The minutes for the meeting is enclosed herewith.

भवदीय,

रविन्द्र गुप्ता

(रविन्द्र गुप्ता/ Ravinder Gupta)

मुख्य अभियन्ता /Chief Engineer & Member Secretary (NCT)

Copy to:

- (i) Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi-110001.



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List of addressees:

1. Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2. Member (Power System), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3. Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4. Director (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5. Sh. Dilip Nigam, Scientist 'G', MNRE, Block no. 14, CGO Complex, Lodhi Road, New Delhi – 110003	6. Chief Operating Officer, CTUIL, Saudamini, Plot No. 2, Sector-29, Gurgaon – 122 001.
7. Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8. CMD, POSOCO, B-9, Qutub, Institutional Area, Katwaria Sarai, New Delhi – 110010
9. Dr. Radheshyam Saha, Ex. Chief Engineer, Central Electricity Authority	10. Shri Sushanta Kumar Ray Mohapatra, Ex. Chief Engineer, Central Electricity Authority



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Minutes for the 7th meeting of National Committee on Transmission

List of participants is attached as **Annexure-I**

Chairman (NCT) welcomed the members of NCT and requested Member (Power System) to apprise the members of NCT with the recent developments in respect of the process of Inter-state transmission system planning and approval, particularly in reference to RE development.

Member (PS) apprised the following:

- i) MoP vide its office order dated 20.10.2021 has dissolved the five Regional Power Committees (Transmission Planning), thereby doing away with the present practice of dual consultations at regional level. However, Regional Power Committees will be consulted for planning of ISTS system.
- ii) MoP vide its office order dated 28.10.2021 has revised the Terms of Reference of the NCT delegating powers for approval of ISTS system based on the cost of the ISTS schemes. The following structure for approval of ISTS scheme has been put in place:
 - Schemes costing less than or equal to Rs. 100 Cr. to be approved by CTU along with mode of implementation under intimation to NCT & MoP.
 - Schemes costing between Rs. 100 Cr. to 500 Cr. to be approved by NCT along with mode of implementation under intimation to MoP.
 - Schemes costing more than Rs. 500 Cr to be recommended by NCT to MoP for approval.
 - CTU after consulting Regional Power Committee(s) [RPC(s)] shall submit the proposal for expansion of ISTS to the NCT for their consideration. For proposal up to Rs.500 crores, prior consultation with RPC would not be required.
- iii) MoP vide its OM dated 15/11/2021 and 02/12/2021 has provided certain aspects to be kept in mind while planning the ISTS system, few of which are mentioned below:
 - New ISTS system will be planned and developed based on system requirement without linking it with LTA requirement. There will be no distinction of Generation linked and System Strengthening scheme for network expansion.
 - In the bid documents of TBCB projects, provision for stage wise commissioning shall be built into.
 - New ISTS approved by CTU /NCT/MoP shall be taken up for bidding by Bid Process Coordinators (TBCB projects) or for tendering by project implementing agency (RTM projects). Projects shall be awarded after SECI or any other REIA notified by MNRE awards first bid of RE projects.
- iv) MoP vide its letter dated 23.11.2021 to Secretary (MNRE) has requested the following to facilitate timely development of ISTS required for evacuation of RE sources:
 - In order to plan transmission system for potential RE zones, MNRE shall provide area wise RE potential (Wind/solar/hybrid) data along with schedule of

Minute of the 7th NCT meeting held on 03.12.2021



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development to MoP. Thereafter, MoP shall share the same with CEA and CTU for planning of Transmission system for such RE potential projects.

- SECI or any other REIA nominated by MNRE shall give period of commissioning in Power Purchase Agreement after consulting CTU & CEA.
- SECI or any other REIA shall take steps for optimal utilization of transmission capacity by conducting bids for RE capacity development along with storage capacity from at least 4-5 RE national project sites with more capacity.

Members deliberated on the various orders/directions given by MoP and observed that planning, approval and bidding process of the RE linked ISTS schemes would be initiated in advance based on inputs i.e. likely quantum of associated RE bids, their implementation schedule etc. furnished by MNRE, without linking them with LTA requirement. However, the award of the transmission schemes would be done only after SECI or any other REIA notified by MNRE awards first bid of RE project. Therefore, before approval of any transmission scheme by CTU/NCT/MoP, the likely quantum of associated RE bids along with their implementation schedule needs to be confirmed/intimated by MNRE after consultation with SECI/REIA so as to firm up various elements of the pooling sub-station/s. MNRE would be the nodal agency to furnish the information pertaining to RE zones for planning purposes, the status of award of RE projects, their schedule of development and need to develop the ISTS system in phases, etc.

Member (E & C) enquired about the expenses to be incurred for allocation/notification of the ISTS scheme costing between Rs 100 to 500 Crore, to be done by NCT. He stated that since the publication of Gazette Notification for the schemes costing more than Rs. 100 Crs and less than Rs. 500 Crs approved by NCT would be carried out by CEA, so CEA need to seek necessary budget allocation from MoP under this head.

Agenda Items:

A. New Transmission schemes submitted by CTUIL for consideration of 7th NCT

1.1. CTU vide its letter dated 16th November' 2021 has submitted the following ISTS proposals (details at **Annexure-II**) for information/recommendation/approval of NCT :

- Transmission Network Expansion in Gujarat to increase its ATC from ISTS : Part A, with estimated cost of Rs 70 crores, for information of NCT
- Transmission Network Expansion in Gujarat to increase its ATC from ISTS: Part B, with estimated cost of Rs 1983 crores, for recommendation of NCT.
- Transmission Network Expansion in Gujarat to increase its ATC from ISTS : Part C, with estimated cost of Rs 148 crores, for approval of NCT
- Transmission Network Expansion in Gujarat associated with integration of RE projects from Khavda potential RE zone, with estimated cost of Rs 1047 crores, for recommendation of NCT



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The above ISTS schemes are basically four parts of the transmission scheme “**System Strengthening in Gujarat associated with the integration of RE projects from Khavda potential REZ**” that has already been deliberated in the 5th NCT meeting held on 25.08.2021 & 02.09.2021. The scheme, inter-alia, included establishment of Kosamba 765/400/220 kV substation and GETCO had suggested shifting of the location of the substation from Kosamba to South Gujarat. Accordingly, NCT had deferred the scheme and had suggested that scheme may be reviewed for optimization of the proposed transmission system for evacuation of power from Khavda RE park.

1.2. Subsequently, in a meeting taken by Secretary (Power), Govt. of India on 02.11.2021 (MoM attached as **Annexure -III**) regarding Resource Advocacy Plan for the state of Gujarat, the following was agreed as part of short term and long term measures to increase the ATC from ISTS for the state of Gujarat :

- Expeditious implementation of 3rd 765/400kV ICT at Vadodara S/s with approval of CTU with SCoD of April'22
- Expeditious implementation of 765/400 kV Ahmedabad sub-station and 765/400/220 kV Kosamba sub-station in South Gujarat area, planned as a part of Khavda RE Park. Since these sub-stations are at planning stage, NCT must meet in November, 2021 to consider these sub-stations. The work may be given in Regulated Tariff Mechanism to POWERGRID and compressed time schedule, latest by 15th December, 2021.

1.3. In this regard, a Joint Study Meeting was held on 05.11.2021 amongst CEA, CTU, POSOCO & GETCO to deliberate over the already planned scheme based on updated inputs received from GETCO. In the meeting, it was decided to phase the schemes already deliberated in the 5th meeting of NCT with minor modifications based on ATC requirement of GETCO as well as system strengthening requirements associated with the integration of RE projects from Khavda potential RE zone. Based on the deliberations, CTU has submitted the proposal for consideration of NCT as given below.

S.No	Transmission scheme	Broad Scope
1.	Transmission Network Expansion in Gujarat to increase its ATC from ISTS : Part A	i) Augmentation of transformation capacity at Vadodara 765/400/220 kV S/s by 1x1500 MVA, 765/400 kV ICT (3 rd)
2.	Transmission Network Expansion in Gujarat to increase its ATC from ISTS: Part B	i) Establishment of 765/400/220 kV Navsari (new) (South Gujarat) S/s (GIS) ii) Navsari (new) (South Gujarat) (GIS)- Kala (GIS) 400 kV D/c line with 63MVar switchable line reactor on each ckt at Kala (GIS) end iii) Navsari(New) (South Gujarat) (GIS) – Magarwada (GIS) 400 kV D/c line.



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		iv) Navsari(New) (South Gujarat) (GIS) – Padghe (GIS) 765 kV D/c line with 330 MVar, 765 kV Switchable line reactor on each ckt at Navsari(New) (South Gujarat) end. v) Augmentation of transformation capacity at Padghe (GIS) 765/400 kV substation by 1x1500 MVA ICT
3.	Transmission Network Expansion in Gujarat to increase its ATC from ISTS : Part C	i) Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA, ii) Establishment of Banaskantha -Sankhari 400 kV 2 nd D/c line.
4.	Transmission Network Expansion in Gujarat associated with integration of RE projects from Khavda potential RE zone	i) Establishment of Banaskantha - Ahmendabad 765 kV D/c line ii) Augmentation of transformation capacity at Navsari (New) (South Gujarat) 765/400 kV S/s by 1x1500 MVA ICT.

1.4. Due to space constraint for installation of line reactors at Kala 400/220 kV substation, CTU suggested installation of the 63MVar switchable line reactors associated with Navsari (New) (South Gujarat) (GIS) - Kala (GIS) 400 kV D/c line at Navsari (New) end instead of at Kala (GIS) end. Also, for termination of Navsari(New) (South Gujarat) (GIS) – Padghe (GIS) 765 kV D/c line at Padghe (GIS) S/stn, two no. of equipped GIS bays are already available. Accordingly, the requirement of GIS bays at Padghe may not be included in the detailed scope of works.

1.5. NCT noted the scheme “Transmission Network Expansion in Gujarat to increase its ATC from ISTS- Part A”, approved by CTUIL with the compressed implementation time-frame of April’22 under RTM to POWERGRID.

1.6. Establishment of 765/400/220 kV sub-station in South Gujarat area under RTM has already been decided by MoP in its meeting dated 02.11.2021. CTU in its proposal has included the same (establishment of Navsari(new) (South Gujarat) 765/400/220 kV substation) under the transmission scheme” Transmission Network Expansion in Gujarat to increase its ATC from ISTS: Part B” along with 400 kV and 765 KV interconnection lines.

1.7. The scheme ‘Transmission Network Expansion in Gujarat to increase its ATC from ISTS- Part C’. This includes

- i) Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA,
- ii) Establishment of Banaskantha -Sankhari 400 kV 2nd D/c line.

Minute of the 7th NCT meeting held on 03.12.2021



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NCT observed that both the elements cannot be implemented as single scheme through TBCB route as one of the element is upgradation /augmentation of an existing substation. The other element, Banaskantha-Sankhari 400 kV 2nd D/c line being a 26 km line, would be small scheme to be bid out for implementation through TBCB route. Accordingly, NCT approved the scheme to be implemented through RTM route, matching with establishment of Prantij 400/220 kV and Sankhari- Prantij 400 kV D/C line by GETCO (presently expected by Mar'25).

- 1.8. The scheme 'Transmission Network Expansion in Gujarat associated with integration of RE projects from Khavda potential RE zone' includes Establishment of Banaskantha-Ahmedabad 765 kV D/c line and Augmentation of transformation capacity at Navsari (New) (South Gujarat) 765/400 kV S/s by 1x1500 MVA ICT.

As Navsari (New) 765/400 kV substation has already been recommended by MoP for implementation through RTM route, NCT observed that 1x1500 MVA, 765/400 kV ICT augmentation could also be clubbed with establishment of Navsari(new) substation under RTM. The augmentation work would be implemented in matching time frame of Banaskantha - Ahmedabad 765 kV D/c line.

Transmission Network Expansion in Gujarat associated with integration of RE projects from Khavda potential RE zone includes only Banaskantha – Ahmedabad 765 kV D/C line (excluding the Augmentation of 1x1500 MVA ICT). The estimated cost of the scheme is Rs 953 Crore with implementation time-frame matching with Khavda Phase-A (Ph-II) (5GW) scheme. Earlier NCT has recommended its implementation with a time-line of 24 months from SPV transfer for Khavda Phase-A (Ph-II) (5GW) scheme. Since the cost of the scheme is greater than Rs 500 Crore, NCT recommended for implementation of the scheme through TBCB route.

- 1.9. POSOCO suggested that uniform guidelines needs to be framed for deciding what works could be identified as technical upgradation / augmentation works. In many of the schemes the associated line bays at existing substation has been included in the scope of the TBCB scheme. On similar grounds the ICT augmentation works can also be implemented through TBCB route.

CEA clarified that the associated bays of transmission line have generally been included as the part of transmission line to avoid any mismatch in their implementation schedule.

To have uniformity, it was agreed that CTU in consultation with CEA would frame guidelines for identifying works that could be considered as technical upgradation / augmentation works for implementation through RTM route.

- 1.10. The decisions taken by NCT in respect of the ISTS schemes submitted by CTUIL for information/approval/recommendation of NCT is tabulated below:



सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड

(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)

(भारत सरकार का उद्यम)

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

(A wholly owned subsidiary of Power Grid Corporation of India Limited)

(A Government of India Enterprise)

Ref: CTUIL/OM/03

Date: 23.12.2021

Director (Projects)
Power Grid Corporation of India Limited
Saudamini, Plot No.2, Sector 29
Gurgaon (Haryana) – 122001

Sub: Implementation of ISTS Transmission Schemes approved by NCT in its 6th & 7th meeting held on 29.10.2021 & 03.12.2021 respectively under Regulated Tariff Mechanism (RTM)

Dear Sir,

NCT vide its letters dated 21.12.2021 & 22.12.2021 has awarded following ISTS Transmission Schemes to CTUIL for their implementation under RTM mode by POWERGRID as indicated in the table below:

Sl. No.	Transmission Scheme	Implementing Agency
1.	Augmentation of Transformation Capacity in Southern Region	Power Grid Corporation of India Ltd.
2.	Transmission System Strengthening for 'Srinagar – Leh Transmission System'	Power Grid Corporation of India Ltd.
3.	Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C	Power Grid Corporation of India Ltd.

Copy of NCT letters in this regard is enclosed at **Annexure-I & II**. The Detailed scope of work along with implementation time-frame for each scheme is as per the letters enclosed.

POWERGRID shall enter into concession agreement with CTUIL for implementation of the aforementioned Transmission Schemes. However, pending finalization of Concession Agreement, it is requested to initiate necessary activities for implementation of the aforementioned Transmission Schemes.

This is for your kind information and necessary action please.

Yours faithfully,

(Signature)
23/12/21
(P. C. Garg)

Chief Operating Officer



MOP letter to CTU
22/12/2021
New Delhi

File No.CEA-PS-11-15(11)/1/2020-PSPA-I Division-Part(1)

161

I/19482/2021

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन - I प्रभाग
Power System Planning & Appraisal - I Division

सेवा में / To,

Chief Operating Officer, CTUIL
Saudamini, Plot No. 2,
Sector-29, Gurgaon - 122 001.

विषय / Subject: Implementation of ISTS Transmission Schemes (costing greater than Rs.100 crore and upto Rs. 500 crore) approved by NCT in its 7th meeting held on 03.12.2021.

The undersigned is directed to inform that NCT has approved implementation of the following ISTS Transmission Scheme (costing greater than Rs. 100 crore and upto Rs. 500 crore) in its 7th meeting held on 03.12.2021, in line with MoP office order dated 28.10.2021, to be implemented through Regulated Tariff Mechanism (RTM) route by agency as indicated below:

S.No.	Transmission Scheme	Implementing Agency
1.	Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C	Power Grid Corporation of India Ltd.

Detailed scope of works for the above scheme is enclosed at Annexure.

This scheme is awarded to CTUIL for its implementation under RTM mode. CTUIL is requested to take necessary action for entering into a concession agreement with the respective agency for implementation of the above scheme.

संलग्न / Encl. - उपरोक्त / as above

भवदीय / Yours faithfully,

रविन्द्र गुप्ता
22/12/21
(रविन्द्र गुप्ता/ Ravinder Gupta)

मुख्य अभियन्ता /Chief Engineer & Member Secretary (NCT)

Copy to:

Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi-110001



I/19482/2021

Annexure

Detailed scope of works:

1) Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C

Sl.No.	Scope of the Transmission Scheme	Capacity /km
1.	Augmentation of transformation capacity at Banaskantha 765/400 kV S/s by 1x1500 MVA ICT	765/400 kV, 1500 MVA ICT: 1 no. 765 kV ICT bay – 1no 400 kV ICT bay– 1 no
2.	Banaskantha – Sankhari 400 kV 2 nd D/c line	26 km 400 kV line bays- 4 nos (2 nos at Banaskantha and 2 nos at Sankhari

Implementation Time-frame: Matching with establishment of Prantij 400/220 kV and Sankhari- Prantij 400 kV D/C line by GETCO (presently expected by Mar '25).



सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)
(भारत सरकार का उद्यम)

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

(A wholly owned subsidiary of Power Grid Corporation of India Limited)
(A Government of India Enterprise)

Ref. No.: CTUIL/OM/09/Rev

16th February 2023

Director (Projects) Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon- 122 001	Shri Chetan Bundela Torrent Power Grid Ltd. 'SAMANVAY', 600, Topovan, Ambawadi, Ahmedabad, Gujarat
CEO POWERGRID Bikaner Transmission System Ltd. C/o ED (TBCB) Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon- 122 001	Shri Lonkedra Singh Ranawat Head – Regulatory INDIGRID Unit No. 101, 1 st Floor, Windor, Village Kolekalyan Off CST Road, Vidyanagari Marg, Kalina, Santacruz (East), Mumbai – 400 098.

Sub: Implementation of ISTS Transmission Schemes approved by NCT in its 11th meeting held on 28.12.2022 and 17.01.2023 under Regulated Tariff Mechanism (RTM)

NCT vide letter dated 16.02.2023 has awarded the following ISTS Transmission Scheme for its implementation under RTM mode by implementing agencies as indicated in the table below:

Sl. No.	Transmission Scheme	Implementing Agency
I. Approved ISTS Schemes:		
1.	Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part A	POWERGRID
2.	Transmission scheme for evacuation of 4.5 GW RE injection at Khavda PS under Phase II- Part D:	TPGL
3.	ICT Augmentation at Navsari (New) associated with integration of additional 7 GW RE power from Khavda RE park under Phase-III.	POWERGRID
4.	Western Region Expansion Scheme-XXXIII (WRES-XXXIII): Part B1	POWERGRID
5.	Western Region Expansion Scheme-XXXIII (WRES-XXXIII): Part C1	POWERGRID
II. Modification in the already approved schemes:		
1.	Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C	POWERGRID
2.	Transmission system for evacuation of power from Rajasthan REZ Ph IV (Part-1) (Bikaner Complex) Part-E	
	(iii) Augmentation with 5x500MVA, 400/220 kV ICTs at Bikaner-II PS:	POWERGRID Bikaner



Sl. No.	Transmission Scheme	Implementing Agency
		Transmission System Ltd. (PBTSL)
III. Communication schemes approved by NCT:		
1.	Supply and Installation of OPGW on existing 400 kV Jalandhar (PG) – Kurukshetra (PG) line which is to be LILOed at 400 kV Dhanansu (PSTCL) (229 km)	POWERGRID
2.	Supply and Installation of OPGW on existing 400 kV Koldam – Ludhiana (PG) line which is to be LILOed at 400 kV Ropar (PSTCL) (150 kms)	INDIGRID
3.	Supply and Installation of OPGW on existing 400 kV Agra – Ballabgarh line (181km) - Replacement	POWERGRID
4.	Supply and Installation of OPGW on existing 400 kV Kishenpur – Wagoora line (183 km) - Replacement	POWERGRID
5.	Redundant communication system for Bhinmal (PG) and Kankroli (PG) ISTS stations.	POWERGRID
6.	Supply and Installation of OPGW on existing 220kV Anta (NTPC) – Bhilwara line (187 km)	POWERGRID

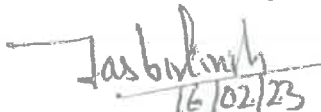
Copy of NCT letter dated 16.02.2023 in this regard is enclosed at **Annexure-I**. The detailed scope of work along with implementation time frame for the above transmission scheme is as per the letter enclosed.

The respective implementing agencies shall enter into a concession agreement with CTUIL for implementation of aforementioned Transmission Scheme. However, pending finalization of Concession Agreement, it is requested to initiate necessary actions for implementation of the aforementioned Transmission Schemes.

The earlier letter ref. no. CTUIL/OM/09 dated 14.02.2023 issued on the above subject stands withdrawn.

This is for your kind information and necessary action, please.

Yours faithfully,


 16/02/23
 (Jasbir Singh)
 Chief General Manager

Encl: as stated.



I/26294/2023

ANNEXURE-I



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग-II
Power System Planning & Appraisal Division-II

सेवा में / To

Chief Operating Officer, CTUIL
Saudamini, Plot No. 2,
Sector-29, Gurgaon-122001

विषय/Subject: Implementation of ISTS Transmission Schemes approved by NCT in its 11th meeting held on 28.12.2022 and 17.01.2023- regarding

महोदय/Sir,

The undersigned is directed to inform that NCT has approved implementation of the following ISTS Transmission Schemes in its 11th meeting held on 28.12.2022 and 17.01.2023, in line with MoP office order dated 28.10.2021, to be implemented through Regulated Tariff Mechanism (RTM) route by agency as indicated below:

I. APPROVED ISTS SCHEMES:**1. Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part A**

Sl. Nos.	Transmission Scheme	Scope	Implementing Agency
1.	Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part A	i) Creation of 220 kV level at 765/400 kV Jabalpur PS with installation of 2x500 MVA, 400/220 kV ICTs along with associated ICT bays, ii) 4 Nos. of 220 kV line bays at Jabalpur PS for LILO of Narsinghpur - Jabalpur (MP) 220 kV D/c line at Jabalpur Pool	POWERGRID



I/26294/2023

Detailed scope of the scheme is given below:

<i>Sl.</i>	<i>Scope of the Transmission Scheme</i>	<i>Capacity /km</i>
1.	Creation of 220 kV level at 765/400 kV Jabalpur PS with installation of 2x500 MVA, 400/220 kV ICTs along with associated ICT bays	400/220 kV, 500 MVA ICT – 2 Nos. 400 kV ICT bays – 2 Nos. 220 kV ICT bays – 2 Nos.
2.	4 Nos. of 220 kV line bays at Jabalpur PS for LILO of Narsinghpur - Jabalpur (MP) 220 kV D/c line at Jabalpur Pool	220 kV line bays – 4 Nos.

Estimated Cost: Rs. 126.09 Crs.

Implementing Agency: POWERGRID.

Implementation timeframe: 18 months from date of allocation

2. Transmission scheme for evacuation of 4.5 GW RE injection at Khavda PS under Phase II- Part D:

<i>Sl. Nos.</i>	<i>Scope of the Transmission Scheme</i>
1.	LILO of Pirana (PG) – Pirana (T) 400 kV D/c line at Ahmedabad S/s with twin HTLS alongwith reconductoring of Pirana (PG) – Pirana (T) line with twin HTLS conductor with OPGW for both main line and LILO section
2.	Bay upgradation work with requisite FOTE at Pirana (PG) & Pirana (T) 400 kV line bays (Bay Upgradation) – 4 Nos@

@ The current rating of existing bays at Pirana (PG) & Pirana(T) is 2000 A. 04 Nos. 400 kV line bays upgradation includes 02 bays upgradation at Pirana (PG) and 02 bays upgradation at Pirana (T). Upgradation at Pirana (T) shall also include upgradation of 400 kV Bus coupler bay and 400 kV Transfer bus coupler bay along with upgradation of bus bar.

Note:

- Transmission system for evacuation of 3 GW RE injection at Khavda is being taken up under Phase-I. Phase-II RE scheme for evacuation of 4.5 GW RE injection at Khavda needs to be taken up for evacuation requirement beyond 3 GW from Khavda RE park.
- Implementation of all the transmission packages proposed for evacuation of 4.5 GW RE injection at Khavda RE park under Phase-II (Part A to Part D) needs to be taken up in similar timeframe.



I/26294/2023

- iii) The switching scheme of existing 400 kV Pirana (T) S/S is Double Main and Transfer (DMT) Scheme and current rating of existing Bus Coupler bay and Transfer Bus Coupler bay is 2000 A. With upgradation of line bays to 3150 A (to suit the re-conductoring with Twin HTLS conductor), existing 400 kV Bus Coupler bay and Transfer Bus Coupler bay (with associated Bus Bar) shall also be upgraded to 3150 A by the TSP.

The scheme has already been de-notified vide Gazette Notification No. 221 dated 13.01.2023.

Estimated cost of the scheme: Rs.221 Crs (as per CTUIL email dated 10.02.2023)

Implementing agency: Torrent Power Grid Limited (TPGL)

Implementation timeframe: In matching the commissioning timeframe of Khavda Phase-II (Part A to C). The implementing agency under RTM would coordinate with the BPC/SPV of Khavda Phase II (Part A – C) schemes to match the commissioning timeframe.

3. ICT Augmentation at Navsari (New) associated with integration of additional 7 GW RE power from Khavda RE park under Phase-III:

Sl. Nos.	Name of Transmission Scheme	Implementation Mode
1.	ICT Augmentation at Navsari (New) S/s associated with integration of additional 7 GW RE power from Khavda RE park under Phase-III	RTM route by TSP of Navsari (new) S/stn i.e. POWERGRID

Detailed scope of the scheme:

S.No.	Scope of the Transmission Scheme	Capacity / line length km
1.	Augmentation of transformation capacity at Navsari (New) 765/400 kV S/s by 1x1500 MVA (ICT-IV)	765/400 kV, 1500 MVA ICT – 1 Nos. 765 kV ICT bay – Not required as ICT to be terminated in existing bay 400 kV ICT bay – 1 Nos. (GIS)

Note: Bay(s) as may be required for completion of diameter (GIS) in one-and-half breaker scheme, shall also be executed by the TSP.

Estimated Cost: Rs. 58.52 Crores.



I/26294/2023

Implementing Agency: POWERGRID.

Implementation timeframe: In matching timeframe of Transmission system for evacuation of additional 7 GW RE power from Khavda RE park under Phase-III Part B

4. Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part B1

Sl. No.	Name of Transmission Scheme	Implementation Mode
1.	Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part B1	Under RTM to the owner of Gwalior-Satna 765 kV line i.e. Powergrid

Detailed scope of the scheme:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
1.	Conversion of 1x240 MVar, 765 kV Fixed line reactor at Gwalior end to Switchable line reactor (with NGR bypass arrangement) along with implementation of Inter-tripping scheme (for tripping of the switchable shunt reactor at Gwalior end along with the main line breaker)	<ul style="list-style-type: none"> Switching equipment for 765 kV line reactor (with NGR bypass arrangement) – 1 No. Implementation of inter-tripping scheme for the switchable line reactor at Gwalior end

Estimated Cost: Rs 19 Crs

Implementing Agency: POWERGRID.

Implementation timeframe: In matching timeframe of Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part B

5. Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part C1

Sl. Nos.	Name of Transmission Scheme	Implementation Mode
1.	Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part C1	RTM route to POWERGRID, the TSP of Jabalpur - Orai 765 kV S/c line.

Detailed scope of the scheme:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
---------	----------------------------------	--------------



I/26294/2023

1.	Conversion of 1x330 MVAR, 765 kV Fixed line reactor at Orai end of Ishanagar – Orai 765 kV line [formed after LILO of one circuit of Jabalpur - Orai 765 kV D/c line at Ishanagar (New) S/s] to Bus reactor at Orai S/s.	Shifting of 330 MVAR, 765 kV Line reactor of Orai-Jabalpur line at Orai end and installing the same as Bus Reactor in existing bay (GIS) at Orai.
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Estimated cost: Rs. 0.5 Crore

Implementing Agency: POWERGRID

Implementation timeframe: In matching timeframe of Western Region Expansion Scheme XXXIII (WRES-XXXIII): Part C.

I. MODIFICATION IN THE ALREADY APPROVED SCHEMES:

- (1) Modification in the “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C” has been approved in the 11th meeting of NCT. The modified scope is as given below:

Sl. No.	Original Scope of the Transmission Scheme	Modified scope of the transmission scheme
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500MVA 765/400 kV, 1500 MVA ICT: 1 Nos. 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA 765/400 kV, 1500 MVA ICT: 1 Nos. 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.
2	Banaskantha -Sankhari 400 kV 2 nd D/c line (26 km) Line Length : 26 km 400 kV line bays- 4 Nos. (2 Nos. at Banaskantha and 2 Nos. at Sankhari)	Banaskantha – Sankhari section of Banaskantha – Prantij 400 kV D/c line (Twin AL59 Moose equivalent) Route Length : 26 km 400 kV line bays- 2 Nos. (at Banaskantha)

Implementation Time-frame: Matching with establishment of Prantij 400/220 kV S/s and Prantij - Sankhari section of Banaskantha – Prantij 400 kV D/c line (presently expected by March, 2025)

Implementing Agency: POWERGRID



I/26294/2023

(2) Transmission system for evacuation of power from Rajasthan REZ Ph IV (Part-1) (Bikaner Complex) Part-E

The scheme inter-alia includes augmentation with 5x500 MVA, 400/220 kV ICTs at Bikaner-II PS:

- **Augmentation with 5x500 MVA, 400/220 kV ICTs at Bikaner-II PS:**

CEA vide letter dated 15.11.22 has allocated the implementation of above scheme to POWERGRID under RTM.

CTUIL vide its mail dated 01.12.2022 has informed that Bikaner-II PS is under implementation by POWERGRID Bikaner Transmission System Ltd. (PBTSL) [100% subsidiary of POWERGRID] under TBCB.

Accordingly, the implementing agency for augmentation with 5x500 MVA, 400/220 kV ICTs at Bikaner-II PS is POWERGRID Bikaner Transmission System Ltd. (PBTSL).

II. COMMUNICATION SCHEMES APPROVED BY NCT:

Sl. Nos.	Name of Transmission Scheme	Implementation Mode	Implementation timeframe	Allocated to	Estimated Cost (Rs Crs)
1.	Supply and Installation of OPGW on existing 400 kV Jalandhar (PG) – Kurukshetra (PG) line which is to be LILOed at 400 kV Dhanansu (PSTCL) (229 km)	RTM	24 months	POWER GRID	10.3
2.	Supply and Installation of OPGW on existing 400 kV Koldam (Indigrid) – Ludhiana (PG) line which is to be LILOed at 400 kV Ropar (PSTCL) (150 kms)	RTM	18 months	INDIGRID	6.7
3.	Supply and Installation of OPGW on existing 400 kV Agra – Ballabhgarh line (181 km) - Replacement	RTM	18 months	POWER GRID	9.05



I/26294/2023

Sl. Nos.	Name of Transmission Scheme	Implementation Mode	Implementation timeframe	Allocated to	Estimated Cost (Rs Crs)
4.	Supply and Installation of OPGW on existing 400 kV Kishenpur – Wagoora line (183 km) - Replacement	RTM	18 months	POWER GRID	9.15
5.	Redundant communication System for Bhinmal (PG) and Kankroli (PG) ISTS stations	RTM	18 months	POWER GRID	2.55
6.	Supply and Installation of OPGW on existing 220 kV Anta (NTPC) – Bhilwara line (187 km)	RTM	18 months	POWER GRID	9.35

The above schemes are awarded to CTUIL for implementation under RTM route. CTUIL is requested to take necessary action for entering into a concession agreement with the respective agency for implementation of the above schemes.

The letter dated 14.02.2023 on the above subject stands withdrawn.

Yours faithfully

[Signature]
16.02.2023

(ईशान शरण/Ishan Sharan)

मुख्य अभियंता /Chief Engineer &
Member Secretary (NCT)

Copy to:

Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi-110001





C/CP/PA2223-04-00-IA006

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

July 07, 2022

MEMORANDUM

SUB: INVESTMENT APPROVAL FOR "TRANSMISSION NETWORK EXPANSION IN GUJARAT TO INCREASE ATC FROM ISTS : PART C"

Investment approval for "TRANSMISSION NETWORK EXPANSION IN GUJARAT TO INCREASE ATC FROM ISTS : PART C" has been accorded by Committee on Investment on Projects in its 130th meeting held on 6th July, 2022 as per the details given below:

1. SCOPE OF PROJECT

Broad Scope of works:

Transmission Line:

(i) Banaskantha – Sankhari 400 kV 2nd D/c line – 26 km

Substation:

(i) 765/400 kV Banaskantha S/s (PG) Extension

765 kV

- a) Transformer bays : 1 No.
- b) 1x1500 MVA, 765/400 kV ICT : 1 No.

400 kV

- a) Transformer bays : 1 No.
- b) Line Bays : 2 Nos.

(ii) 400/220 kV Sankhari S/s (GETCO) Extension

400 kV

Line bays : 2 Nos.

2. PROJECT COST & FUNDING

The estimated cost of the project based on March, 2022 price level is **₹186.19 crore** including IDC of **₹10.40 crore**. The abstract cost estimate is attached as **Annexure - I**.

The project is proposed to be implemented through Debt (70%) and Equity (30%) with loan component from domestic borrowing/ bonds/ External Commercial Borrowing (ECB) etc. and equity component through internal resources.

[Signature]



3. COMMISSIONING SCHEDULE

The project is scheduled to be commissioned matching with establishment of 400/220kV Prantij S/s and 400kV Sankhari – Prantij D/c line by GETCO (presently expected by March, 2025).


07/07/2024
(Krishna Kumar Kandpal)
DGM (CP)



Annexure – I

ABSTRACT COST ESTIMATE		
Transmission Network Expansion in Gujarat to increase ATC from ISTS : Part C		
(March 2022 price level)		
Sl. No.	DESCRIPTION	AMOUNT (Rs. in crore)
A	Preliminary Survey & Soil Investigation	0.06
B	Cost of Compensation for Transmission Lines	
	i) Compensation towards Crop, Tree, PTCC and land	13.08
	ii) Compensation towards Forest	0.02
C	Civil Works	
	i) Infrastructure for substations	0.40
D	Equipment Cost	
	a) Transmission Lines	45.02
	b) Sub-Stations	93.14
E	Sub Total (A TO D)	151.71
F	Special Tools & Plants @1% of D	1.38
G	Incidental Expenditure During construction (IEDC) @ 10.75% of [E - B(ii)]	16.31
H	Contingencies @ 3% of [E - B(ii)]	4.55
I	Centages & Contingencies @ 8% on Compensatory Afforestation (considering Rs.1,40,000 per Ha) for 0.092 Ha	0.00
J	Overheads Payable to SEBs	1.84
	Sub Total (A TO J)	175.79
K	Interest During Construction (IDC)	10.40
	GRAND TOTAL	186.19



वितरण /Distribution:

1. Chairman, Maharashtra State Electricity Board, Commercial Section, 5th Floor, 'PRAKASHGAD', Bandra (East), MUMBAI- 400 051.
2. Chairman, Head Office Madhya Pradesh State Electricity Board, Shakti Bhawan, Jabalpur-482-008 (MP)
3. Chairman, Gujarat Electricity Board, Vidyut Bhawan, Race Course, Baroda, Gujarat
4. Chairman, Govt. of Goa, Vidhyut Bhavan, Opp. Police Station, Panjim, Goa- 403001
5. Chairman, Chhattisgarh State Electricity Board, PO – Sundarnagar, Dangania, Raipur, Chhattisgarh – 492 013
6. Secretary (Power), Electricity Department, Administration of Dadra Nagar Haveli, U.T. Silvassa – 396 230
7. Secretary (Power), Electricity Department, Administration of Daman and Diu, U.T. Daman – 396 210
8. CMD, Power System Operation Corporation Limited, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi -11001

प्रति विनम्र सूचनार्थ /Copy for kind information, please:

1. PS to Secretary (Power), MoP, Shram Shakti Bhawan, New Delhi- 110 001
2. PS to Addl. Secretary & Financial Advisor, MoP, Shram Shakti Bhawan, New Delhi- 110 001
3. Chairperson, CEA, Sewa Bhawan, R.K. Puram, New Delhi- 110 066
4. Secretary, CERC, 3rd & 4th Floor, Chanderlok building, 36, Janpath, New Delhi- 110 001
5. CEO, NITI Aayog, Yojana Bhawan, New Delhi- 110 001
6. Advisor, PAMD, NITI Aayog, Yojana Bhawan, New Delhi
7. Member Secretary, NRPC, 18/A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi- 110 016
8. Member (Power Systems), CEA, Sewa Bhawan, R.K.Puram, New Delhi- 110 066
9. Secretary, CEA, Sewa Bhawan, R.K.Puram, New Delhi- 110 066 – 03 copies
10. Joint Secretary, Ministry of Statistics & Programme Implementation, Sardar Patel Bhawan, New Delhi-110001
11. Joint Secretary (Transmission), MoP, Shram Shakti Bhawan, New Delhi- 110 001
12. Joint Secretary (Plan Finance Div.-II), Ministry of Finance, North Block, New Delhi- 110 001
13. Director (Transmission), MoP, Shram Shakti Bhawan, New Delhi- 110 001
14. Director, Ministry of Finance (Plan finance Div.), North Block, New Delhi- 110 001
15. Deputy Secretary, Cabinet Secretariat, Rashtrapati Bhawan, New Delhi- 110 001
16. Under Secretary, Finance & Budget Section, MoP, Shram Shakti Bhawan, New Delhi- 110 001


(Krishna Kumar Kandpal)
DGM (CP)



Important Note:

As per approval, following critical activities may be monitored:

- (i) Timely Award of major package(s).
- (ii) Timely supply of major equipment.
- (iii) Risk Management Matrix indicating various milestones to be monitored for the subject project is attached at **Annexure-II**.

Distribution:

ED : CMG / Engg.- SS, TL, Civil, CE, FQA/ CS & MM / Finance/ ERP & IT Cell/ HR/ Commercial & RC/ AM, LD&C & Safety Cell / Engg-HVDC & QA&I/ WRTS-II / CTUIL

Chief GM : NTAMC/ Admin-IR/ HRD, RB & Corp. Comm/ ESMD & CSR

Company Secretary

DGM: Law

For kind information of:

Director (Personnel)/ Director (Finance)/Director (Projects)/CVO



(Krishna Kumar Kandpal)
DGM (CP)



Risk Management Matrix for "Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part-C)"

Sl. No.	Risk Parameters	Broad Mitigation steps		Responsibility Centre**
		Mitigation-1	Mitigation-2	
1	Delay in obtaining Forest clearance due to cumbersome process	Submission of proposal as early as possible/immediately after completion of detailed survey in forest stretch	Consistent Follow-up for expediting Forest clearance at all levels	Site Project Head/ESMD
2	Delay in commencement of project	Award of major contracts to be placed within 1 month of Investment Approval & Contract Agreement to be signed within 1 month thereafter	Kick-off meeting within 1 month of Letter of Award	CS/CMG
3	Time overrun due to delay in resolution of RoW issues in construction of Transmission line	Regular follow-ups and continuous consultation with Land owner & Local Administration	Escalating to Senior Authorities at State govt level viz Chief Secretary/Hon'ble Minister for immediate resolution.	Site Project Head/CMG
4	Delay in land acquisition of substations		Not Applicable	
5	Idling of transmission system due to non-readiness of generator / downstream / upstream transmission system	Regulatory approval/Indemnification agreement to be signed with generators/other agencies	To maintain active co-ordination with generating company/STUs/other ISTS licensees for aligning project progress and create documentary evidence so that CERC Tariff order is not impacted.	CMG
6	Restriction of additional cost by CERC in absence of RCE	RCE-I to be prepared within 1 month of award of all major packages (Tower & Substation)	RCE-II to be prepared when actual Capex is > 50% & thereafter regular review of project cost and completion schedule to ascertain requirement, if any, of further RCE requirement	Site Project Head / Cost. Engg.
7	Restriction of IDC/IEDC by CERC due to lack of / insufficiency in documentary evidence of time overrun	Regular records to be maintained regarding constraints in project progress and documented for support	Hindrance Register to be maintained in SAP and reviewed regularly by project Head	Site Project Head / Commercial
8	Failure of equipment due to non-resolution of quality issue resulting in delay in projects	All major equipment quality checks to be maintained at Level-4	Quality to be ensured at different stages of manufacture as per standard practice.	QA & I Group
9	Non-compliance to statutory requirement of legal / safety / social / environmental etc.	Preparation of check-list at RHQ level and monitoring of same		Site Project Head
10	Timely Implementation of the Project			
a. Commencement				
1	Finalization of L2	Within 1 month of NOA		CMG
2	Site Mobilisation	As per L2		Site Project Head
3	Survey	As per L2		Site Project Head
4	Statutory Approvals/ NOC (i.e. PTCC, Civil Aviation, Defence Establishment etc.)		Not Applicable	
b. Physical Progress				
1	Foundation/Civil works etc.	As per L2	Complete 2 months before completion schedule	Site Project Head
2	Erection of Equipment	As per L2	Complete 3 month before completion schedule	Site Project Head
3	Stringing		Not Applicable	
4	Supply of equipment	As per L2	Completion of Transformer & major equipment Supply within 6th - 15th months & other bay extension equipment from 6th - 15th months progressively from NOA date.	CC: Head (Engg.- S/s) Site Project Head
c. Commissioning		As per L2		Site Project Head

** Overall in-charge for Responsibility Centre is Head of the respective Region / Department/ Project Group



संदर्भ/Ref : CC-ENGG-TR202135-1001587-SC1623-765-400-220kV-SS-SLD

Date : 27/10/2022

From : S J Lahiri
Senior GM

To : Linxon India Pvt Ltd
9 Floor, RMZ Galleria BB Road , Bengaluru
Bengaluru

Cc : 400 D/C 2nd Banaskantha - Sankhari line

Subject : Substation Package SS-91: Extension of 765/400kV Banaskantha S/S and 400kV Sankhari SS (GETCO) under Transmission Network expansion in Gujarat to increase ATC from ISTS Part-C

LOA Ref : 5002002280/SUB-STATION (EXCLUDING)/DOM/A06-CC CS-7/NOA-I&II/WR2-400013&400014 Dated 08/09/2022

Please find enclosed following drawings/ documents for necessary action at your end.

Vendor Drg. No. : TR202135-1001587-SS1623-765-400-220KV-SS-SLD
Orgn. Drg. No. : TR202135-1001587-SC1623-765-400-220kV-SS-SLD
Revision No. : 01
Drg. Title : Baskantha S/S- 765-400kV SINGLE LINE DIAGRAM
App. Category : CAT-I
Release Date : 27/10/2022



Scan to verify

Comments : Generally in order.

अनुमोदित श्रेणी/App. Category:

- I. फेब्रिकेशन/निर्माण/टाइप टेस्टिंग हेतु जारी।
Approved/released for fabrication/construction.
- II. फेब्रिकेशन/निर्माण/टाइप टेस्टिंग हेतु अनुमोदित/जारी बशर्ते दिए गए टिप्पणियाँ एवं आशोधनों की सम्मिलित किया जाये। कृपया रिवाइज्ड दस्तावेज अनुमोदनार्थ प्रस्तुत करें।
Approved/released for fabrication/ construction subject to incorporation of comments and modification as noted. Revised drawing required for approval.
- III. टिप्पणियाँ सम्मिलित करने के उपरांत दस्तावेज को अनुमोदनार्थ प्रस्तुत करें।
To be resubmitted for approval after incorporating the comments.
- IV. सूचनार्थ एवं रिकार्ड हेतु।
For information and record.
- REL-CON निर्माण हेतु जारी।
Released for construction.

नोट/Note:

1. Approval/Comments conveyed herein neither relieve the contractor of his contractual obligations and his responsibilities, weights, quantities, design details assemble fits, performance particulars and conformity of the supplies with the Indian Statutory Laws as may be applicable, nor does it limits the purchaser's right under the contract.
2. The approval conveyed vide this letter does not cover the approval of make for sub-vendor items.

केन्द्रीय कार्यालय: "सौदामिनी", प्लॉट नंबर 2, सेक्टर -29, गुरुग्राम -122001, (हरियाणा), दूरभाष: 0124-2571700-719

Corporate Office: "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel.: 0124-2571700-719

पंजीकृत कार्यालय: बी -9, कुतब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली -110016. दूरभाष: 011-26560112, 26560121, 26564812, 26564892, सीआईएन: L40101DL1989GO1000017

Registered Office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016. Tel: 011-26560112, 26560121, 26564812, 26564892, CIN : L40101DL1989GO1000017
Website: www.powergridindia.com



65

linxon	765-400kV Banaskantha Extn. S/S					Clarification
Department:	Author:	Status:	Date:	Language:	Revision:	Page:
Engg.	DS/NJ	submitted	13.10.2022	en	0	1 / 1

765-400kV Substation at Banaskantha SLD

Dear Sir,

This refers to your comment given on SLD Rev-0. Please find mentioned below our point wise clarification on the comments.

Sr. No.	PGCIL Comment	Linxon Clarification
1	Present scope shall be indicated clearly.	Refer Cloud marking for same

Request you to kindly give your approval on revised SLD based on above clarification.

Best regards,

Dhruti Shah / Nisha Jasani



BILL OF EQUIPMENTS - 765KV:-

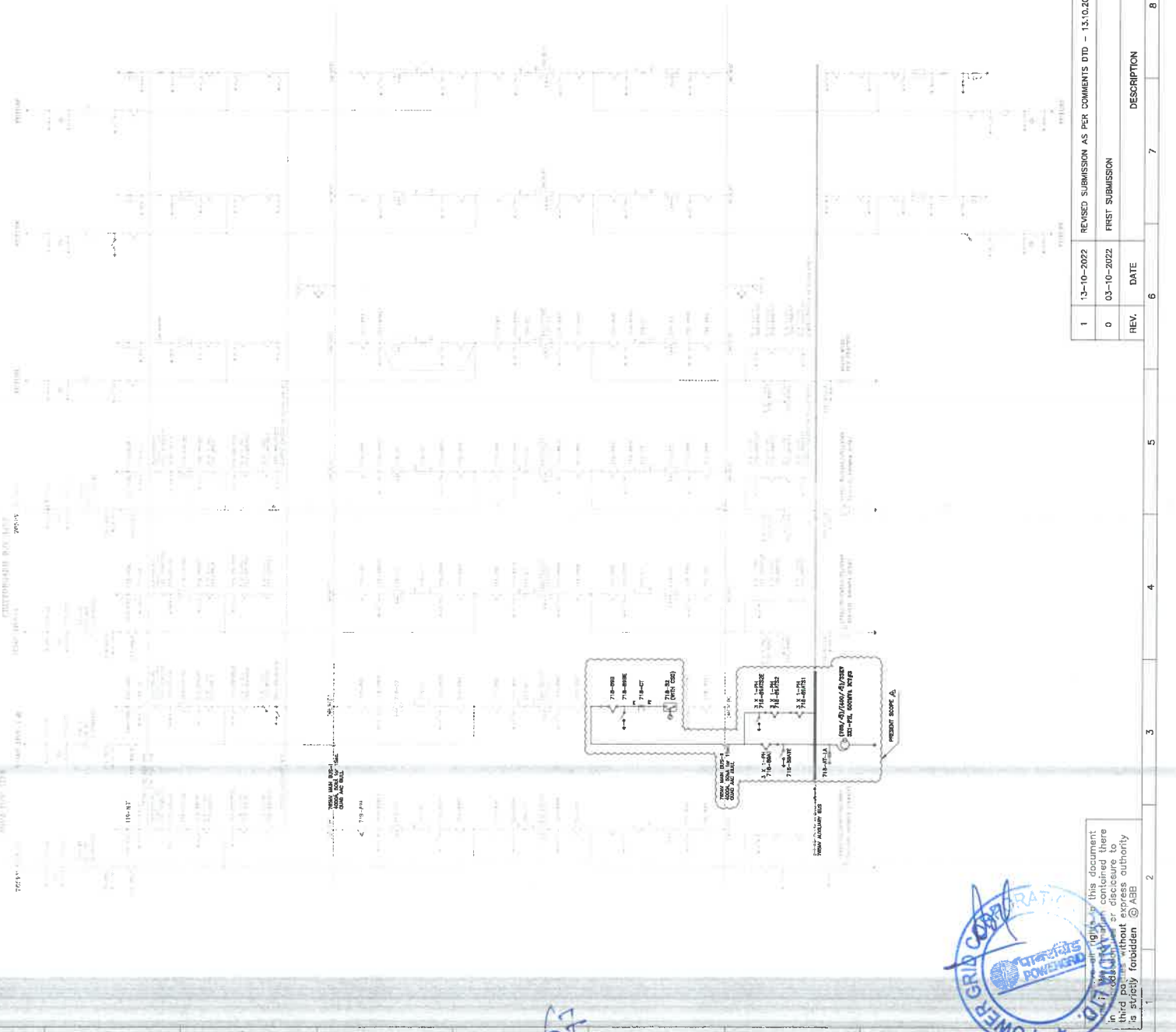
S.NO	DESCRIPTION	QTY AS PER ACTUAL	SYMBOL
1.0	300MVA, 765KV/400KV/220KV AT (1PH) (PCCS SUPPLY)	3	⚡
2.0	765KV CIRCUIT BREAKER WITHOUT CLOSING RESISTOR (CPR)	1	⚡
3.0	765KV VERTICAL INSET/DOUBLE BREAK INSULATOR WITH ONE SWATH SWITCH (3PH) 315KA, 500A FOR 1 SEC	1	⚡
4.0	765KV VERTICAL INSET/DOUBLE BREAK INSULATOR WITHOUT SWATH SWITCH (1PH) 200KA, 500A FOR 1 SEC	3	⚡
5.0	765KV VERTICAL INSET/DOUBLE BREAK INSULATOR WITH ONE SWATH SWITCH (1PH) 200KA, 500A FOR 1 SEC	6	⚡
6.0	765KV CURRENT TRANSFORMER (1PH) WITH 120K EXTENDED	3	⚡
7.0	765KV SURGE ARRESTER, SHUNT RATIO JUNIT (1PH)	3	⚡

765KV CT CORE DETAILS

APPLICATION	CT RATIO	CURRENT CLASS	OUTPUT VA	ACCURACY CLASS	VK VOLTS	MAKRA	IP TRA ET	ISF
BUS DIFF. PROTECT. UNIT	1	3000-2000-500/1A	—	PK	3000/2000/500	15/10/2.5	30/30/120	—
METERING	2	3000-2000-500/1A	20 AT ALL 0.25 AT ALL TAPS	PK	3000/2000/500	15/10/2.5	30/30/120	—
METERING	3	3000-2000-500/1A	20 AT ALL 0.25 AT ALL TAPS	PK	3000/2000/500	15/10/2.5	30/30/120	—
TRANSFER	4	3000-2000-500/1A	20 AT ALL 0.25 AT ALL TAPS	PK	3000/2000/500	15/10/2.5	30/30/120	—
DIFF. LINE PROTECT. UNIT	5	3000-2000-500/1A	—	PK	3000/2000/500	15/10/2.5	30/30/120	—
PROT./BUS LINE	6	3000-2000-500/1A	—	PK	3000/2000/500	15/10/2.5	30/30/120	—

NOTE:-
1) REFER SHEET-3 OF 2 FOR 400KV SINGLE LINE DIAGRAM.
2) REFER SHEET-3 OF 3 FOR 220KV CONNECTION ARRANGEMENT OF 1-PH TRANSFORMERS DIAGRAM.

LEGEND:-
—— PRESENT SCOPE
----- EXISTING SYSTEM

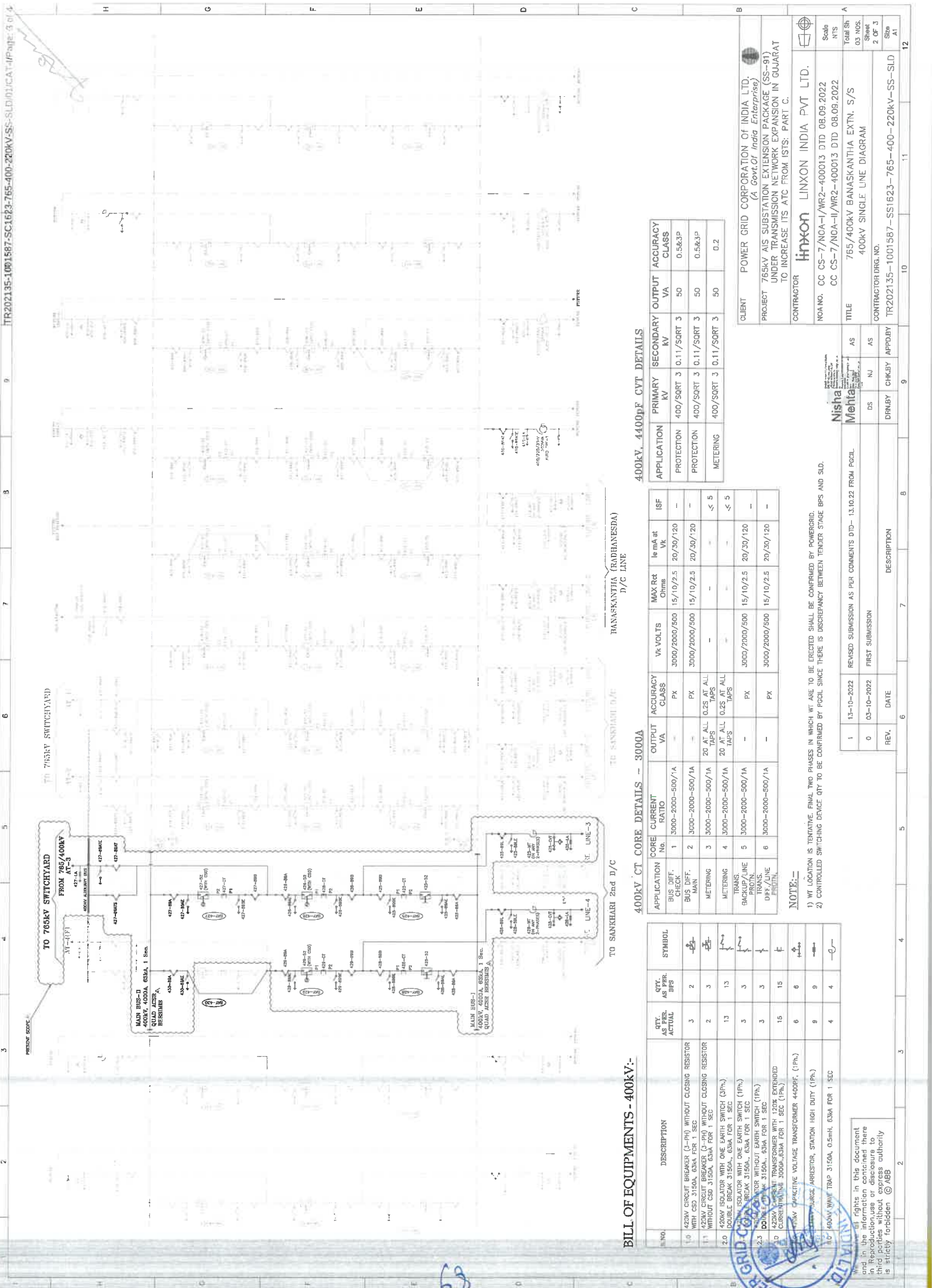


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CLIENT	POWER GRID CORPORATION OF INDIA LTD. (A Govt. of India Enterprise)
PROJECT	765KV AIS SUBSTATION EXTENSION PACKAGE (SS-91) UNDER TRANSMISSION NETWORK EXPANSION IN GUJARAT TO INCREASE ITS ATC FROM 1ST TO PART C.
CONTRACTOR	Linxon India Pvt Ltd.
NOA NO.	CC CS-7/NOA-1/WR2-400013 DTD 08.09.2022 CC CS-7/NOA-1/WR2-400013 DTD 08.09.2022
TITLE	765/400KV BANASKANTHA EXTN. S/S 765KV SINGLE LINE DIAGRAM
CONTRACTOR DRG. NO.	TR202135-1001587-SS1623-765-400-220KV-SS-SLD

REV.	DATE	DESCRIPTION
1	13-10-2022	REVISED SUBMISSION AS PER COMMENTS DTD - 13.10.2022 FROM PGCIL
0	03-10-2022	FIRST SUBMISSION

APPROVED BY	AS	APPROVED BY	AS
DRNBY	CHKBY	APPD.BY	12



BILL OF EQUIPMENTS - 400KV:-

S.NO	DESCRIPTION	QTY. AS PER ACTUAL	QTY. AS PER BBS	SYMBOL
1.0	420KV CIRCUIT BREAKER (C-H) WITHOUT CLOSING RESISTOR	3	2	
1.1	420KV CIRCUIT BREAKER (C-H) WITH CLOSING RESISTOR	2	3	
2.0	420KV ISOLATOR WITH ONE EARTH SWITCH (3PH.)	13	13	
2.1	420KV ISOLATOR WITH ONE EARTH SWITCH (1PH.)	3	3	
2.2	420KV ISOLATOR WITHOUT EARTH SWITCH (1PH.)	3	3	
3.0	420KV CURRENT TRANSFORMER WITH 120KV EXTENDED CURRENT RATING 3000-630A FOR 1 SEC (1PH.)	15	15	
4.0	420KV CAPACITIVE VOLTAGE TRANSFORMER 4400VF. (1PH.)	6	6	
5.0	420KV SURGE ARRESTOR, STATION HIGH DUTY (1PH.)	9	9	
6.0	400KV WWTB 3150A, 0.5m, 63KA FOR 1 SEC	4	4	

400KV CT CORE DETAILS - 3000A

APPLICATION	CORE No.	CURRENT RATIO	OUTPUT VA	ACCURACY CLASS	Vk VOLTS	MAX R _{ct} Ohms	1e mA at Vk	ISF
BUS DIFF. CHECK	1	3000-2000-500/1A	-	PX	3000/2000/500	15/10/2.5	20/30/120	-
BUS DIFF. MAIN	2	3000-2000-500/1A	-	PX	3000/2000/500	15/10/2.5	20/30/120	-
METERING	3	3000-2000-500/1A	20 AT ALL TAPS	0.2S AT ALL TAPS	-	-	-	≤ 5
METERING	4	3000-2000-500/1A	20 AT ALL TAPS	0.2S AT ALL TAPS	-	-	-	≤ 5
TRANS. BACKUP/LINE	5	3000-2000-500/1A	-	PX	3000/2000/500	15/10/2.5	20/30/120	-
TRANS. DIFF./LINE	6	3000-2000-500/1A	-	PX	3000/2000/500	15/10/2.5	20/30/120	-

400KV, 4400pF CVT DETAILS

APPLICATION	PRIMARY KV	SECONDARY KV	OUTPUT VA	ACCURACY CLASS
PROTECTION	400/SQRT 3	0.11/SQRT 3	50	0.5&3P
PROTECTION	400/SQRT 3	0.11/SQRT 3	50	0.5&3P
METERING	400/SQRT 3	0.11/SQRT 3	50	0.2

NOTE:-

- 1) WT LOCATION IS TENTATIVE. FINAL TWO PHASES IN WHICH WT ARE TO BE ERECTED SHALL BE CONFIRMED BY POWERGRID.
- 2) CONTROLLED SWITCHING DEVICE QTY TO BE CONFIRMED BY PQCL SINCE THERE IS DISCREPANCY BETWEEN TENDER STAGE BPS AND SLD.

REV.	DATE	DESCRIPTION
1	13-10-2022	REVISED SUBMISSION AS PER COMMENTS DTD- 13.10.22 FROM PQCL
0	03-10-2022	FIRST SUBMISSION

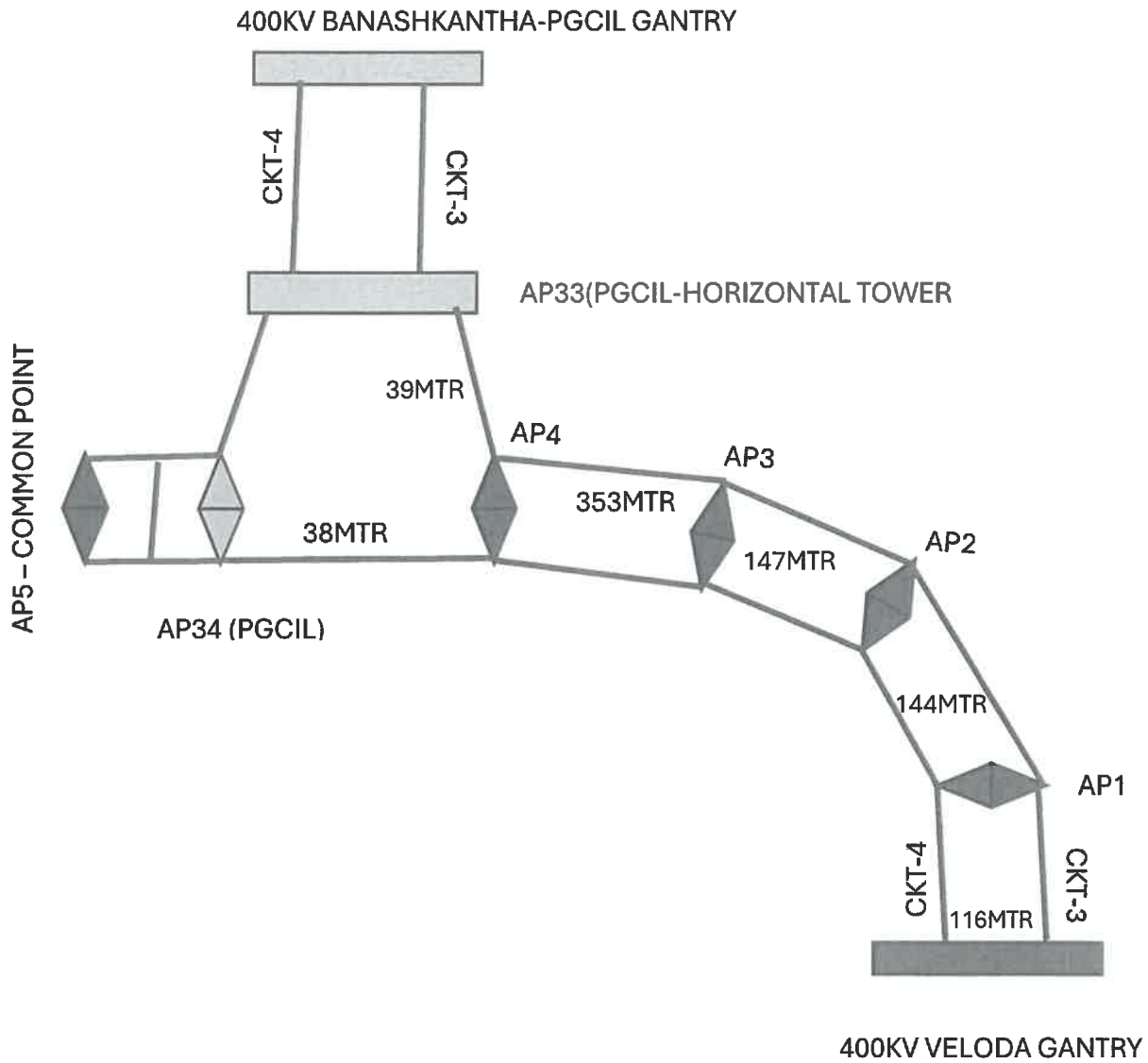
Nisha	AS
Meha	AS
DS	NJ
DRBY	CHKBY
APPROBY	

CLIENT	POWER GRID CORPORATION OF INDIA LTD.
PROJECT	765KV AIS SUBSTATION EXTENSION PACKAGE (SS-91) UNDER TRANSMISSION NETWORK EXPANSION IN GUJARAT TO INCREASE ITS ATC FROM ISTS: PART C.
CONTRACTOR	HINXON LINXON INDIA PVT LTD.
NOA NO.	CC CS-7/NCA-400013 DTD 08.09.2022
CC	CC CS-7/NCA-400013 DTD 08.09.2022
TITLE	765/400KV BANASKANTHIA EXTN. S/S
CONTRACTOR DRG. NO.	400KV SINGLE LINE DIAGRAM
TR202135-1001587	SS1623-765-400-220KV-SS-SLD

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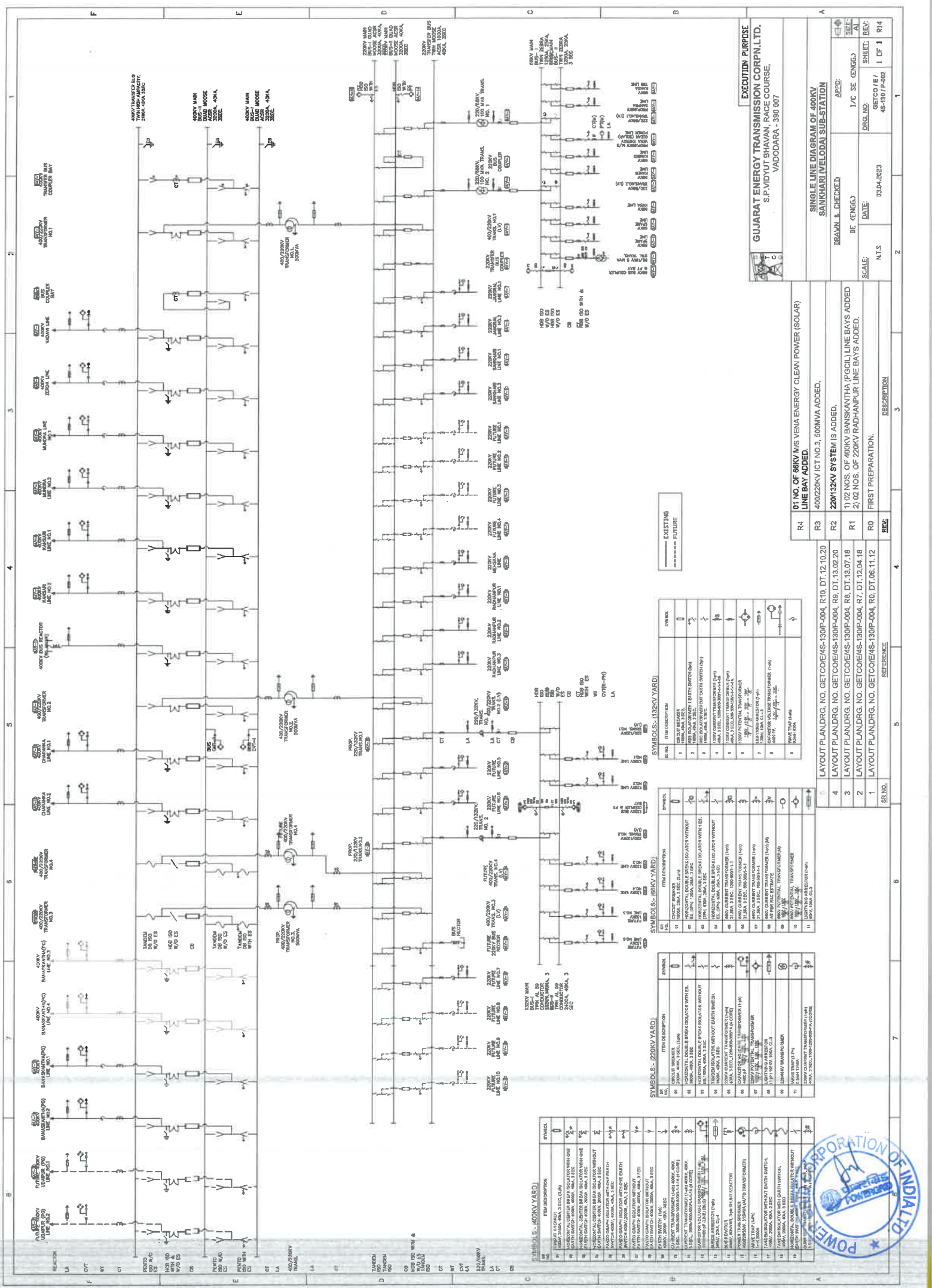
— M/S PGCIL LINE

— M/S GETCO LINE

	PGCIL	GETCO	TOTAL
400KV BANABSKANTHA- VELODA CKT -3 LENGTH =	21.860	+ 0.799	= 22.659 KM
400KV BANABSKANTHA- VELODA CKT -4 LENGTH =	22.051	+ 0.798	= 22.849 KM



AP



EXECUTION PURPOSE

GUJARAT ENERGY TRANSMISSION CORP.LTD.
S.P.VIDYUT BHAVAN, RACE COURSE,
VADODARA - 390 007

01 NO. OF 50KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

02 NO. OF 400KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

03 NO. OF 220KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

04 NO. OF 132KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

01 NO. OF 50KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

02 NO. OF 400KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

03 NO. OF 220KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

04 NO. OF 132KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

01 NO. OF 50KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

02 NO. OF 400KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

03 NO. OF 220KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

04 NO. OF 132KV NIS VENA ENERGY CLEAN POWER (SOLAR) LINE BAY ADDED

SR NO.	DESCRIPTION	REFERENCE
1	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R10, DT. 12.10.20	
2	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R8, DT. 13.02.20	
3	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R8, DT. 13.07.18	
4	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R7, DT. 12.04.18	
5	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R0, DT. 06.11.12	

SR NO.	DESCRIPTION	REFERENCE
1	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R10, DT. 12.10.20	
2	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R8, DT. 13.02.20	
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4	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R7, DT. 12.04.18	
5	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R0, DT. 06.11.12	

SR NO.	DESCRIPTION	REFERENCE
1	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R10, DT. 12.10.20	
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4	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R7, DT. 12.04.18	
5	LAYOUT PLAN DRG. NO. GETCO/IAS-130P-004, R0, DT. 06.11.12	

DETAILED PROJECT REPORT FOR **Transmission Network Expansion in Gujarat to increase ATC** **from ISTS : Part C (Project ID : TR-202135)**

1.0 CONTEXT / BACKGROUND

The ISTS schemes which is a part of the transmission scheme "System Strengthening in Gujarat associated with the integration of RE projects from Khavda potential REZ" has been deliberated in the 5th NCT meeting held on 25.08.2021 & 02.09.2021.

Subsequently, a Joint Study Meeting was held on 05.11.2021 amongst CEA, CTU, POSOCO & GETCO to deliberate over the already planned scheme based on updated inputs received from GETCO. In the meeting, it was decided to phase the schemes already deliberated in the 5th meeting of NCT with minor modifications based on ATC requirement of GETCO as well as system strengthening requirements associated with the integration of RE projects from Khavda potential RE zone. Based on the deliberations, CTU submitted the following proposal for consideration of NCT-

- i) Augmentation of transformation capacity at Banaskantha 765/400 kV S/S by 1x1500 MVA ICT;
- ii) Establishment of Banaskantha -Sankhari 400 kV 2nd D/c line.

Accordingly, NCT approved above ISTS Transmission scheme (*costing greater than Rs. 100 crore and upto Rs. 500 crore*) and recommended mode of implementation through RTM. Subsequently, in line with MoP letter dated 28.10.2021, CEA vide letter dated 22.12.2021 awarded the subject scheme to CTUIL for implementation under Regulated Tariff Mechanism by POWERGRID (implementing agency). As mentioned in the OM, CTUIL has to enter into a concession agreement with the implementing agency (POWERGRID) for implementation of this scheme.

The schematic of the proposed Transmission system is shown at **Exhibit-1.0**.

2.0 SCOPE OF WORK

The present detailed project report covers the following scope of work:

Transmission Line:

- (i) Banaskantha – Sankhari 400 kV 2nd D/c line – 26 km

Substation:

- (i) 765/400 kV Banaskantha S/s (PG) Extension:

765 kV

Transformer bays

: 1 No.



1x1500 MVA, 765/400 kV ICT : 1 No.

400 kV

Transformer bays : 1 No.

Line Bays : 2 Nos.

(ii) 400/220kV Sankhari S/s (GETCO) Extension:

400 kV

Line bays : 2 Nos.

2.1 PROJECT HIGHLIGHTS

a)	Project	:	Transmission Network Expansion in Gujarat to increase ATC from ISTS : Part C
b)	Location of the Project	:	WESTERN REGION
c)	Project Cost	:	Rs. 186.19 Crores at December 2021 Price Level (including IDC of Rs. 10.40 Crores)
d)	Monthly Fixed Charges	:	Rs. 293.00 Lakhs on Base Cost Rs. 337.79 Lakhs on Projected Completed Cost
e)	Commissioning schedule	:	The project is scheduled to be commissioned within 32.5 months from the date of Investment Approval (to be completed by March 2025).

3.0 PROJECT APPROVAL BY CONSTITUENTS / SHARING OF TRANSMISSION CHARGES

3.1.1 The subject scheme "**Transmission Network Expansion in Gujarat to increase ATC from ISTS : Part C**" was discussed in the 5th NCT meeting held on 25.08.2021 and 02.09.2021 and approved in its 7th NCT meeting held on 03.12.2021 with mode of implementation as RTM. Subsequently, in line with MoP letter dated 28.10.2021, CEA vide letter dated 22.12.2021 awarded the subject scheme to CTUIL for implementation under Regulated Tariff Mechanism by POWERGRID (implementing agency). As mentioned in the OM, CTUIL has to enter into a concession agreement with the implementing agency (POWERGRID) for implementation of this scheme. (Copy of relevant extracts of minutes of the above meetings enclosed at **Annexure - 8.0**).

3.1.2 Approval of the Government of India under Section 68 of the Electricity (supply) Act, 2003 has been received vide CEA letter dated 04.02.2022. (Copy attached at **Annexure 9.0**)

3.2 SHARING OF TRANSMISSION CHARGES

The transmission charges for this project shall be shared by the beneficiaries in line with the Sharing Regulations notified by CERC from time to time.



4.0 PROJECT STRATEGY

The Transmission System has been assigned to POWERGRID on RTM basis and thus it is expected that the various elements of this transmission scheme have been undertaken and evolved in consultation with concerned authorities keeping in view the present and future load requirement of Western Region.

5.0 LEGAL FRAMEWORK

It is proposed to execute the above entire transmission scheme as per provisions contained in the Indian Electricity Act, 2003 and the rules made there-under and the Electricity (Supply) Act, 1910 and 1948, in so far as these are applicable.

ENVIRONMENTAL IMPACT ASSESSMENT

6.1 Environmental Risk

As per the policy and procedures laid down in ESPP, preliminary route selection is done based on environmental screening and scoping procedure with the help of secondary/published data/documents such as Forest Atlas and the Survey of India maps using "bee" line method, followed by field verification through walk over survey. All possible steps are taken to avoid the route alignment through forests. In cases where it becomes unavoidable due to the geography of terrain, the alignment is made in such a way that the route through the forests is the barest minimum. For selection of optimum route, following points are taken into consideration:

- (i) The route of the proposed transmission line does not involve any human rehabilitation.
- (ii) Any monument of cultural or historical importance is not getting affected.
- (iii) The route does not create any threat to the survival of any community.
- (iv) It does not affect any Public-Utility Services like Playground, School, Other establishments, etc.
- (v) It does not pass through any sanctuaries, National Park, etc.
- (vi) It does not infringe with areas of natural resources.

As per the preliminary assessment based on walk over survey of the area, minor social forest stretches are likely to be encountered for this Transmission system comprising of the following line:

NAME OF TRANSMISSION LINE

FOREST INVOLVEMENT

(Approx. area in Ha)

- a) Banaskantha – Sankhari 400 kV
2nd D/c line.

0.092 Ha

However, exact involvement of forest stretch shall be known only after detailed survey and finalization of route alignment.

7.0 EQUIPMENT SELECTION PHILOSOPHY



POWERGRID has in-house developed infrastructure/software capabilities and computer aided facilities for Planning, Design, Operation and Maintenance of transmission system. Before planning a transmission system, various system studies like Load flow, Stability, Short-Circuit, etc. are undertaken keeping in view the existing system, present and future load flow requirements and the most optimal transmission system either associated with generation projects or Grid strengthening projects, is evolved with bare minimum redundancy required. Further, Design studies are undertaken for selection of major system and equipment parameters for transmission system upto 800kV level.

The subject project has been designed in the most optimal manner based on the various studies as mentioned above. The system and equipment parameters are chosen keeping in view the present trend in technology. The conductors are selected such that the losses in them due to internal resistance as well as due to external effects are bare minimum. The bus bar materials and the clamps and connectors are chosen meeting the stringent international requirements so that there is least loss of energy in them. The Transformer are suitably selected and evaluated before award itself for most efficient operation from thermal and loss efficiency point of view. The energy thus saved is energy transmitted to the beneficiaries. This is a major step in energy conservation as the energy saved on account of losses is construed as energy generated.

8.0 TECHNOLOGY ISSUES

8.1 Salient features of 765/400 kV Substation Equipment and facilities

The design and specification of substation equipment are to be governed by the following factors:

8.1.1 Insulation Coordination

765/400 kV System would be designed to limit the switching overvoltage to 2.5 pu and power frequency overvoltage of 1.5 p.u. In case of 765/420 kV system, the initial value of temporary overvoltage could be 2 p.u for 1-2 cycles. Consistent with these values and protective levels provided by lightning arrestors, the following insulation levels are proposed to be adopted for 765 kV and 400 kV systems:

		765 KV	420 KV
a	Impulse withstand voltage for - Transformers - for Other Equipment	1950 kVP 2100 kVP	1300 kVP 1550 kVP
b	Switching surge withstand voltage	1550 kVP	1050 kVP
c	Minimum creepage distance	2000 mm	10500 mm
d	Max. fault current	50kA	63 kA
e	Duration of fault	1 Sec	1 Sec
f	Corona extinction voltage	508kV rms	320kV rms

To control the steady state, transient and dynamic overvoltage to specified levels, compensation equipment shall be provided.



8.1.2 Steady State Stability

The Steady State Stability is the ability of a system, to return/remain in the state of equilibrium when subjected to small or gradual changes of disturbances. The steady state stability limit is the maximum power that can flow through some lines in the system when the entire or part of the system to which the stability limit refers is subjected to a small disturbance without loss of its stability.

The steady state stability is usually quantified by measuring the relative angular displacement (also called as swing curve) between the two buses (nodes) in a network when a small disturbance is applied somewhere into the system.

In an integrated power system consisting of large number of generator, load and line etc., a maximum relative angular separation of about 30 deg. between the two buses may be assumed to be acceptable (safest) limit for maintaining the steady state stability of the system. Angular separation for different alternatives have been studied and found to be in order.

8.1.3 Switching Schemes

It is essential that the system should remain secured even under conditions of major equipment or bus-bar failure. Sub-stations being the main connection points have large influence on the security of the system as a whole. The selection of the bus switching scheme is governed by the various technical and other related factors. One & Half breaker bus scheme has been considered for 765kV and 400kV sides in Banaskantha (PG) S/s and Double Main & Transfer in Sankhari (GETCO) S/s for 400 kV side due to their merits in terms of reliability, security, operational flexibility and ease of maintenance of equipment's.

The following switching schemes have been considered in various substations:

Substation	765kV side	400kV Side
765/400 kV Banaskantha (PG) S/s Extension	One and Half	One and Half
400/220 KV Sankhari (GETCO) S/s Extension	—	Double Main & Transfer

8.1.4 765/400 kV Substation equipment:

The switchgear shall be designed and specified to withstand operating conditions and duty requirements. Further, switchgear for all voltage levels shall be generally of conventional type air insulated switchgear due to economy, subject to availability of suitable land.

8.1.4.0 Power Transformer

Power transformers shall conform to IEC : 60076 / IS : 2026 in general. These transformers shall generally have OLTC with a range of $\pm 5.5\%$, the range and requirement of which shall be finalized based on the system requirement. The air core reactance shall be of the order of 20%. Tertiary windings shall be provided for large auto transformers, which shall be capable of being loaded to one third of transformer loading. Insulation level of tertiary winding shall not be less than maximum transferred surge from HV/MV winding to tertiary winding.

8.1.4.1 Circuit Breakers

Circuit breakers shall in general comply to IEC 62271-100 & IEC-60694 and shall be of SF6 Type. The rated break time shall not exceed 60ms for 220 kV and 40 ms for 765 kV and 400kV circuit breakers. Circuit breakers shall be provided with single phase and three phase auto reclosing. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors.

8.1.4.2 Isolators

The isolators shall comply to IEC 62271-102 in general. Isolators shall be horizontal/knee type/double break/vertical break/ pantograph type keeping in view the bus switching schemes proposed. Isolators shall be motor operated. Earth switches are provided at various locations to facilitate maintenance. Main blades and earth blades shall be interlocked and interlock shall be fail safe type. All earth switches shall be motor operated type.

8.1.4.3 Current Transformers

Current Transformers shall comply with IEC 60044-1 in general. All ratios shall be obtained by secondary taps. They have six secondaries for 765kV and 400kV out of which four shall be used for protection and 2 shall be used for metering. For 220 kV system, it shall have 5 secondaries out of which four shall be used for protection and 1 shall be used for metering. The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. Accuracy class for protection core shall be PX and for metering core shall be 0.2S as per IEC 61869.

8.1.4.4 Capacitor Voltage Transformers

Voltage transformers shall comply with IEC 60044-5 in general. These shall have three secondary out of which two shall be used for protection and one for metering. Accuracy class for protection core shall be 3 P and for metering core shall be 0.2. The voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT shall be 4400/6600/8800 pF depending on PLCC requirements.

8.1.4.5 Surge Arresters

Station class current limiting, heavy duty gapless type Surge arresters conforming to IEC 60099-4 in general shall be provided. The rated voltage of Surge arrester and other characteristics are chosen in accordance with system requirements. Surge arresters shall be provided near line entrances, so as to achieve proper insulation coordination. These shall be fitted with pressure relief devices and diverting ports suitable for preventing shattering of insulator housing providing path for the flow of rated currents in the event of arrestor's failure.

The switchgear shall be designed and specified to withstand operating conditions and duty requirements.



8.1.5 Substation Support facilities

Certain facilities required for operation & maintenance of substations as described below shall be provided in new substation and in existing substation they have already been provided and would be extended, wherever required.

8.1.5.1 Firefighting System

Firefighting system in general conforms to fire insurance regulations of India. Extension of the existing firefighting system with both AC motor & diesel engine driven pumps is proposed. Automatic heat actuated emulsifying system is proposed for transformers. In addition, alarm system based on heat/smoke detectors are proposed to be installed at sensitive points in a substation. Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations.

8.1.5.2 Lighting

Adequate normal & emergency AC & DC lighting shall be provided in the switchyards.

8.1.5.2 Telemetry and Communication

The communication network under the proposed project shall have the following aspects in order to meet the high reliability, availability and maintainability criteria:

- i. The proposed FO based communication links/network shall be used for speech and data communication to SLDC and/or RLDC. The capacity planned has scope for future usages including for Special protection schemes.
- ii. The Fiber Optic (FO) terminal equipment to be installed under the project shall be based upon SDH technology with STM-16 bit rate having support for both existing PDH & Ethernet based requirement. The interfaces shall be selected meeting the present requirement for grid management etc. The SDH equipment shall be provided with redundancy to facilitate path protection and against failure of any interface card/power supply.
- iii. Suitable interface cards shall be provided for data transmission and interfacing with data equipment such as PMU*. SPS, RTU and/or sub-station automation system.

**The PMUs provide real time phase angle measurement which is utilized for better Visualization & help to increase the situational awareness of Power System Operators to facilitate real-time congestion management, design of an advanced warning system, validation of data, fine tuning of system models and design of an adaptive protection system.*

8.1.6 Protection & Control

The substations shall be provided with control, relaying & monitoring functions along with substation automation system based on IEC 61850 protocol using fiber optic network. The communication with adjacent connected substations shall be through PLCC & digital protection through OPGW.

The state of art protection system based on numerical technology has been provided to minimize the damage to equipment in the event of fault for Transformers, Reactors, Transmission lines and Bus bars. These protective relays are with self-diagnostic features.



and conforming to latest IEC 61850 for communication purposes for communicating the detailed list of events recoded by these relays in the event of fault or any abnormal conditions. Normally all these relays are equipped with in built fault recorder which can record the analogue as well as digital information for analysis of fault.

Protective Relaying System

The protective relaying system proposed to be provided for transmission lines, auto-transformers and bus bars to minimize the damage to the equipment in the events of faults and abnormal conditions, is dealt in this section.

Auto Transformers

Auto transformers shall be provided with the following protections:

- i) Differential protection
- ii) Restricted earth fault protection
- iii) Back-up impedance protection

Besides these, transformers shall also be provided with Bucholz relay, protection against oil and winding temperatures & pressure relief device.

Bus bar Protection

The high speed bus bar differential protection which is essential to minimize the damage and maintain system stability at the time of bus bar faults shall be provided for 765 kV and 400 kV buses. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have the provision for future expansion.

Local Breaker Back up Protection

This shall be provided for each of 765 kV/400 kV breakers and will be connected to de-energize the affected stuck breaker from both sides.

Time synchronization equipment

Time synchronization equipment complete in all respect including antenna, cable, processing equipment required to receive time signal through GPS or from National Physical Laboratory (NPL) through INSAT shall be provided.

Substation Automation System

For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 has been provided. The distributed architecture has been used for Substation Automation system where the controls are provided through bay control unit and bay control units are provided bay wise for voltage level 400kV and above. All bay control units as well as protection units are normally connected through an optical fiber high speed network. The control and monitoring of substation elements such as circuit breaker, disconnector, resetting of relays etc. are being done from Human Machine Interface (HMI) from the control room. SAS is equipped with the facility of remote operation. By providing remote HMI and suitable communication link, the substation can be controlled from a remote location. The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in Substation Automation System. The Automation System shall be provided with the facility of communication and control for remote end operation.



8.1.7 PLCC

Power line carrier communication (PLCC) equipment complete for speech transmission, line protections, and data channels shall be provided on each 400 kV transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels. The PLCC equipment shall in brief include the following:

Coupling device, line traps, digital/analog carrier terminals, protection couplers, HF cables, trunk selectors, automatic exchange, and maintenance and testing instruments.

Coupling devices shall be suitable for 4400/6600/8800 pF for 420 kV CVTs for phase to phase coupling. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for the safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided. The line traps shall be broad band tuned suitable for blocking the complete range of carrier frequencies.

Line Trap shall have the necessary protective devices such as lightning arresters for the protection of tuning device and shall be equipped with corona rings. Decoupling network consisting of line traps and coupling capacitors may also be required at certain substation in case of extreme frequency congestion.

8.1.7 Control Concept

All the EHV breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room / remote control center. Each breaker would have two sets of trip circuits which would be connected to separately fused DC supplies for greater reliability. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

8.2.1 400kV D/c Twin AC Transmission Line

8.2.1.1 Wind Zone

The weight of tower will vary in an ascending order from wind zone 1 to wind zone 6 as the transverse load on the tower considered owing to the wind pressure increases in the same pattern. The identification of wind zone is based on the wind zone map given in National Building Code 2016, Vol.1 and the past experience in the region.

The transmission lines fall under wind zone - 4 (47 m/s) as per National Building Code 2016, Vol.1 and it shall be designed accordingly.

8.2.1.2 Design Criteria

The design parameters proposed to be adopted for the transmission line are generally based on the report of standardization committee of CEA and stipulations of relevant Indian Standards. Twin bundle conductors have been considered for the design of transmission lines as per requirements of the identified system.

8.2.1.3 Line Configuration

The 400 kV D/c Twin line shall have vertical configuration of Towers.



8.2.1.4 Towers & Foundations

Self-supporting latticed bolted steel towers, fabricated from structural steel angle section from Mild steel or/and High tensile steel plate/section, shall be used. Tower structure components and bolts & nuts shall be hot dip galvanized.

Normally, the following types of double circuit tower structure shall be used in this line.

- i) DA type suspension towers for upto 2 degree angle of deviation.
- ii) DB type suspension towers for upto 15 degree angle of deviation.
- iii) DC type tension towers for upto 30 degree angle of deviation.
- iv) DD type tension towers for upto 60 degree angle of deviation and suitable for dead end condition. These may also be used for terminal locations.

The standard extension normally used for various types of towers are as follows:

DA, DB & DC : 3m, 6m, 9m

DD : 3m, 6m, 9m, 18m, 25m, 30m, 35m

In addition to the above, special towers, for major river crossing, power line crossing and the places where the terrain is particularly different, such as approach to the sub-station, forest stretches etc. shall also be used. All towers shall be designed in accordance with latest edition of IS-802 and considering necessary improvements and reinforcements evolved as per suggestions/recommendations of CEA's expert committee based on the experience of previous tower failures in the country.

8.2.1.4.1 Foundations

Tower Foundations are generally pad & chimney type and typically classified as Dry, Wet, Partially submerged (PS), Fully Submerged (FS), Wet Black Cotton (WBC), Sandy, Dry Fissured Rock (DFR), Wet Fissured Rock (WFR), Submerged Fissured Rock (SFR), Hard Rock etc. depending upon type of soil encountered and designed accordingly based on relevant Indian standards and CBIP guidelines. For river crossing locations & soils having poor bearing capacity, wherever required, pile/well type foundations are used.

8.2.1.4.2 Revetment and Benching

For hilly and undulating stretch, wherever the line is passing through, revetment and benching shall be provided as per site conditions.

8.2.1.5 Conductors

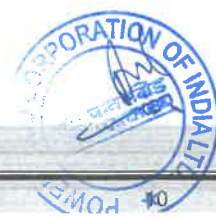
AL59 type conductors have been considered based on system requirements.

8.2.1.6 Earthwire/OPGW

Earth wire and OPGW shall be used on the line so that it can withstand two successive lightning strokes of 150 kA. Shielding angles of 20 deg is considered for transmission line.

OPGW shall be used to meet the requirements of Power System Communication. Optical Fibre technology provides an efficient telecommunication network to support their various applications requiring higher speed & bandwidth.

8.2.1.7 Grounding



The tower footing resistance shall be kept below 10 ohms. Pipe type or counterpoise earthing shall be used to bring the tower footing resistance down to acceptable level.

8.2.1.8 Insulator and Hardware Fittings

High strength composite long rod insulators shall be used. The following types of insulator strings along with hardware fittings shall be used:

400 kV TRANSMISSION LINE WITH TWIN MOOSE CONDUCTOR

Sl. No	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit (kN)	Mechanical Strength of Insulator String along with Hardware Fittings (kN)
a.	Single 'I' Suspension	20x3335	13020	1x1	120	120
b.	Single Suspension 'Pilot'	20x3335	13020	1x1	120	120
c.	Double Tension	24x3910	13020	2x1	160	2x160

Items (a) and (c) are mostly used for suspension and tension towers respectively. Item (b) also shall be used in heavy angle towers – DD type - to restrict jumper movement. Suitable hardware fittings shall be used for attachment of the insulators with the tower at one end and also for supporting the conductors at the other end. Corona control rings or grading rings will be used for improving corona and RIV performance.

8.2.1.9 Line Accessories

i) Mid span compression joint for conductor

Mid span compression joint suitable for conductor shall be used for joining two lengths of conductor. The minimum slipping strength of the joint after compression shall not be less than 95 % of the UTS of conductor / earthwire.

ii) Repair sleeve for conductor

Repair sleeve shall be used only for repairing not more than two strands broken in the outer layer of conductor. It shall be of compression type in two parts with provision of seat sliding of keeper piece.

iii) Spacers/Spacer Damper

Twin bundle spacers shall be used for the Twin bundle lines respectively to reduce vibrations and maintain sub-conductor spacing under all working conditions.

8.2.1.10 Power line, Railway line, Road and P&T line crossing

The transmission lines shall be crossing power lines, railway lines roads and P&T lines for which suitable extensions of towers shall be used.



The standard extension normally used for various types of towers are as follows:

DA, DB & DC : 3m, 6m, 9m
DD : 3m, 6m, 9m, 18m, 25m, 30m, 35m

In addition to the above body extension, suitable leg/Chimney extensions shall also be provided in the hilly terrain, wherever required, to reduce the benching.

9.0 MANAGEMENT ARRANGEMENTS

9.1 Organizational set up

In POWERGRID the 'Organizational Concept' has been given due importance and the basic structure of organization has been made with a view to achieve the following objectives:

- i) To group related functions together to have clearly defined 'Roles' for the relevant 'functional heads'.
- ii) To have well defined 'Responsibility & Authority' centers in the structure.
- iii) To have well defined 'communication channels' and optimum 'span of control' in the organization.
- iv) To have optimum manpower.
- v) To have decentralization of activities as far as possible.

At the first level in the organization, Corporate Centre will be planning, monitoring and controlling the objectives and activities of the organization. At the second level, the Regional HQs will be playing the role of controlling the activities in the regions and will report to Corporate Centre. In POWERGRID, 10 regions have been identified as NR-I, NR-II, NR-III, SR-I, SR-II, WR-I, WR-II, ER-I, ER-II & NER and these regions will be headed by GM/ED. The subject project falls under the purview of WR-II.

Apart from the above, Project office is also established considering project size and importance.

At the third level in the structure, the Substation Groups will be controlling the activities of the respective Substation and associated lines under that Group and will report to the Regional HQs/Project office. The Groups will consist of basic working units such as substation Construction/maintenance, line construction/maintenance. The Groups will have both service and technical functions, to cater to the basic functional requirements.

9.1.1 Project Management

The project of transmission system will be planned, implemented, monitored and controlled through Integrated Project Management and Control System (IPMCS).

IPMCS uses PERT/CPM technique as the basic management tool. For effective project planning and review, three tier level of planning and review have been adopted.

Level-I:

Planning is done by the Corporate Monitoring Group, a central planning cell, which is in the form of an overall project schedule called the Master Network, for the project which forms the basis for all subsequent planning and monitoring of the activities. This covers broadly all the packages of project and indicates activities of engineering, contracts

manufacturing, erection and commissioning. The Master Network is prepared using computerized techniques which subsequently helps in comparing the actual progress of the project with the scheduled progress. This gives indication of the likely critical areas and helps in preventing the same, thereby resulting in smoother implementation. The Master Network also acts as a source for the planning to be done at Level - II & Level - III.

Level-II:

Planning is done package-wise and is worked out and finalised with the respective contractor/vendor during the pre-award stage. Level II networks are made within the milestones identified in the project Master Network (L-I).

Level-III :

Plans deal with elaborate schedules and weekly/monthly rolling plans which are prepared for activities of engineering, supply (as the case may be) & field activities. These form the basis of monitoring by the various functions.

The system envisages monthly review of the level II programs with contractors and at field on a weekly basis. A site monthly progress report is sent to the head office having four sections, i.e.

- i) Project completion trend
- ii) Salient achievements for the month
- iii) Program for next month
- iv) Areas needing attention of top management

9.1.2 Project Implementation Review

As on 28th February 2022, POWERGRID operates about 1, 72,275 ckm. of transmission lines and 265 Substations with a transformation capacity of about 4,73,612 MVA. POWERGRID has a team of dedicated experts in the field of substation and Transmission Line Engg. equipped with state-of-the-art technology, software capabilities and computer aided facilities for Planning, Design, Operation and Maintenance of transmission system. It has a well-established system of continuous feedback from the field and upgrades the system accordingly.

Based on the feedback as well as in pursuit to economize the cost and implementation period, its experts are vigorously pursuing the standardization of Transmission Line designs, substation/switchyard layouts, schemes, technical parameters of equipment, etc.

POWERGRID has developed a project monitoring system matching with the organization structure, complexity / intricacies involved in the project implementation and Management information system. The system calls for increasing details of planning in all facets of functioning such as engineering, contracts, site and corresponding levels of monitoring and control; for generating a management summary report to the top management. This management summary report highlights the project completion

trends, actions being taken/to be taken for the attention of the top management on exceptional basis of critical areas.

Further, the monitoring system envisages a regular total project review called project review meeting (PRM). This review meeting is headed by the Regional in-charge with representation from all functions viz. Contracts, Engineering, Field, Personnel, Finance, Corporate Monitoring Group, etc. The participants discuss project critical, project interface problems and project completion trends, etc.

From the discussions held during the PRM a status report emanates and also an exception report is put up to the Chief Executive and Directors which highlights extremely critical areas needing immediate attention and assistance required. The PRM is held at Corporate Centre generally once in three months. These discussions help in identifying the critical areas and seeking decisions for speedy project implementation.

10.0 MEANS OF FINANCE AND PROJECT BUDGET

10.1 Project Cost Estimate

The estimated cost of the project based on **December 2021 price level** is as follows:

		(Rs. in crores)
		Total cost
1.	Transmission System	175.79
2.	Interest during Construction	10.40
TOTAL		186.19

The abstract cost estimate for Transmission system is given at **ANNEXURE - 1.0**. The break-up of the cost estimate for civil works, Transmission line and substations are given at **ANNEXURES - 1.1, 1.2 and 1.3** respectively.

10.2 Basis of Cost Estimate

The estimated cost of the project as on December 2021 price level works out to **Rs. 186.19 crores** including an IDC of **Rs. 10.40 crores**. Unit rates for 400kV transmission line and 765/400kV substation works have been taken from Schedule of Rates (which has been prepared based on the average of unit rates of latest LOAs/Bids and/or from Raw material prices) for December 2021 Price level.

The cost estimate is inclusive of GST as applicable for various equipment (supply & services portion). F&I @ 4% has been considered in the Estimate for plain terrain.

10.3 Project Overheads

The following overheads have been charged on to the cost of the transmission system as a percentage of the equipment cost (excluding cost of compensatory afforestation):

For Transmission system

- | | |
|---|--------|
| i) Incidental Expenditure during Construction | 10.75% |
| ii) Contingencies | 3.00% |

10.4 Funding arrangement

10.4.1 Phased Fund Requirement

The anticipated year wise fund requirement for the project including interest during construction is given below:

YEAR	TOTAL (Rs in Crores)
2022 – 2023	17.98
2023 – 2024	51.91
2024 – 2025	98.68
2025 – 2026	17.59
Total	186.19

10.4.2 Mode of Financing

The project is proposed to be funded through POWERGRID's Internal Resources (IR) and through domestic borrowings/bonds/External Commercial borrowings. The equity component (30%) is proposed to be met through the Internal Resources (IR) and the loan component (70%) through domestic borrowings/bonds/External Commercial borrowings.

10.5 Interest during Construction

Based on the assumption that the project will be financed from loan and equity in the ratio of 70:30 and the equity component being released simultaneously along with the loan component, the interest during construction works out to **Rs. 10.40 crores**. The interest rate for the loan amount has been considered 9.00% for domestic loan. The details of calculation are furnished in **ANNEXURE - 4.0**.

The interest during construction would however be based on the actual financial structure of the project and applicable terms of interest on loan(s), etc.

10.6 Monthly Fixed Charges

Since the subject transmission system is proposed to be commissioned by March 2025 and therefore, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 after considering 3.51% O&M escalation year on year have been referred for calculation of monthly fixed charges. Details are as follows:

- Rate of interest on Domestic Loan @ 9.00% p.a.;
- Return on equity @ 15.5%;
- Depreciation @ 0% for land, @ 5.28% for TL, @ 5.28% for substations, @ 6.33% for PLCC.



iv. O&M charges :

a. For **FY 2025-26** as @ 1.08 Lakhs per Km for 400kV D/c Twin line, @ 55.37 Lakhs for 765kV Bay, @39.55 Lakhs for 400kV Bay and @ 0.60 Lakhs per MVA for 765/400kV ICT.

v. Debt:Equity ratio 70:30;

vi. Interest on working capital @ 10.50%;

The tentative monthly fixed charges work out as **Rs. 293.00 Lakhs** on Base Cost and **Rs. 337.79 Lakhs** on Projected Completed Cost (**ANNEXURE - 3.0**).

10.7 Completion Cost

The completion cost of the project is expected to be **Rs. 209.97 crores** including IDC of **Rs. 10.96 crores**. The above cost has been worked out based on the average movement of WPI (80% weightage) and CPI (20% weightage) for the preceding 12 month period as per guide lines dated 06.08.1997. Details of calculation are enclosed at **ANNEXURE - 5.0**. The abstract cost estimate for completed cost is enclosed at **ANNEXURE - 1.0a**. The phased fund requirement and calculation for IDC for completed cost are enclosed at **ANNEXURES - 2.0a** and **4.0a** respectively.

10.8 IRR Calculation

The Project IRR, Equity IRR and Economic IRR on Projected Completed Cost have been calculated for the project and the same is tabulated below:-

	For Completed Cost
Project IRR	11.00 %
Equity IRR	15.93 %
Economic IRR	12.64 %

Considering interest rate on domestic loan at 9.0% and return on equity at 15.5%, the weighted average cost of capital (WACC) for domestic funded projects of POWERGRID with debt:equity of 70:30 works out to 10.95%. Project IRR of subject scheme at 11.00% being greater than WACC establishes the financial viability of the project.

The details of calculation are furnished in **ANNEXURE - 7.0**.

11.0 TIME FRAME

The project is scheduled to be commissioned within 32.5 months from the date of Investment Approval (to be completed by **March 2025**). Implementation schedule is given at **EXHIBIT-3.0**.

12.0 RISK ANALYSIS



Revenue Risk

The capital cost of the transmission system comprises of i) an equity component and ii) a loan component. This is recovered through the annual transmission charges consisting of return required for the equity, an interest for the loan component together with the depreciation charges, the O&M charges and interest on working capital from the beneficiaries as per CERC Notifications. In addition to annual charges Income Tax, FERV and incentives, etc. as per notification would also be payable. Transmission charges payable have been worked out presently based on CERC Tariff Regulations, 2019 and same shall be billed as per the applicable tariff regulations as issued by CERC from time to time during useful life of the assets.

Regulatory Risk

The transmission charges for this project shall be shared by the beneficiaries in line with the Sharing Regulations notified by CERC from time to time. CERC (Sharing of inter-State Transmission charges and losses) Regulations, 2020 came into force w.e.f. 01.11.2020. Under the Sharing Regulations 2020 signing of any TSA is not envisaged. However, relevant features of TSA, RSA and BCD Procedure have been included in the Regulations itself. Transmission Service Agreements and Revenue Sharing Agreements as on date of commencement of these Regulations shall be saved till expiry of the Agreements to the extent they are not in conflict with provisions of the 2020 Sharing Regulations as and when it becomes effective.

Environmental Risk

Transmission system projects are environmentally friendly and do not involve any disposal of solid effluents and hazardous substance in land, air and water.

Legal / Contractual Risks

The procurement practices of POWERGRID are in line with best practices followed internationally. Further, requisite due diligence is carried out prior to award of contracts which inter-alia includes assessment of capacity and capability of bidders to perform the contract, thereby mitigating contractual risks. In the unlikely event of such risk, adequate provisions such as Dispute Resolution, Risk & Cost procurement, etc. are in built in the Bidding/Contract Document to deal with the same.

The legal framework governing the contracts in India is well established and finally in place. As such, there is minimal probability of any legal risk.

Project Management Risks

POWERGRID holds vast experience in the area of construction of 400kV and 765kV long Inter-state Transmission lines and associated substations. It has commissioned numerous 400kV and 765kV Transmission Lines and Substation projects successfully which are under operation.



POWERGRID has developed and implemented systems & procedures aligned with Integrated Management System. The Critical projects are monitored even more closely. As such, with a dedicated and experienced pool of manpower and application of IMS in implementation of its projects, POWERGRID makes every endeavor to achieve the target making probability of impact of Project Management Risks to minimal.

13.0 PAST RECORD OF SUCCESSFUL PROJECT IMPLEMENTATION

The above transmission system has been evolved, carrying out detailed studies by using latest available power system analysis software (PSS/E), and the proposed system is considered to be adequate to transfer power to the respective beneficiaries with reliability and security. Regarding achieving its objective in the stipulated time frame, it is to mention that POWERGRID has in-house expertise in all specialized areas of transmission with systems upto 800KV AC, ± 500 KV HVDC, Gas Insulated Sub-Stations, Static VAR Compensation, Series Capacitors, FACTS (Flexible AC Transmission System), Controlled Shunt reactors etc.

POWERGRID, since its formation has commissioned many large size and difficult transmission projects. Majority of such projects have been completed on or ahead of schedule.

As on 28th February 2022, POWERGRID operates about 1, 72,275 ckm. of transmission lines and 265 Substations with a transformation capacity of about 4,73,612 MVA. POWERGRID has maintained the transmission system's availability at over 99% consistently.

In recognition of POWERGRID's excellence in areas of its operations as above, POWERGRID has been rated as "Excellent" many times since 1993-94 in achieving the MoU targets with Ministry of Power. POWERGRID is also a recipient of Prime Minister's MoU Award consecutively for many years for being amongst top ten PSUs.

14.0 SUSTAINABILITY

14.1 System Design Philosophy

The power evacuation system is designed in the most optimum manner such that losses in the system are minimal. The system and equipment parameters are chosen according to the present trends in technology, the conductors available are such that the losses in them due to internal resistance as well as due to external effects such as corona and RIV are bare minimum. The busbar materials and the clamps and connectors are chosen after meeting the stringent international requirements so that there is least loss of energy in them. The transformers, reactors and other switchgear are also similarly selected and evaluated before award itself for most efficient operation from thermal loss and efficiency.

14.2 System Operation Philosophy



The power flow in a particular line varies due to demand variation, failure of equipment, line faults, etc. For the system to be stable and to use optimized resources, it is very important to record the power flow at each and every time. This necessitates the monitoring of operation of the system on a three shift basis.

14.3 System Maintenance Philosophy

The maintenance management system in vogue in POWERGRID aims at keeping the system under stable conditions while ensuring minimum maintenance cost and safety of equipment and personnel. The maintenance management schedule detailed work specification covering all maintenance jobs permit to work system, long term maintenance planning meeting for about 30 minutes for finalizing maintenance schedule for next 24 hours and resolution of interface problems between departments. These meetings are supplemented by meeting of HODs for one hour on alternate days to accelerate the decision making process and to lay down the priorities and guidelines for maintenance work during next 72 hours.

14.3.1 Spare parts Management System

The primary objective of spare part management system will be to ensure timely availability of proper spare parts for efficient maintenance of the substations and lines without excessive build-up on non-moving and slow moving inventory. The spare parts management system for this project will cover the following areas:

- a) Proper codification of all spares and consumables
- b) Spare parts indenting and procurement policy
- c) Ordering of critical mandatory and recommended spares
- d) Judicious fixation of inventory levels and ordering levels for spare parts based on our experience in other projects.
- e) Development of more than one source wherever practicable.

14.3.2 Training of personnel

The expertise available with the country is adequate to cover maintenance of Transmission Line and sub-station EHV equipment, etc. Also, available technical expertise within POWERGRID is adequate to cover operation and maintenance requirements of equipment. Hence, training in these areas can be arranged by POWERGRID's training facility with the help of training officers, equipment suppliers and consultants, site commissioning personnel as well as POWERGRID's own specialists.

14.3.3 O&M Manuals

- a) Adequate O & M manuals will be distributed to all concerned as per the policy of the company.



- b) O & M manuals will be available to all concerned prior to commissioning of substations and transmission lines to avoid problems in preparation of commissioning documents as well as proper installation & commissioning of equipment.

14.3.4 Special Maintenance tools and Plants

A set of Special maintenance tools and plants shall be provided for installation, commissioning and proper maintenance of the elements of the transmission system. Suitable provision is kept for the same in the cost estimate @ 1% of the total Equipment Cost.



I/25625/2023



सत्यमेव जयते
भारत सरकार

Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन - I प्रभाग
Power System Planning & Appraisal-I Division

सेवा में / To,

- Member Secretary, WRPC, MIDC area, Marol, Andheri East, Mumbai – 400093
- Managing Director, GETCO, Sardar Patel Vidyut Bhawan, Race Course, Vadodara – 390007
- Director (Projects), PGCIL, Saudamini, Plot No. 2, Sector-29, Gurgaon – 122001
- Director (SO), Grid-India, 9th Floor, IFCI Towers, 61, Nehru Place, New Delhi – 110019
- COO, CTUIL, Saudamini, Plot No. 2, Sector-29, Gurgaon – 122001

**विषय / Subject: Minutes of the meeting to discuss the modification in scope of work of
“Transmission Network Expansion in Gujarat to increase ATC from
ISTS: Part C” scheme - reg**

महोदया /महोदय,

A meeting was held on 05.01.2023 under the chairmanship of Chairperson, Central Electricity Authority, to discuss the modification in scope of work of “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C” scheme. Minutes of the meeting is attached for kind information and necessary action.

भवदीय / Yours faithfully,

(विकास सचान/ Vikas Sachan)

उपनिदेशक/ Deputy Director



I/25625/2023

Minutes of the meeting held on 05.01.2023 to discuss the modification in scope of work of the transmission scheme- "Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C"

List of participants is attached as **Annex-I**.

Background:

The Transmission Network Expansion in Gujarat to increase its ATC from ISTS: Part C scheme was agreed in the 7th NCT meeting held on 03.12.2021, with following scope of work:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA	765/400 kV, 1500 MVA ICT: 1 No. 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.
2	Banaskantha -Sankhari 400 kV 2 nd D/c line	26 km 400 kV line bays- 4 nos (2 Nos. at Banaskantha and 2 Nos. at Sankhari)

Estimated Cost: Rs 148 Crore

Implementation Time-frame: Matching with establishment of Prantij 400/220 kV and Sankhari- Prantij 400 kV D/C line by GETCO (presently expected by Mar'25)

The scheme is presently under implementation by POWERGRID (under RTM).

Subsequently, GETCO had requested CTUIL to review the Banaskantha -Sankhari 400 kV 2nd D/c line considering the issue of high fault level at 400 kV level of Sankhari (Veloda) S/s (~45 kA in 2026-27 time-frame) as well as RE connectivity to the tune of 700-800 MW which has been granted by GETCO at 220 kV level of Sankhari S/s.

Further, based on the request of GETCO, CTUIL in the 11th meeting of National Committee on Transmission (NCT) held on 28th December, 2022 had intimated that Banaskantha -Sankhari 400 kV (2nd) D/c line may be modified as Banaskantha – Prantij 400 kV D/c line along with 63 MVar, 420 kV switchable line reactor on each ckt at Prantij S/s end (Prantij – Sankhari 400 kV D/c line is under the scope of GETCO).

In the 11th meeting of NCT, it had been decided to deliberate on the above modifications suggested by GETCO in a separate meeting.

Deliberations held in the meeting:

- Chairperson, CEA, suggested that the Banaskantha – Sankhari 400 kV 2nd D/c line (being implemented by POWERGRID under RTM) may not be terminated at Sankhari S/s, instead it may be terminated on the tower outside Sankhari S/s. GETCO should implement the Prantij-Sankhari 400 kV D/c line and connect it with the Banaskantha – Sankhari 400 kV 2nd D/c line being implemented by POWERGRID. The 2 Nos. of 400 kV bays at Sankhari S/s may be deleted from the scope of POWERGRID.
- Both POWERGRID and GETCO agreed to the proposal. POWERGRID also agreed for the deletion of 2 Nos. of 400 kV bays at Sankhari S/s from their scope.



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- On the query from POWERGRID regarding tower configuration/conductor mismatch, it was suggested that POWERGRID and GETCO may coordinate among themselves and match their tower and conductor configuration at the earliest.

Decisions taken in the meeting:

- The modified scope of work of “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C” scheme being implemented by POWERGRID under RTM route is given below:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA	765/400 kV, 1500 MVA ICT: 1 No. 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 no.
2	Banaskantha - Sankhari 400 kV D/c line (2 nd) along with line bays only at Banaskantha end	26 km (approx.) 400 kV line bays- 2 Nos. (at Banaskantha S/s)

Implementation Time-frame: Matching with establishment of Prantij 400/220 kV S/s and Prantij - Sankhari 400 kV D/c line (presently expected by March, 2025)

- The scope of work in intra-state to be implemented by GETCO is given below:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
2	Sankhari – Prantij 400 kV D/c line along with line bays and 63 MVar, 420 kV switchable line reactors on each ckt at Prantij S/s end	125 km (approx.) 400 kV line bays- 2 Nos. (at Prantij S/s) 63 MVar, 420 kV Switchable Line Reactors- 2 Nos. at Prantij end along with associated switching equipment

Implementation Time-frame: Presently expected by March, 2025.

- POWERGRID and GETCO alongwith CTUIL would finalize the type of conductor and tower configuration within two weeks to ensure compatibility of the transmission lines being implemented by them.
- POWERGRID and GETCO would implement the complete scope of work in matching timeframe so that no asset remains unutilized.



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Annex-I

List of the participants of the meeting held on 05.01.2023 to discuss the modification in scope of work of "Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C" scheme

Sl. No.	Name of the Participant (Sh./Smt.) & Designation	Organization
1	Ghanshyam Prasad, Chairperson	CEA
2	Ishan Sharan, Chief Engineer	CEA
3	B.S. Bairwa, Director	CEA
4	Vikas Sachan, Deputy Director	CEA
5	Krishna Kumar T.R., ED	POWERGRID
6	Manju Gupta, Add. GM	POWERGRID
7	P. C. Garg, COO	CTUIL
8	Ashok Pal, Dy. COO	CTUIL
9	P.S. Das, Sr. GM	CTUIL
10	Bhaskar Wagh, Chief Manager	CTUIL
11	Pratyush Singh, Manager	CTUIL
12	M Venkateswara Rao, Manager	Grid-India
13	Prabhankar Porwal, Dy. Manager	Grid-India
14	Kanti Bhuva, ACE (R&C)	GETCO



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग-II
Power System Planning & Appraisal Division-II

सेवा में/To

As per list of Addresses

विषय : ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की ग्यारहवीं बैठक के कार्यवृत्त - के सम्बन्ध में।


Subject: Minutes of the 11th meeting of National Committee on Transmission (NCT) - regarding.

महोदया (Madam) / महोदय (Sir),

The 11th meeting of the "National Committee on Transmission" (NCT) was held on 28th December 2022 (1st Sitting) and 17th January 2023 (2nd Sitting). Minutes of the meeting are enclosed herewith.

भवदीय/Yours faithfully,

Encl.: As above.

 01.02.2023

(ईशान शरण/Ishan Sharan)

मुख्य अभियंता / Chief Engineer

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi



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List of Addresses:

1.	Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2.	Member (Power Systems), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3.	Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4.	Director (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5.	Sh. Dilip Nigam, Scientist 'G', MNRE, Block Nos. 14, CGO Complex, Lodhi Road, New Delhi – 110003	6.	Chief Operating Officer, CTUIL, Saudamini, Plot Nos. 2, Sector-29, Gurgaon – 122 001.
7.	Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8.	CMD, Grid Controller of India, B-9, Qutub, Institutional Area, Katwaria Sarai, New Delhi – 110010
9.	Dr. Radheshyam Saha, Ex. Chief Engineer, Central Electricity Authority		



I/25992/2023

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3.14.2 CTUIL mentioned that M/s TPGL vide letter dated 20.12.2022 had informed that they are also the owner of 2 Nos. 400 kV line bays at Pirana (PG) S/s. Accordingly, implementation agency for bay work at Pirana (PG) needs to be revised as given below:

Sl. No.	Scope of the Transmission Scheme (Original)	Scope of the Transmission Scheme (Revised)
1.	LILO of Pirana (PG) – Pirana (T) 400 kV D/c line at Ahmedabad S/s with twin HTLS conductor alongwith reconductoring of Pirana (PG) – Pirana (T) line with twin HTLS conductor (with OPGW for both main & LILO portion) and Bay upgradation work at Pirana (T) along with requisite FOTE - to be awarded to TPGL	LILO of Pirana (PG) – Pirana (T) 400 kV D/c line at Ahmedabad S/s with twin HTLS conductor alongwith reconductoring of Pirana (PG) – Pirana (T) line with twin HTLS conductor (with OPGW for both main & LILO portion) and Bay upgradation work at Pirana (T) and at Pirana (PG) along with requisite FOTE - to be awarded to TPGL
2.	Bay upgradation work at Pirana (PG) along with requisite FOTE - to be awarded to Powergrid.	

3.14.3 NCT approved the above.

3.15 **Modification in scope of work of “Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C” scheme**

3.15.1 The Transmission Network Expansion in Gujarat to increase its ATC from ISTS: Part C scheme was agreed in the 7th NCT meeting held on 03.12.2021 with following scope of work:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA	765/400 kV, 1500 MVA ICT: 1 No. 765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.
2	Banaskantha -Sankhari 400 kV 2 nd D/c line	Route length: 26 km 400 kV line bays- 4 Nos. (2 Nos. at Banaskantha and 2 Nos. at Sankhari)



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3.15.2 Estimated Cost of the scheme was Rs 148 Crore and Implementation Time-frame was in Matching with establishment of Prantij 400/220 kV and Sankhari- Prantij 400 kV D/c line by GETCO (presently expected by March, 2025).

3.15.3 The scheme is presently under implementation by POWERGRID (under RTM) as per NCT letter dated 22.12.2021. Subsequently, in a meeting amongst CTUIL & GETCO on 09.11.2022, GETCO requested CTU to review the Banaskantha -Sankhari 400 kV 2nd D/c line considering the issue of high fault level at 400 kV level of Sankhari (Veloda) S/s (~45 kA in 2026-27 time-frame) as well as RE connectivity to the tune of 700-800 MW which has been granted by GETCO at 220 kV level of Sankhari S/s. Further, the matter was deliberated in meetings held on 16.11.2022 & 18.11.2022 amongst CEA, CTUIL, POSOCO & GETCO wherein following emerged:

- GETCO informed that Sankhari – Prantij 400kV D/c line along with Prantij 400/220kV S/s is currently under tendering stage with target completion by March 2025.
- POWERGRID informed that they have already awarded the Banaskantha – Sankhari 400 kV 2nd D/c line.
- To resolve the issues raised by GETCO, it was decided that instead of establishing Banaskantha -Sankhari 400 kV 2nd D/c line under ISTS and Sankhari – Prantij 400kV D/c (twin AL-59) line under Intra-state, *Banaskantha – Prantij 400 kV D/c direct line (~150 km.) along with 63 MVar, 420 kV switchable line reactors on each ckt at Prantij S/s end* may be established. This would reduce the fault level at Sankhari to below 40 kA and would also help to feed load in Prantij area directly from Banaskantha (PG) S/s thereby relieving overloading issues on Banaskantha – Sankhari 400 kV D/c line.
- POWERGRID and GETCO were requested to coordinate with each other and confirm the modalities of implementation of Banaskantha – Prantij 400 kV D/c direct line.

3.15.4 In this direction, POWERGRID vide e-mail dated 25.11.2022 informed that although they have awarded transmission Line and S/s Extension packages at both sides (i.e. Banaskantha & Sankhari ends) and construction work is in progress, they are ready to implement Banaskantha – Prantij 400 kV D/c line along with 63 MVar, 420 kV switchable line reactor on each ckt at Prantij S/s end (instead of earlier scope of Banaskantha – Sankhari 400 kV 2nd D/c line).

3.15.5 Subsequently, GETCO vide e-mail dated 20.12.2022 informed that in order to avoid sectionalisation arrangement at Sankhari or bypassing of lines at later stage (i.e. idle bays at Sankhari substation), it would be advisable to review the planned scheme at this stage itself. In view of the same, GETCO requested that the Bansakantha - Prantij 400 kV D/c line may be implemented under ISTS and 400 kV D/C Sankhari - Prantij line under Intra-State scheme may be dropped.

3.15.6 In view of the above, CTUIL proposed to revise the scheme as per details given below:

Sl. No.	Scope of the Transmission Scheme	Capacity /km
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA	765/400 kV, 1500 MVA ICT: 1 No. 765 kV ICT bay – 1 No . 400 kV ICT bay– 1 No.



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2	Banaskantha – Prantij 400kV D/c (Quad ACSR/AAAC/AL59 moose equivalent) line along with 63 MVar, 420 kV switchable line reactors on each ckt at Prantij S/s end	Route length: 150 km 400 kV line bays- 4 Nos. (2 Nos. at Banaskantha and 2 Nos. at Prantij) 63 MVar, 420 kV Switchable Line Reactors- 4 Nos. (at Prantij end) along with associated switching equipment.
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3.15.7 The estimated Cost of revised scheme is of the order of Rs 840 Cr. as per March 2022, price level. It was discussed that revised scheme proposed by CTUIL has huge change from original scheme in terms of expenditure. It may also necessitate change in implementation mode.

3.15.8 Keeping in view that the scheme allocated to POWERGRID under RTM is already under implementation, NCT gave the direction to review the scheme and come up with an alternate solution in the next sitting.

3.15.9 Accordingly, a meeting was held on 05.01.2023 under the chairmanship of Chairperson, CEA, to discuss the proposal. Representatives of CTUIL, GETCO & POWERGRID participated in the meeting. In the meeting, following was agreed:

- Banaskantha-Sankhari 400 kV 2nd D/c line (being implemented by POWERGRID under RTM) may not be terminated at Sankhari S/s, instead it may be terminated on the tower outside Sankhari S/s.
- GETCO to implement the Prantij-Sankhari 400kV D/c line and connect it with Banaskantha- Sankhari 400 kV 2nd D/c line being implemented by POWERGRID.
- 400 kV line bays (2 Nos.) at Sankhari S/s may be deleted from the scope of POWERGRID.
- POWERGRID and GETCO would finalize the type of conductor and tower configuration within two weeks to ensure compatibility of the transmission lines being implemented by them.
- POWERGRID and GETCO would implement the complete scope of work in matching timeframe so that no asset remains unutilized.

3.15.10 CTUIL informed that POWERGRID vide email dated 16.01.2023 has forwarded the Minutes of the meeting held on 10.01.2023 between POWERGRID and GETCO in this regard. In the meeting, the implementation modality, location of interconnection and timeframe of the proposed arrangement had been mutually agreed between POWERGRID & GETCO.

3.15.11 NCT noted the same and approved the following revised scope of works of “*Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part C*”

Sl. No.	Original Scope of the Transmission Scheme	Modified scope of the transmission scheme
1	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA 765/400 kV, 1500 MVA ICT: 1 Nos.	Augmentation of transformation capacity at 765/400 kV ICT Banaskantha S/S by 1x1500 MVA 765/400 kV, 1500 MVA ICT: 1 Nos.



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	765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.	765 kV ICT bay – 1 No. 400 kV ICT bay– 1 No.
2	Banaskantha -Sankhari 400 kV 2 nd D/c line (26 km) Line Length : 26 km 400 kV line bays- 4 Nos. (2 Nos. at Banaskantha and 2 Nos. at Sankhari)	Banaskantha- Sankhari section of Banaskantha – Prantij 400 kV D/c line (Quad ACSR/AAAC/AL59 moose equivalent) Route length: 26 km 400 kV line bays - 2 Nos. (at Banaskantha)

Implementation Time-frame: Matching with establishment of Prantij 400/220 kV S/s and Prantij - Sankhari section of Banaskantha – Prantij 400 kV D/c line (presently expected by March, 2025)

Note:

- (i) The downstream system to be implemented by GETCO under intra-state with which the developer (POWERGRID) has to match the SCoD is as follows:

Sl. Nos.	Scope of the Transmission Scheme	Capacity /km
1.	Sankhari – Prantij section of Banaskantha – Prantij 400 kV D/c line along with line bays and 63 MVAR, 420 kV switchable line reactors on each ckt at Prantij S/s end	Route length: 125 km (approx.) 400 kV line bays- 2 Nos. (at Prantij S/s) 63 MVAR, 420 kV Switchable Line Reactors- 2 Nos. at Prantij end along with associated switching equipment

3.16 Transmission system for evacuation of power from REZ in Rajasthan (20 GW) under Phase-III Part C3 and E3

3.16.1 Transmission system for additional 20 GW REZ in Northern Region (Phase-III) was agreed in the 3rd NRPC (TP) meeting held on 19.02.2021 and 49th Northern Region Power Committee (NRPC) meeting held on 27.09.2021. Subsequently in the 5th NCT meeting held on 25.08.2021 & 02.09.2021, above scheme was agreed for implementation. As part of above scheme, in 5th NCT meeting, STATCOM along with MSC & MSR each at Ramgarh and Fatehgarh-III PS was also discussed in following two packages:

A. Transmission system for evacuation of power from REZ in Rajasthan (20GW) under Phase-III Part C3

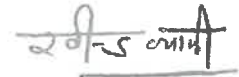
S.Nos.	Scope of the Transmission Scheme	Capacity (MVAR)	Estimated Cost
1	Ramgarh PS: STATCOM	±2x300 MVAR STATCOM,	Rs 300 Cr



Certificate as per
CERC (Indian Electricity Grid Code) Regulations 2023
(For Inter State Transmission System)

It is to certify that the following asset under the Transmission System namely
"Transmission Network Expansion in Gujarat to increase ATC from ISTS: Part-C"
conform to the CEA Technical Standards for Construction, CEA Technical Standards for
Connectivity, CEA Technical Standards for Communication, Central Electricity Authority
(Measures relating to Safety and Electricity Supply) Regulations, 2010 and CERC (Indian
Electricity Grid Code) Regulations, 2023 and are capable of operation to their full capacity
as per the requirements for declaration of commercial operation, as per following details:

Sl. No.	Name of Asset	Date/Time
1	765/400 kV, 1x1500 MVA ICT-3 along with associated 765 kV & 400 kV ICT bays at Banaskantha S/S.	20.11.2024/ 19:48 hours



(R. K. Tyagi)
Chairman and Managing Director



Government of India
Central Electricity Authority
Regional Inspectorial Organisation
Ground Floor, WRPC Building, F-3, MIDC Area
Marol, Andheri (East), Mumbai 400 093

No. WRIO/GUJ/A-14765/2024

Dated: 10/11/2024

To,
M/s. Powergrid Corporation of India Limited,
765/400kV S/S, Village- Mudetha,
Mudetha-Arniwada Road, Ta: Deesa,
Dist: Banaskantha, Gujarat-385530.

Approval for Energization

Subject: - Inspection of electrical installations of **M/s. Powergrid Corporation of India Limited, 765/400kV S/S, Village- Mudetha, Mudetha-Arniwada Road, Ta: Deesa, Dist: Banaskantha, Gujarat** under regulation 45 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2023.

Reference: (1) Application No.A/2024/14765, Dated: 20/10/2024.
2) Inspection report of this office dated 09/11/2024.
(3) Compliance received on Date 10/11/2024.

Whereas the inspection of electrical installations of **M/s. Powergrid Corporation of India Limited, 765/400kV S/S, Village- Mudetha, Mudetha-Arniwada Road, Ta: Deesa, Dist: Banaskantha, Gujarat** was carried out on **9th November, 2024** by the undersigned under Regulation 45 of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023.

Approval for Energization of the said electrical installation/apparatus (Details being attached as Annexure) is hereby accorded subject to following conditions:

1. **M/s. Powergrid Corporation of India Limited** shall ensure to have all other requisite clearances /NOCs from Government and Local bodies, as applicable, before energization.
2. Adherence to relevant provisions of Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023 shall be ensured by **M/s. Powergrid Corporation of India Limited** for safety during operation and maintenance.

The periodic inspections may be carried out at an interval 5 years from the date of last inspection. The application shall be filed by the applicant at least 6 months in advance so that compliance and final approval is granted on time. This periodicity is subject to change by Govt order/notification.

Vikram Thorat
10/11/2024

(Vikram Thorat)
Assistant Director

For Chief Electrical Inspector
To The Government of India

(Email ID: vikram.thorat@cea.nic.in , Mob. No.: 9960673643)

Copy to: Chief Engineer (EI), CEA, 3rd Floor, NRPC Building, Katwaria Sarai, New Delhi

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Annexure

SN	Name of Equipment	Phase/ L	Make	Rating	Sl. No.
1	765kV ICT#3	R phase	GE	500MVA	L0850
2	765kV ICT#3	Y Phase	GE	500MVA	L0849
3	765kV ICT#3	B Phase	GE	500MVA	L0851

765/400kV ICT#3 1500 MVA

10/11/2024
10/11/2024





ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
GRID CONTROLLER OF INDIA LIMITED
(A Government of India Enterprise)

[formerly Power System Operation Corporation Limited (POSOCO)]

पश्चिम क्षेत्रीय भार प्रेषण केन्द्र / Western Regional Load Despatch Centre

कार्यालय : एफ-3, एम. आई. डी. सी. क्षेत्र, मरोल, अंधेरी (पूर्व), मुंबई-400093

Office : F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai- 400093

CIN : U40105DL2009GOI188682, Website : www.wrlcdc.in, E-mail : wrldc@grid-india.in, Tel: 022 28202690, Fax: 022 28235434, 28202630

प्रमाणपत्र संदर्भ : प.क्षे.भा.प्रे.के./प.क्षे.-2/192-253/

दिनांक: 27/11/2024

पारेषण तत्वों एवं बे द्वारा सफल ट्रायल ऑपरेशन (विद्युत भार के साथ) का प्रमाण पत्र

Certificate of successful Trial Operation (with electrical load) of Transmission Element(s)/bay(s)

संदर्भ / Reference:

- I. WRTS-1 Communication (U.ID- 890) dated 15-10-2024 (Format-I and IA)
- II. WRLDC Communication to WRTS-2 dated 16-10-2024 (Format-II-Acknowledgement)
- III. WRTS-2 Communications dated 14-11-2024 (processing related information)
- IV. WRLDC Communication to WRTS-2 dated 15-10-2024 (Format-IV-851)
- V. WRTS-2 request for charging & trial operation with power flow dated 16-11-2024
- VI. Code from WRLDC to WRTS-2 on 16-11-2024, 17-11-2024 & 19.11.2024 for charging & trial operation
- VII. Communication dated 22-11-2024 from WRTS-2 [C1-C4] [TR.ID-253]
- VIII. Communication from WRTS-2 dated 26-11-2024 on compliance of SCADA requirements at WRLDC

Based on the above documents under reference, it is hereby certified that the following Transmission elements/bays of M/s **POWERGRID, WRTS-2** have successfully undergone trial operation (with power flow) at **765/400kV Banaskantha Substation**:

क्रमांक / S.No	पारेषण संपत्ति का नाम / Name of the Transmission Asset:	ट्रायल ऑपरेशन प्रारम्भ किए जाने का समय एवं तारीख / Date and Time of commencement of trial operation	ट्रायल ऑपरेशन समाप्ति का समय एवं तारीख / Date and time of completion of trial operation
1	765 kV Main Bay-718 of 1500 MVA, 765/400 kV ICT-3 at Banaskantha S/s	17-11-2024 20:18 hrs	18-11-2024 20:18 hrs
2	400 kV Main Bay-427 of 1500 MVA, 765/400 kV ICT-3 at Banaskantha S/s	17-11-2024 20:18 hrs	18-11-2024 20:18 hrs
3	400 kV Tie Bay-426 of 1500 MVA, 765/400 kV ICT-3 at Banaskantha S/s	19-11-2024 19:48 hrs	20-11-2024 19:48 hrs
4	1500 MVA, 765/400 kV ICT-3 at Banaskantha S/s	17-11-2024 20:18 hrs	18-11-2024 20:18 hrs

This certificate is being issued in accordance with Reg. 25 of CERC (Indian Electricity Grid Code) Regulations 2023 to certify trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

वेलूरी बालाजी

कार्यपालक निदेशक, प.क्षे.भा.प्रे.के

To: कार्यपालक निदेशक, प.क्षे.पारेषण प्रणाली-2, पावरग्रिड, बडोदरा.

प्रति: 1. सदस्य सचिव, प.क्षे.वि.स., मुंबई

2. कार्यपालक निदेशक, रा.भा.प्रे.के, नई दिल्ली

पंजीकृत कार्यालय : बी- 9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110009

Registered Office : B-9, 1st Floor, Outub Institutional Area, Katwaria Sarai, New Delhi- 110009

Website : www.grid-india.in

106



Ref: WR-II/VDR/Banaskantha/ICT3/06012025

Date: 06.01.2025

To,

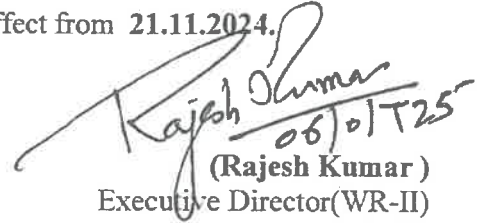
As per Distribution List.

NOTIFICATION OF DOCO

It is hereby intimated that consequent to the successful Trial Operation with power flow, the following assets under "Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C" along with communication, metering, telemetry and protection system has been put under Commercial Operation with effect from **00:00 hours of 21.11.2024** in line with clause no.5(1) of CERC(Terms and Conditions of Tariff) Regulations, 2024 and clause no. 27(1)(c)(i) of CERC(Indian Electricity Grid Code) Regulations, 2023.

- 765/400 kV, 1x1500 MVA ICT-3 along with associated 765 kV & 400 kV ICT bays at Banaskantha S/S.

Transmission charges of the above-mentioned assets is payable with effect from **21.11.2024**.


(Rajesh Kumar)
Executive Director(WR-II)**List of Distribution:**

1. Member Secretary, WRPC, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
2. Managing Director, GUVNL, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
3. Managing Director, GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
4. Managing Director, MPPTCL, Shakti Bhavan, MPSEB colony, Rampur, Jabalpur, Madhya Pradesh-482008
5. Managing Director, MPPMCL, E-4, Arera colony, Bhopal, Madhya Pradesh - 462016.
6. Managing Director, MSEDCL, Prakashgad, Bandra (East), Mumbai - 400051.
7. Managing Director, CSPTCL, Sewa Bhavan, Dangania, Raipur, Chhattisgarh-492013.
8. Executive Director, WRLDC, POSOCO, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
9. CEO (CTUIL), Gurgaon.
10. Chief Engineer, GOA Electricity Department, Panjim, Goa - 403001.
11. Executive Engineer, Electricity Department, Daman and Diu, Moti Daman, Daman.
12. Executive Engineer, Electricity Department, Dadra & Nagar Haveli, Silvassa.
13. Vice President, Dadra & Nagar Haveli and Daman and Diu Power Distribution Corporation Ltd (DNHDDPDCL), 1st and 2nd Floor, Vidyut Bhavan, Next to Secretariat building, 66kV road, Dadra and Nagar Haveli and Diu and Daman, Silvassa - 396230

क्षेत्रीय मुख्यालय : प्लॉट नं.-54, रिया-रेवती रिजॉर्ट के पास, समा-सावली रोड, वडोदरा - 390 008(गुजरात) -

Regional Head Office : Plot no.-54, Adjacent to Riya-Revati Resort Sama-Savli Road, Vadodara - 390 008(Gujarat)

दूरभाषः/Phone: (O) 0265-2487541, फैक्सः/Fax: 0265-2487544, e-mail: pmswr2@powergrid.co.in

पंजीकृत कार्यालय: बी-5, कुतब इंस्टीटयुशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016

Registered Office: B-5, Outok Institutional Area, Katwaria Sarai, New Delhi - 110 016





पावरग्रिड
POWERGRID

पावर ग्रिड कॉर्पोरेशन ऑफ़ इंडिया लिमिटेड

(भारत सरकार का उपक्रम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

CIN: L40101DL1989GOI038121

पश्चिम क्षेत्र परियोजना प्रणाली-II, क्षेत्रीय मुख्यालय / Western Region Transmission System - II, Regional Headquarters

Copy to :

1. ED (PMD), POWERGRID, CC, Gurgaon.
2. ED (F&A), POWERGRID, CC, Gurgaon.
3. ED (Commercial & RC), POWERGRID, CC, Gurgaon.
4. CGM-I/C Engg, POWERGRID, CC, Gurgaon.
5. CGM-I/C AM, POWERGRID, CC, Gurgaon.
6. Company Secretary, CC, Gurgaon.
7. CGM (AM) WR-II, POWERGRID, Vadodara.
8. CGM (Projects), WR-II, POWERGRID, Vadodara.
9. CGM (Finance), WR-II, POWERGRID, Vadodara.
10. Sr.GM(PESM), WR-II, POWERGRID, Vadodara
11. Sr.DGM(SC&C/IT), WR-II, POWERGRID, Vadodara.
12. STA to ED (WR-II), POWERGRID, Vadodara.

क्षेत्रीय मुख्यालय : प्लॉट नं.-54, रिया-रेवती रिजॉर्ट के पास, समा-सावली रोड, वडोदरा - 390 008(गुजरात) -

Regional Head Office : Plot no.-54, Adjacent to Riya-Revati Resort Sama-Savli Road, Vadodara - 390 008(Gujarat)

दूरभाषः/Phone: (O) 0265-2487541, फैक्सः/Fax: 0265-2487544, e-mail: pmswr2@powergrid.co.in

पंजीकृत कार्यालय: बी-5, कुतब इंस्टीटयुशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016

Registered Office: B-5, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016





भारत सरकार
केन्द्रीय विद्युत प्राधिकरण
पश्चिम क्षेत्रीय विद्युत समिति
एफ -3, एमआयडीसी क्षेत्र, अंधेरी (पूर्व), मुंबई - 400 093

Government of India
Central Electricity Authority
Western Regional Power Committee
F-3, MIDC Area, Andheri (East), Mumbai 400093

दूरभाष / phone: 022- 28221636; 28221681; 28220194-6

फैक्स /fax: 022 – 28370193

वेबसाइट/ website: www.wrpc.nic.in

ईमेल/e-mail: opc-wrpc@nic.in

सं: पक्षेविस/प्रचा. / प्रसस-कार्यवृत्त /2025-26/ 71-139 दिनांक 2nd January 2025

सेवा में,

विषय:- प.क्षे.वि.समिति, मुंबई की प्रचालन एवं समन्वय समिति की 585 वीं बैठक का संशोधित कार्यवृत्त।

महोदय,

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई की प्रचालन एवं समन्वय समिति की दिनांक 22.11.2024 को आयोजित 585 वीं बैठक का संशोधित कार्यवृत्त आपकी सूचनार्थ संलग्न है।

धन्यवाद।

संलग्न : उपरोक्तानुसार

भवदीय,

Sd/-

(डी एन गवाली)

अधीक्षण अभियंता (प्रचालन)



List of OCC Members

1.	Chief Engineer (L D), GETCO, Gotri	0263-2352019
2.	Chief Engineer (Generation), GSECL, Vadodara	0265-2344734/2338847
3.	Superintendent Engineer (CP & SS), GETCO, Vadodara	0265-2337918, 2338164
4.	Chief Engineer (L D), MPPTCL, Jabalpur	0761-2664343
5.	Chief Engineer (O&M:Gen), MPPGCL, Jabalpur	0761-2664572/2668050
6.	Chief Engineer (L D), MSETCL, Kalwa	022-27601769
7.	Chief Engineer (PP), MSEDCL, Mumbai	
8.	Chief Engineer (Works), MSPGCL, Mumbai	022-26473896
9.	Superintending Engineer (LD), MSETCL Ambazari	07104-220275
10.	Chief Engineer (L D), CSPTCL /Raipur	0771-2574174
11.	Chief Engineer (O&M:GEN), CSPGCL, Raipur	0771-2574425
12.	Executive Director, PGCIL Raipur	
13.	General Manager, POSOCO, Mumbai	022-28202630
14.	General Manager (WRTS-I), Powergrid, Nagpur	0712-2641366
15.	General Manager (O & M), WRTS-II, PGCIL, Vadodara	0265-2487542
16.	Chief Engineer (Transmission), NPCIL, Mumbai	25580741/25563350
17.	Station Director, TAPS, Tarapur 1 & 2	02525-282125/244125
18.	Station Director, TAPS, Tarapur 3 & 4	02525-244021/244169
19.	Station Director, KAPS, Kakrapar 1 & 2	02626-231231
20.	Station Director, KAPS, Kakrapar 3 & 4	
21.	General Manager (OS), NTPC, Mumbai	022-28216692
22.	General Manager, NTPC, Korba	07759-237462/237552
23.	General Manager (OS), NTPC, HQ-II Raipur	0771-2544550
24.	General Manager, NTPC, Vindhychal, M.P.	07805 -247711
25.	General Manager, NTPC, SIPAT, CG	07752-246504
26.	General Manager NTPC LARA	
27.	General Manager NTPC Gadawada	
28.	General Manager NTPC Kharagone	
29.	General Manager NTPC Solapur	
30.	General Manager, NTPC, Kawas, Surat	0261-2860290
31.	General Manager, NTPC, Gandhar	02642-287402
32.	General Manager, NTPC, Mouda	07115-281221/281219
34.	CLD TPC, Mumbai	022-25541908/67175385
35.	Head (O), Dahanu TPS, Dahanu	02528-222039
36.	Sr V P Reliance Transmission, Pune 30471555 Vice President (Generation), Torrent Power Ltd, Ahmedabad	0124-3917982/020- 079-27506679
37.	Executive Director, Sugan CCPP, Torrent Power Ltd, Surat.	02621-661151
38.	Vice President (O & M), APL Mundra , Gujarat	02838-266364
39.	Head Operation CGPL Mundra	
40.	Vice President (Opn), Jindal Power Ltd., Raigarh	07767-281993/281995
41.	AGM(OS) NSPCL Delhi	011-26717363, 26717366
42.	GENERAL MANAGER (POWER), RGPPL, Ratnagiri	02359-241071/241011
43.	Member (Power), NCA, Indore	0731-2559888
44.	Chief Engineer (PM & C), NHDC, Bhopal	0755 4030188/4030130
45.	E. E. Elect. (Ponda), Goa	0832-2313780
46.	Executive Engineer DD (UT), Daman	0260-/2230771/2250889/2230550
47.	Executive Engineer DNH (UT), Silvassa	0260-2642338
48.	Secretary, CERC, New Delhi	011-24360010/23753923
49.	CEO, JSW Energy Ltd.	011-46032343/26183546
50.	VP-Power Infra-Essar Hazira Surat	0261-6688498/022-67082198
51.	Chief Electrical Distribution Engineer CR	022-22621060
52.	Vice President EPTCL Hazira Surat	0261-6682747
53.	COO, Korba West Power Co. Ltd. Raigarh	
54.	VPI(COMML) Essar Power MP Ltd MP	
55.	GM Torrent power grid ltd. Ahmedabad, Gujarat	
56.	Adani Power Maharashtra Ltd Tiroda	
57.	CGM, R K M Powergen Pvt Ltd	
58.	ED, Athena Chattishgarh Power Ltd.	
59.	Head(O&M) Dhariwal Infra Ltd C'pur	
60.	Head Operation Jaypee Nigrie STPP Singrauli.	
61.	VP(O&M), GCEL, Chhattishgarh	
62.	Head Operation DB Power, Chhattishgarh.	
63.	Head operation Hindustan Power, Anuppur MP	
64.	Head operation GMR, Warora Energy Ltd.	
65.	Head O&M, Sterlite Grid Ltd Bhopal	
66.	Head Operation Balco, Chhattishgarh.	
67.	Head(O& M), SKS, SPGCL, Raigarh	
68.	AVP, O&M Electrical, RIPL, Amravati	



Item No. 10: Any other agenda:

1. DOCO of 765/400 kV ICT-3 at Banaskantha.

(PGCIL)

765/400 kV 1500 MVA ICT-3 at Banaskantha was commissioned on 16.11.2024 on no load and taken on load on 17.11.2024. In this scheme, 765/400 kV 1500 MVA ICT-3 including its 765 kV & 400 kV bays and 400 kV Banaskantha-Sankhari portion of Banaskantha-Prantij line(26kM) along with 02 nos. 400kV line bays at Banaskantha substation were approved in 7th NCT meeting held on 03.12.2021 and subsequent modification in scope agreed in 11th NCT meeting held on 28.11.2022 and 17.01.2023. Accordingly, implementation time frame was also kept matching with establishment of 400/220 kV Prantij S/s (GETCO) and Prantij-Sankhari section of 400 kV DC Banaskantha-Prantij line i.e. March-2025. Downstream system of GETCO i.e. Prantij-Sankhari section of 400 kV DC Banaskantha-Prantij line along with 02 nos. 400 kV bays and 02 nos. LR at Prantij end are yet to be commissioned.

2. The 765/400 kV 1500 MVA ICT-3 at Banaskantha has been commissioned on 17.11.2024 and successfully completed trial run operation of 24 hours and it is helping in improving the system performance, safety and security of the grid (loading in the range of 600-700MW, thereby helping in N-1 reliability criterion, loading profile attached). Therefore, it is requested to provide consent for declaration of DOCO for 765/400 kV ICT-3 at Banaskantha w.e.f. 19.11.2024.

585th OCCM Discussion:

PGCIL briefed the agenda item.

Considering the improvement in system performance, security and reliability of the grid on synchronisation of 765/ 400 kV ICT-3 at Banaskantha, OCC Subcommittee agreed to the proposal.

Further, MS WRPC requested SLDC Gujarat to expedite the downstream system of Getco.

Item No. 10: Date of the next OCC meeting.

The date of upcoming OCC meeting may be decided by members.

585th OCCM Discussions:

MS WRPC stated that the date and venue of the next OCC will be intimated to the members shortly.



**Certificate as per
CERC (Indian Electricity Grid Code) Regulations 2023
(For Inter State Transmission System)**

It is to certify that the following assets under the Transmission System namely "Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C" conform to the CEA Technical Standards for Construction, CEA Technical Standards for Connectivity, CEA Technical Standards for Communication, Central Electricity Authority(Measures relating to Safety and Electricity Supply) Regulations,2010 and CERC (Indian Electricity Grid Code) Regulations 2023 and are capable of operation to their full capacity as per the requirements for declaration of commercial operation w.e.f. as per following details :

- 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section(Powergrid scope of work) of Banaskantha-Prantij 400 kV D/C line along with associated line bays at Banaskantha S/S.

S. N.	Name of Assets	Date &Time
1	400kV Banaskantha-Sankhari section(Ckt-3) of Banaskantha-Prantij 400 kV D/C line along with associated line bay at Banaskantha S/S. (The circuit is terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO)	02.04.2025 23:05 hours
2	400 kV Banaskantha-Sankhari section(Ckt-4) of Banaskantha-Prantij 400 kV D/C line along with associated line bay at Banaskantha S/S. (The circuit is terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO)	02.04.2025 00:23 hours

(Signature)

(R. K. Tyagi)
Chairman and Managing Director
Power Grid Corporation of India Limited



Government of India
Central Electricity Authority
Regional Inspectorial Organisation
Ground Floor, WRPC Building, F-3, MIDC Area
Marol, Andheri (East), Mumbai 400 093

No. WRIO/GUJ/B-1746/2025

Dated: 09/03/2025

To,
M/s. Power Grid Corporation of India Limited,
765/400/220 KV Substation, Village – Mudetha,
Mudetha-Arnivada Road, Dist-Banaskantha, Gujarat-385530.

Approval for Energization

Subject: - Inspection of 2nd Banaskantha-Sankhari 400 KV D/C Line of **M/s. Power Grid Corporation of India Limited** under regulation 45 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2023.

Reference: Application No. B/2025/1746, Dated: 25/02/2025.

Whereas the inspection of 2nd Banaskantha-Sankhari 400 KV D/C Line of **M/s. Power Grid Corporation of India Limited** was carried out on **5th March, 2025** by the undersigned under regulation 45 of CEA (Measures relating to Safety and Electric Supply) Regulation, 2023.

Approval for Energization of above said Transmission Line work is hereby accorded subject to following conditions:

1. **M/s. Power Grid Corporation of India Limited** shall ensure to have all other requisite clearances/NOCs from authorities such as CEA for prior approval, Air Headquarters, Defense Authorities, Civil Aviation, SEB for Power line crossing, National Highways, State Highways Authorities, Forest, Navigation Authorities, PTCC Clearance, Railways, or any other local authority, as applicable, before energization.
2. **M/s. Power Grid Corporation of India Limited** shall have ratification by the Committee constituted by Hon'ble Supreme Court of India in its Order in I.A No. 85618 of 2020 dated 19.04.2021 related to Great Indian Bustard (GIB) for the modification of this transmission line, if applicable, before energization.
3. **M/s. Power Grid Corporation of India Limited** shall ensure that the general public through Local authorities like Village Heads/ Panchayats/ Municipal Council/ Municipal Corporation/Police Stations/BDO/Tehsil and District Magistrate/Police Commissioner etc have been intimated about the energization schedule of line and prior information about the energization schedule of the line has been provided to the general public through distribution of handbills/publication in newspapers/other suitable media in local language of state and English and drum beating etc.
4. Adherence to relevant provisions of Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023 shall be ensured by **M/s. Power Grid Corporation of India Limited** for safety during operation and maintenance.



The periodic inspections may be carried out at an interval 5 years from the date of last inspection. The application shall be filed by the applicant at least 6 months in advance so that compliance and final approval is granted on time. This periodicity is subject to change by Govt order/notification.

Vikram Thorat
03/03/2025

(Vikram Thorat)
Assistant Director
For Chief Electrical Inspector
To The Government of India
(Email ID: vikram.thorat@cea.nic.in , Mob. No.: 9960673641)

Copy to: Chief Engineer (EI), CEA, 3rd Floor, NRPC Building, Katwaria Sarai, New Delhi





Government of India
Central Electricity Authority
Regional Inspectorial Organisation
Ground Floor, WRPC Building, F-3, MIDC Area
Marol, Andheri (East), Mumbai 400 093

No. WRIO/GUJ/A-14218/2024

Dated: 29/08/2024

To,
M/s. Power Grid Corporation of India Ltd,
Arniwada Road, Tal- Deesa,
Dist- Banaskantha, Gujarat.

Approval for Energization

Subject: - Inspection of electrical installations of M/s. Power Grid Corporation of India Ltd, Arniwada Road, Tal- Deesa, Dist- Banaskantha, Gujarat under regulation 45 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2023.

Reference: (1) Application No.A/2024/14218, Dated: 31/07/2024.
(2) Inspection report of this office dated 12/08/2024.
(3) Compliance received on Date 29/08/2024.

Whereas the inspection of electrical installations of M/s. Power Grid Corporation of India Ltd, Arniwada Road, Tal- Deesa, Dist- Banaskantha, Gujarat was carried out 8th August, 2024 by the undersigned under Regulation 45 of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023.

Approval for Energization of the said electrical installation/apparatus (Details being attached as Annexure) is hereby accorded subject to following conditions:

1. M/s. Power Grid Corporation of India Ltd shall ensure to have all other requisite clearances /NOCs from Government and Local bodies, as applicable, before energization.
2. Adherence to relevant provisions of Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023 shall be ensured by M/s. Power Grid Corporation of India Ltd for safety during operation and maintenance.

The periodic inspections may be carried out at an interval 5 years from the date of last inspection. The application shall be filed by the applicant at least 6 months in advance so that compliance and final approval is granted on time. This periodicity is subject to change by Govt order/notification.


22/08/2024

(Islavath Prathap Kumar)

Deputy Director
For Chief Electrical Inspector
to the Govt. of India.

Copy to: Chief Engineer (EI), CEA, 3rd Floor, NRPC Building, Katwaria Sarai, New Delhi.



Banaskantha SS-91 Equipment Erection Deatails

Si.No.	Location	Bay	Equipment Name	Phase	Qty	Equipment Si.No.	Make
1	400KV	Line bay-425	Line CVT	R	1	37992034854	GE T&D India Limited
2	400KV	Line bay-425	Line CVT	Y	1	37992034855	GE T&D India Limited
3	400KV	Line bay-425	Line CVT	B	1	37992034856	GE T&D India Limited
4	400KV	Line bay-428	Line CVT	R	1	37992034857	GE T&D India Limited
5	400KV	Line bay-428	Line CVT	Y	1	37992034858	GE T&D India Limited
6	400KV	Line bay-428	Line CVT	B	1	37992034859	GE T&D India Limited
7	400KV	bay-425	CT	R	1	37994044408	GE T&D India Limited
8	400KV	bay-425	CT	Y	1	37994044407	GE T&D India Limited
9	400KV	bay-425	CT	B	1	37994044406	GE T&D India Limited
10	400KV	bay-428	CT	R	1	37994044405	GE T&D India Limited
11	400KV	bay-428	CT	Y	1	37994044404	GE T&D India Limited
12	400KV	bay-428	CT	B	1	37994044403	GE T&D India Limited
13	400KV	bay-426	CT	R	1	37994044414	GE T&D India Limited
14	400KV	bay-426	CT	Y	1	37994044413	GE T&D India Limited
15	400KV	bay-426	CT	B	1	37994044412	GE T&D India Limited
16	400KV	bay-427	CT	R	1	37994044466	GE T&D India Limited
17	400KV	bay-427	CT	Y	1	37994044416	GE T&D India Limited
18	400KV	bay-427	CT	B	1	37994044415	GE T&D India Limited
19	400KV	bay-429	CT	R	1	37994044411	GE T&D India Limited
20	400KV	bay-429	CT	Y	1	37994044410	GE T&D India Limited
21	400KV	bay-429	CT	B	1	37994044409	GE T&D India Limited
22	400KV	bay-425	Line LA	R	1	306 (S-137)	OBLUM
23	400KV	bay-425	Line LA	Y	1	307 (S-136)	OBLUM
24	400KV	bay-425	Line LA	B	1	308 (S-135)	OBLUM
25	400KV	bay-428	Line LA	R	1	309 (S-132)	OBLUM
26	400KV	bay-428	Line LA	Y	1	313 (S-131)	OBLUM
27	400KV	bay-428	Line LA	B	1	312 (S-130)	OBLUM
28	400KV	bay-427	ICT LA	B	1	S-315	OBLUM
29	400KV	bay-427	ICT LA	B	1	S-311	OBLUM
30	400KV	bay-427	ICT LA	B	1	S-310	OBLUM
31	400KV	bay-425	CB	R (A)	1	10/2023/36955	SIEMENS
32	400KV	bay-425	CB	Y (B)	1	10/2023/36955	SIEMENS
33	400KV	bay-425	CB	B (C)	1	10/2023/36955	SIEMENS
34	400KV	bay-428	CB	R (A)	1	10/2023/36956	SIEMENS
35	400KV	bay-428	CB	Y (B)	1	10/2023/36956	SIEMENS
36	400KV	bay-428	CB	B (C)	1	10/2023/36956	SIEMENS
37	400KV	bay-426	CB	R (A)	1	10/2023/36957	SIEMENS
38	400KV	bay-426	CB	Y (B)	1	10/2023/36957	SIEMENS
39	400KV	bay-426	CB	B (C)	1	10/2023/36957	SIEMENS
40	400KV	bay-429	CB	R (A)	1	10/2023/36958	SIEMENS
41	400KV	bay-429	CB	Y (B)	1	10/2023/36958	SIEMENS
42	400KV	bay-429	CB	B (C)	1	10/2023/36958	SIEMENS
43	400KV	bay-427	CB	R (A)	1	10/2023/36959	SIEMENS
44	400KV	bay-427	CB	Y (B)	1	10/2023/36959	SIEMENS
45	400KV	bay-427	CB	B (C)	1	10/2023/36959	SIEMENS
46	400KV	bay-425	Line-WT	R	1	5060/5767 LT	SIEMENS
47	400KV	bay-425	Line-WT	Y	1	5060/5764 LT	SIEMENS
48	400KV	bay-428	Line-WT	R	1	5060/5765 LT	SIEMENS



Banaskantha SS-91 Equipment Erection Deatails

Si.No.	Location	Bay	Equipment Name	Phase	Qty	Equipment Si.No.	Make
49	400KV	bay-428	Line-WT	Y	1	5060/5761 LT	SIEMENS
65	400KV	bay-425	Isolator	A	1	1 set	GR POWER
66	400KV	bay-425	Isolator	B	1	1 set	GR POWER
67	400KV	bay-426	Isolator	A	1	1 set	GR POWER
68	400KV	bay-426	Isolator	B	1	1 set	GR POWER
69	400KV	bay-427	Isolator	A	1	1 set	GR POWER
70	400KV	bay-427	Isolator	B	1	1 set	GR POWER
71	400KV	bay-427	Isolator	T	1	1 set	GR POWER
72	400KV	bay-428	Isolator	A	1	1 set	GR POWER
73	400KV	bay-428	Isolator	B	1	1 set	GR POWER
74	400KV	bay-429	Isolator	A	1	1 set	GR POWER
75	400KV	bay-429	Isolator	B	1	1 set	GR POWER
76	400KV	bay-430	Isolator	A	1	1 set	GR POWER

Prashant Singh
29/08/2024





ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
GRID CONTROLLER OF INDIA LIMITED
(A Government of India Enterprise)

[formerly Power System Operation Corporation Limited (POSOCO)]

पश्चिम क्षेत्रीय भार प्रेषण केन्द्र / Western Regional Load Despatch Centre

कार्यालय : एफ-3, एम. आई. डी. सी. क्षेत्र, मरोल, अंधेरी (पूर्व), मुंबई-400093

Office : F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai- 400093

CIN : U40105DL2009GOI188682, Website : www.wrlc.in, E-mail : wrlc@grid-india.in, Tel.: 022 28202690, Fax: 022 28235434, 28202630

प्रमाणपत्र संदर्भ: प.क्षे.भा.प्रे.कें./WRTS-2/Banaskantha/ 195

दिनांक: 28/04/2025

पारेषण तत्वों एवं बे द्वारा सफल ट्रायल ऑपरेशन (विद्युत भार के साथ) का प्रमाण पत्र

Certificate of successful Trial Operation (with electrical load) of Transmission Element(s)/bay(s)

Reference:

- WRTS-2 communication (U. ID-1135) dated 29-03-2025 (Format-I and IA)
- WRLDC communication to WRTS-2 dated 29-03-2025 (Format-II-Acknowledgement)
- WRTS-2 request for charging & trial operation dated 29-03-2025
- WRLDC communication to WRTS-2 dated 31-03-2025 (Format-IV – 1065)
- Charging codes from WRLDC to WRTS-2 on 01-04-2025
- Communication dated 04-04-2025 from WRTS-2 [C1-C4] [TR.ID - 325]
- Communication from WRTS-2 dated 25.04.2025 on compliance of SCADA requirements at WRLDC

Based on the above documents under reference, it is hereby certified that the following Transmission elements/bays of M/s POWERGRID, WRTS-2 have successfully undergone trial operation (with electrical load) at 765/400 kV Banaskantha S/s:

क्रमांक / S.No.	पारेषण संपत्ति का नाम / Name of the Transmission Asset:	ट्रायल ऑपरेशन प्रारंभ किए जाने का समय एवं तारीख / Date and Time of commencement of trial operation	ट्रायल ऑपरेशन समाप्ति का समय एवं तारीख / Date and time of completion of trial operation
1	400 kV Banaskantha-Sankhari 3 (from Banaskantha PG to loc AP5 POWERGRID portion, 21.978 kms out of 22.815 kms line length)	01-04-2025 23:05	02-04-2025 23:05
2	400 kV Banaskantha-Sankhari 4 (from Banaskantha PG to loc AP5 POWERGRID portion, 21.978 kms out of 22.815 kms line length)	01-04-2025 00:23	02-04-2025 00:23

This certificate is being issued in accordance with Reg. 25 of CERC (Indian Electricity Grid Code) Regulations 2023 to certify trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

प्रमाणित
28/04/25
एम. एम. मेहेंदळे
कार्यपालक निदेशक, प.क्षे.भा.प्रे.कें.

To: कार्यपालक निदेशक, प. क्षे. पारेषण प्रणाली-2, पावरग्रिड, वड़ोदरा

प्रति: 1. सदस्य सचिव, प.क्षे.वि.स., मुंबई

2. कार्यपालक निदेशक, रा.भा.प्रे.के, नई दिल्ली



Ref: WR-II/VDR/Banaskantha-Sankhari line

Date: 05.06.2025

To,

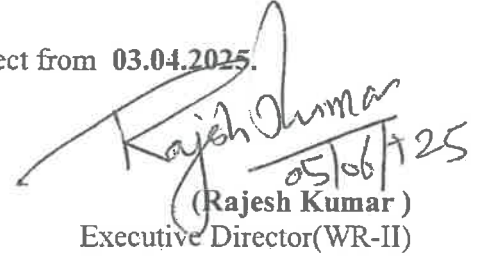
As per Distribution List.

NOTIFICATION OF DOCO

It is hereby intimated that consequent to the successful Trial Operation with power flow, the following assets under "Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C" along with communication, metering, telemetry and protection system has been put under Commercial Operation with effect from **00:00 hours of 03.04.2025** in line with clause no.5(1) of CERC(Terms and Conditions of Tariff) Regulations, 2024 and clause no. 27(1)(c)(i) of CERC(Indian Electricity Grid Code) Regulations, 2023.

- **400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).**

Transmission charges of the above-mentioned assets is payable with effect from **03.04.2025**.


(Rajesh Kumar)
Executive Director(WR-II)**List of Distribution:**

1. Member Secretary, WRPC, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
2. Managing Director, GUVNL, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
3. Managing Director, GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
4. Managing Director, MPPTCL, Shakti Bhavan, MPSEB colony, Rampur, Jabalpur, Madhya Pradesh-482008
5. Managing Director, MPPMCL, E-4, Arera colony, Bhopal, Madhya Pradesh - 462016.
6. Managing Director, MSEDCL, Prakashgad, Bandra (East), Mumbai - 400051.
7. Managing Director, CSPTCL, Sewa Bhavan, Dangania, Raipur, Chhattisgarh-492013.
8. Executive Director, WRLDC, POSOCO, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
9. CEO (CTUIL), Gurgaon.
10. Chief Engineer, GOA Electricity Department, Panjim, Goa - 403001.
11. Executive Engineer, Electricity Department, Daman and Diu, Moti Daman, Daman.
12. Executive Engineer, Electricity Department, Dadra & Nagar Haveli, Silvassa.
13. Vice President, Dadra & Nagar Haveli and Daman and Diu Power Distribution Corporation Ltd (DNHDDPDCL), 1st and 2nd Floor, Vidyut Bhavan, Next to Secretariat building, 66kV road, Dadra and Nagar Haveli and Diu and Daman, Silvassa - 396230

क्षेत्रीय मुख्यालय : प्लॉट नं.-54, रिया-रेवती रिजॉर्ट के पास, समा-सावली रोड, वडोदरा - 390 008(गुजरात) -
Regional Head Office : Plot no.-54, Adjacent to Riya-Revati Resort Sama-Savli Road, Vadodara - 390 008(Gujarat)

दूरभाष:/Phone: (O) 0265-2487541, फैक्स:/Fax: 0265-2487544, e-mail: pmswr2@powergrid.co.in

पंजीकृत कार्यालय: बी-5, कुतब इंस्टीटयुशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016

Registered Office: B-5, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016



Copy to :

1. ED (PMD), POWERGRID, CC, Gurgaon.
2. ED (F&A), POWERGRID, CC, Gurgaon.
3. ED (Commercial & RC), POWERGRID, CC, Gurgaon.
4. ED (AM), POWERGRID, CC, Gurgaon.
5. CGM-I/C Engg, POWERGRID, CC, Gurgaon.
6. Company Secretary, CC, Gurgaon.
7. CGM (AM) WR-II, POWERGRID, Vadodara.
8. CGM (Projects), WR-II, POWERGRID, Vadodara.
9. Sr.GM(Comml), WR-II, POWERGRID, Vadodara
10. Sr.GM(PESM), WR-II, POWERGRID, Vadodara
11. GM (Finance), WR-II, POWERGRID, Vadodara.
12. Sr.DGM(SC&C/IT), WR-II, POWERGRID, Vadodara.
13. Sr.DGM(RTAMC), WR-II, POWERGRID, Vadodara.
14. STA to ED (WR-II), POWERGRID, Vadodara.

क्षेत्रीय मुख्यालय : प्लॉट नं.-54, रिया-रेवती रिज़ॉर्ट के पास, समा-सावली रोड, वडोदरा - 390 008(गुजरात) -
Regional Head Office : Plot no.-54, Adjacent to Riya-Revati Resort Sama-Savli Road, Vadodara - 390 008(Gujarat)
दूरभाष:/Phone: (O) 0265-2487541, फ़ैक्स:/Fax: 0265-2487544, e-mail: pmswr2@powergrid.co.in

पंजीकृत कार्यालय: बी-5, कुतब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016
Registered Office: B-5, Kutab Institutional Area, Katwaria Sarai, New Delhi - 110 016





भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन - I प्रभाग

Power System Planning & Appraisal-I Division

सेवा में / To,

- (i) COO, CTUIL, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana – 122001
- (ii) CMD, Grid-India, 61, IFCI Tower, 8th & 9th Floor, Nehru Place, New Delhi – 110019
- (iii) Managing Director, Gujarat Energy Transmission Corporation Limited, Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390007
- (iv) Member Secretary, Western Regional Power Committee, F-3, MIDC Area, Marol, Opp. SEEPZ, Central Road, Andheri (East), Mumbai - 400 093

विषय/Subject: Meeting to discuss the termination of 400 kV D/C Banaskantha – Prantij line at 400 kV Veloda substation as an interim arrangement till competition of 400 kV D/C Sankhari (Veloda) – Prantij line section by GETCO.

महोदय / Sir,

Two meetings were held on 19.03.2025 and 21.03.2025 to discuss the termination of 400 kV D/C Banaskantha – Prantij line at 400 kV Veloda substation as an interim arrangement till competition of 400kV D/C Sankhari (Veloda) – Prantij line section by GETCO. The minutes of the meetings are attached herewith.

भवदीय / Yours faithfully,

Signed by Manjari
Chaturvedi

Date: 24-03-2025 16:41:28

(मंजरी चतुर्वेदी / Manjari Chaturvedi)

निदेशक / Director

प्रति लिपि / CC:

- (i) SA to Member (PS), CEA

सेवा भवन, आर. के. पुरम-I, नई दिल्ली-110066 टेलीफोन : 011-26732305 ईमेल: cea-pspa1@gov.in वेबसाइट: www.cea.nic.in

Sewa Bhawan, R.K Puram-I, New Delhi-110066 Telephone: 011-26732305 Email: cea-pspa1@gov.in Website: www.cea.nic.in



Minutes of meetings held on 19.03.2025 and 21.03.2025 to discuss the termination of 400 kV D/C Banaskantha – Prantij line at 400 kV Sankhari (Veloda) substation as an interim arrangement till competition of 400 kV D/C Sankhari (Veloda) – Prantij line section by GETCO.

The list of participants is attached as **Annex-I**.

Background:

Banaskantha -Sankhari portion of the Banaskantha -Prantij 400 kV D/c line is being constructed by POWERGRID under ISTS and is almost ready, whereas the Sankhari- Prantij 400 kV D/c line alongwith the Prantij S/s being constructed by GETCO, is delayed. As the Sankhari- Prantij 400 kV D/c line is delayed and is likely by March, 2027, GETCO had requested to terminate the 400 kV Banaskantha -Sankhari D/c line at Sankhari S/s, where bays are available for the same.

To deliberate on the matter, a meeting had been convened amongst CEA, CTUIL, GETCO and WRLDC on 19.03.2025 and 21.03.2025.

Discussion in the meeting:

- 1) CTUIL and GETCO were in agreement with the proposal as it would provide relief in the line loadings, however, the fault level observed at Sankhari S/s with the termination of Banaskantha -Sankhari 400 kV D/c line at Sankhari S/s was about 43 kA as per studies, whereas the S/s has been designed for 40 kA. GETCO informed that the substations equipment are rated for 63 kA for 1 sec and 40 kA for 3 sec. In case of any fault, the faulty section is isolated within milliseconds and hence, the proposal may be agreed to. WRLDC opined that the protection settings need to be reviewed so that any fault is cleared well within one second.
- 2) GETCO stated that all the cost incurred in this interim arrangement and further in final arrangement would be borne by GETCO. It was deliberated that till the interim arrangement is in place, GETCO should not connect any new generation at Sankhari S/s as it would increase the fault level. GETCO agreed to the same.
- 3) On a query, GETCO stated that 2 Nos. of 400 kV spare bays are already available at Sankhari S/s wherein the Banaskantha – Sankhari 2nd D/c line can be terminated. Also, the line termination can be done within 10 days of approval (i.e. by March, 2025 end).

After detailed discussions, the following was agreed:

After deliberations, the proposal was agreed subject to the following:

- Protection settings need to be reviewed and should be deliberated in the Protection Committee Meeting of Western Region Power Committee (WRPC).
- All the cost incurred in termination of the line at Sankhari S/s would be borne by GETCO. GETCO should expedite the construction of Prantij -Sankhari line and restore the system to the original agreed configuration (Banaskantha – Prantij 400 kV D/c line)



at the earliest. The associated cost of restoration of final line configuration would have to be borne by GETCO.

- Till the interim arrangement (Banaskantha- Sankhari 400 kV D/c line terminated at Sankhari S/s) is in place, GETCO should not connect any new generation at Sankhari S/s as it would increase the fault level.

Annex-I

List of participants:

- **CEA**
 1. Shri Ishan Sharan - Chief Engineer
 2. Ms. Manjari Chaturvedi - Director
 3. Shri Vikas Sachan - Deputy Director
 4. Ms. Akshata Yadav- Assistant Director
- **CTUIL**
 1. Shri Parth Sarthi Das – Sr. General Manager
 2. Shri Pratyush Singh – Chief manager
 3. Shri Shashank Shekhar – General Manager
- **Grid-India**
 1. Ms. Pushpa S. – Chief General Manager
 2. Shri. Venky Minnakuri – Chief Manager
- **GETCO**
 1. Shri Deepak Patel - SE
 2. Shri Dharmesh Kalsariya - EE





GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

Regd. Office: Sardar Patel Vidyut Bhavan,

Race Course, VADODARA – 390 007.

(CIN: U40100GJ1999SGCO36018)

Phone No.(0265) 2353086 (D) / Fax No.(0265) 2337918/2338164 (GUVNL)

Web site: www.getcogujarat.com-Email: stu.getco@gebmail.com



Ref no. GETCO/CE(STU)/ACE(STU)/SE(STU)/CTU/

Date: 13.03.2025

To,
The Chief Engineer,
Power System Planning & Project Appraisal-I
Central Electricity Authority (CEA),
Sewa Bhawan, R.K Puram-I,
New Delhi-110066

Sub: Termination of 400kV D/C Banaskantha – Prantij line at 400kV Veloda substation as an interim arrangement till competition of 400kV D/C Sankhari (Veloda) – Prantij line section by GETCO.

Ref: 11th NCT meeting (CEA-PS-12-13/3/2019-PSPA-II Division) dated 16.01.2023

Dear Sir,

As per above referred 11th NCT meeting, 400 kV D/C Banaskantha–Prantij line is planned as Transmission network expansion in Gujarat to increase ATC from ISTS: Part C scheme to be implemented as under:

- ISTS Scope: Banaskantha – Sankhari (Veloda) section of 400 kV D/C Banaskantha – Prantij line to be implemented by POWERGRID under RTM in matching timeframe of GETCO Prantij substation and GETCO scope line
- GETCO Scope: Prantij – Sankhari (Veloda) section of 400 kV D/C Banaskantha – Prantij line to be implemented by GETCO

As per inputs from POWERGRID, Banaskantha – Sankhari (Veloda) section of 400 kV D/C Banaskantha – Prantij line (ISTS scope) will be ready by March-25. However, Prantij – Sankhari (Veloda) section of 400 kV D/C Banaskantha – Prantij line and 400 kV Prantij substation by GETCO will be ready March-27.

Therefore, it is intended to use Banaskantha – Sankhari (Veloda) section of 400 kV D/C Banaskantha – Prantij line by termination of the same is 400kV Sankhari substation as an interim arrangement. 2 Nos. of 400 kV feeder bays at Sankhari substation for the same is available and termination arrangement by extending the line up to 400kV Sankhari substation will be implemented by GETCO, as it is very near to Sankhari substation.

This interim arrangement will result into smooth operation of Intra-State transmission network in the area and also reduce critical load of following lines:

- 400 kV S/C Banaskantha (PG) – Zerda (Kansari): it is critically loaded upto 700-800 MW and one of circuit of 400kV D/C Kansari – Soja line is kept open for load control by SLDC.
- 400 kV D/C Banaskantha – Veloda line (existing): it is loaded up to 700-800 MW per circuit.

Also, this interim arrangement may increase ATC limit for drawl of power in Gujarat.

It is requested to review proposed interim arrangement i.e. termination of 400 kV D/C Banaskantha – Prantij line at 400kV Veloda substation and accord approval for the same.

Thanking you,

Yours faithfully,
For Gujarat Energy Transmission Corporation Limited,

(K J Bhuva)
Chief Engineer (STU)

Copy FWCs to:

- (1) The Sr. General Manager, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001
- (2) The Executive Director, POWERGRID Corporation of India Ltd, Western Region – II, Plot No. 54, Sam Road, Vadodara, Gujarat-390024
- (3) The Managing Director, GETCO, Corporate Office, Vadodara – 390 007



CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "765/400 kV, 1X1500 MVA ICT 3 along with associated 765 kV& 400 kV ICT Bays at Banaskantha S/S " under "Transmission Network Expansion in Gujarat to increase its ATC from ISTS (Part-C)" in Western Region - II of Power Grid Corporation of India Limited, which is proposed to be under commercial operation w.e.f. 21.11.2024 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure from 01.04.2022 to 31.03.2023	10.18	1.09	0.06	11.33
2	Expenditure from 01.04.2023 to 31.03.2024	1148.94	97.29	25.57	1271.80
3	Expenditure from 01.04.2024 to 20.11.2024	236.22	66.49	45.90	348.61
4	Expenditure from 21.11.2024 to 31.03.2025	170.27	0.00	0.00	170.27
5	Estimated Expenditure from 01.04.2025 to 31.03.2026	6248.34	0.00	0.00	6248.34
6	Estimated Expenditure from 01.04.2026 to 31.03.2027	948.03	0.00	0.00	948.03
	Total	8761.98	164.87	71.53	8998.38

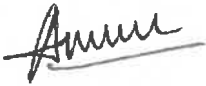


G.D. Apte & Co.
Chartered Accountants

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. WR-II as on 31.03.2025.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 25121007BMITBZ9786



Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, June 23, 2025



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200, Email: audit@gda.co.in
Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512 3184



G.D. Apte & Co.
Chartered Accountants

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "765/400 kV, 1X1500 MVA ICT 3 along with associated 765 kV& 400 kV ICT Bays at Banaskantha S/S " under "Transmission Network Expansion in Gujarat to increase its ATC from ISTS (Part-C)" in Western Region - II of Power Grid Corporation of India Limited, which is proposed to be under commercial operation w.e.f. 21.11.2024 is detailed as under:

(Rs. Lakhs)

S/N	Particulars	Land	Building and Civil Works	Tr. Line	Sub-Station	OPG W	Communication System excl. OPGW	I. T Equipment incl. software, UNMS, URTDSM, EMS, Cyber Security System, REMC, WAMS, SCADA System	Batteries	Total
1	Expenditure from 01.04.2022 to 31.03.2023	0.00	0.00	0.00	10.75	0.00	0.02	0.56	0.00	11.33
2	Expenditure from 01.04.2023 to 31.03.2024	0.00	0.00	0.00	1,206.26	0.00	2.58	62.96	0.00	1,271.80
3	Expenditure from 01.04.2024 to 20.11.2024	0.00	0.00	0.00	330.64	0.00	0.71	17.26	0.00	348.61
4	Expenditure from 21.11.2024 to 31.03.2025	0.00	0.00	0.00	161.50	0.00	0.35	8.43	0.00	170.28
5	Estimated Expenditure from 01.04.2025 to 31.03.2026	0.00	207.97	0.00	6,032.17	0.00	0.33	7.86	0.00	6,248.33
6	Estimated Expenditure from 01.04.2026 to 31.03.2027	0.00	138.65	0.00	809.38	0.00	0.00	0.00	0.00	948.03
	Total	0.00	346.62	0.00	8,550.70	0.00	3.99	97.07	0.00	8,998.38

Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200, Email:

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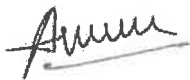
G.D. Apte & Co.
Chartered Accountants

S/N	Particulars	TL	Sub-station	Fiber Optic/OPGW/PLCC
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	0.00	8291.36	88.87
2	Initial Spares included above	0.00	157.46	0.00

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. WR-II as on 31.03.2025.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 251210078MITBZ9786



Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, June 23, 2025



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200, Email:

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G.D. Apte & Co.
Chartered Accountants

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "**Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C**" in Western Region - II of Power Grid Corporation of India Limited, which is proposed to be under commercial operation w.e.f. 03.04.2025 is detailed as under:

400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure from 01.04.2022 to 31.03.2023	1,521.16	47.60	9.10	1,577.86
2	Expenditure from 01.04.2023 to 31.03.2024	2,834.76	88.71	99.62	3,023.09
3	Expenditure from 01.04.2024 to 31.03.2025	1,547.48	48.43	214.10	1,810.01
4	Expenditure from 01.04.2025 to 02.04.2025	7.63	0.24	1.73	9.60
5	Estimated Expenditure from 03.04.2025 to 31.03.2026	1,676.80	0.00	0.00	1,676.80
6	Estimated Expenditure from 01.04.2026 to 31.03.2027	643.42	0.00	0.00	643.42
	Total	8231.25	184.98	324.55	8740.78



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G.D. Apte & Co.
Chartered Accountants

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. WR-II as on 31.03.2025.

We further certify that the expenditure from 01.04.2025 to 02.04.2025 as referred above has been verified by us from the books of Power Grid Corporation Of India Ltd.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 25121007BMITCA5432



Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, June 23, 2025



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200, Email.

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G.D. Apte & Co.
Chartered Accountants

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C" in Western Region - II of Power Grid Corporation of India Limited, which is proposed to be under commercial operation w.e.f. 03.04.2025 is detailed as under:

400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).

Rs. In Lakhs

S/ N	Particulars	Land	Buildin g and Civil Works	Tr. Line	Sub- Station	OPGW	Communicat ion System excl. OPGW	I. T Equipment incl. software, UNMS, URTDMS, EMS, Cyber Security System, REMC, WAMS, SCADA System	Batteri es	Total
1	Expenditure from 01.04.2022 to 31.03.2023	0.00	0.00	1545.39	9.34	21.92	0.67	0.54	0.00	1577.86
2	Expenditure from 01.04.2023 to 31.03.2024	0.00	0.00	1774.44	1083.76	24.65	77.35	62.88	0.00	3023.08
3	Expenditure from 01.04.2024 to 31.03.2025	0.00	0.00	1320.11	420.54	14.95	30.01	24.40	0.00	1810.01
4	Expenditure from 01.04.2025 to 02.04.2025	0.00	0.00	0.00	8.50	0.00	0.61	0.49	0.00	9.60
5	Estimated Expenditure from 01.04.2025 to 31.03.2026	0.00	0.00	1563.88	67.49	0.00	37.50	7.94	0.00	1676.81
6	Estimated Expenditure from 01.04.2026 to 31.03.2027	0.00	0.00	630.25	0.00	0.00	13.17	0.00	0.00	643.42
	Total	0.00	0.00	6834.07	1589.63	61.52	159.31	96.25	0.00	8740.78

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G.D. Apte & Co.
Chartered Accountants

S/N	Particulars	TL	Sub-station	OPGW
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	4644.08	1459.03	57.03
2	Initial Spares included above	24.63	52.93	0.00

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. WR-II as on 31.03.2025.

We further certify that the expenditure from 01.04.2025 to 02.04.2025 as referred above has been verified by us from the books of Power Grid Corporation Of India Ltd. The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 25121007BMITCA5432



Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, June 23, 2025



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200, Email: audit@gdaca.com
Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512 3180



**Spare Discharge Liability of ICT-3 at Banaskanta under "Transmission Network Expansion
in Gujarat to increase ATC from ISTS, Part-C".**

ASSET-1

In Lacs

Particulars	(P&M) Sub-Station	Initial Spare discharged
	(including IT, PLCC)	As on COD (21.11.2024)
SS	8291.36	157.46

Petitioner



Spare Discharge Liability of 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari TL section under
"Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C".

ASSET-2

In Lacs

Particulars	(P&M) Sub-Station	Initial Spare discharged
	(including IT, PLCC)	As on COD (03.04.2025)
TL	4644.08	24.63
SS	1459.03	52.93

Petitioner



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	131.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	29.32	217.72	368.51	387.91	387.91
Interest on Loan-Form No. 9E	33.62	262.56	438.48	434.25	402.87
Return on Equity-Form No. 8	33.47	268.95	465.20	491.05	491.05
Int. on Working capital-Form No.11	8.61	32.20	41.06	42.74	43.63
Op. and maintenance-Form No.2	166.49	488.59	513.50	540.13	569.96
Total AFC	271.51	1,270.02	1,826.75	1,896.08	1,895.42


(Petitioner)



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Summary of Asset Level Cost

Form No. - 1A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)	
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation	
Region	Western Region	DOC Date Nov 21, 2024

A) Summary of Capital Cost, Means of Finance of the Asset

(Amount in Rs. Lakh)

Particular	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Expenditure incurred						
	As Per IA	As per RCE	As on COD / 01.04.2024	2024-25	2025-26	2026-27	2027-28	2028-29	As on 31.03.2029
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	207.97	138.65	0.00	0.00	346.62
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	8,557.34	0.00	0.00	0.00	0.00	0.00	8,557.34
Comm. Sys. excluding Fiber Optic	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	4.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/	0.00	0.00	97.42	0.00	0.00	0.00	0.00	0.00	97.42
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital Cost as per Books	0.00	0.00	8,658.76	0.00	207.97	138.65	0.00	0.00	9,005.38
Less: Liability	0.00	0.00	7,045.00	0.00	0.00	0.00	0.00	0.00	0.00
Add:discharge of liability	0.00	0.00	0.00	193.42	6,042.20	809.38	0.00	0.00	0.00
De cap During Year As per Books	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital incurred	0.00	0.00	1,613.76	193.42	6,250.17	948.03	0.00	0.00	9,005.38
Equity	2,769.036	0.00	484.13	58.03	1,875.05	284.41	0.00	0.00	2,701.62
Debt	6,461.084	0.00	1,129.63	135.39	4,375.12	663.62	0.00	0.00	6,303.76



Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Banaskatha:ICT-3 AT BANASKANTA	Conventional	765 KV	1.000					1500.0				Nov 21, 2024	Y
Banaskatha:765 KV ICT BAY	Conventional	765 KV		1.000								Nov 21, 2024	Y
Banaskatha:400 KV ICT BAY		400 KV			1.000							Nov 21, 2024	Y

Summary:

O&M Expenses For Substations Covered in the instant petition					2024-25	2025-26	2026-27	2027-28	2028-29
765KV SUB-STATION									
Normative Rate of O&M as per Regulation					41.34	43.51	45.79	48.20	50.73
No. of Units					1.00	1.00	1.00	1.00	1.00
O&M Claimed					14.84	43.51	45.79	48.20	50.73
400KV SUB-STATION									
Normative Rate of O&M as per Regulation					29.53	31.08	32.71	34.43	36.23
No. of Units					1.00	1.00	1.00	1.00	1.00
O&M Claimed					10.60	31.08	32.71	34.43	36.23



765KV SUB-STATION ICT

Normative Rate of O&M as per Regulation	0.262	0.276	0.29	0.305	0.322
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	141.05	414.00	435.00	457.50	483.00



3. Communication System

Summary:

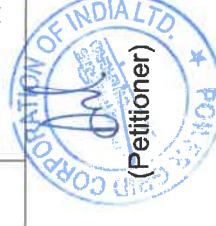
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Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	166.49	488.59	513.50	540.13	569.96
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	166.49	488.59	513.50	540.13	569.96
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	166.49	488.59	513.50	540.13	569.96



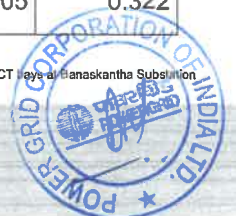
Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0.305	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322



220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/MW)	0.00	1.83	1.92	2.03	2.13	2.24
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28



Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

A) Details of All the Asset Covered under the Scope of the Project

(Amount in Rs. Lakh)

Asset Name	Actual COD of the asset	COD considered for tariff purpose	Effective COD for the project as whole (Refer C)	Weighted Average useful life of the project (Refer D)	Lapsed useful Life of the project as on 01.04.2024 (Refer E)	Balance useful Life of the project as on 01.04.2024 (Refer E)
					0	24

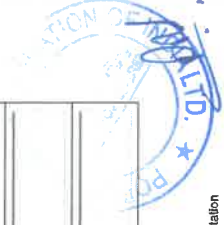
B) Details as on 01.04.2024 for determination of Single Tariff for the Project Commissioned prior to 01.04.2024

C) Computation of Effective COD for determining lapsed useful life of the project as whole

D) Weighted Average useful Life of the Project as whole

E) Lapsed Weighted average useful life of the project & Balance weighted average Useful life
This refers to the No. of completed years from the effective COD till the last day of the previous tariff period (i.e. 31.03.2024)

1) Effective COD	
2) Last date of the previous tariff control period	Mar 31, 2024
3) No. of Completed years lapsed as on 01.04.2024 (2) - (1)	0



4) Remaining useful life (in year) (WAL-lapsed year)

24



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Statement of Capital cost

Form No. -4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2024-25			
a) Opening Gross Block Amount as per books	8,658.76	7,045.00	1,613.76
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	71.53	24.98	46.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	164.88	0.00	164.88

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	8,658.76	6,851.58	1,807.18
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	71.53	1.84	69.69
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	164.88	0.00	164.88

As on relevant date :2025-26

a) Opening Gross Block Amount as per books	8,658.76	6,851.58	1,807.18
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	71.53	1.84	69.69

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	164.88	0.00	164.88
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a) Addition in Gross Block Amount during the period	207.97	0.00	207.97
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	8,866.73	809.38	8,057.35
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	164.88	0.00	164.88

As on relevant date :2026-27

a) Opening Gross Block Amount as per books	8,866.73	809.38	8,057.35
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	164.88	0.00	164.88

a) Addition in Gross Block Amount during the period	138.65	0.00	138.65
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	9,005.38	0.00	9,005.38
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	164.88	0.00	164.88

As on relevant date :2027-28

a) Opening Gross Block Amount as per books	9,005.38	0.00	9,005.38
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	164.88	0.00	164.88



a) Addition in Gross Block Amount during the period		0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above		0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above		0.00	0.00	0.00
d) De-cap in gross block amount during the year		0.00	0.00	0.00

a) Closing Gross Block Amount as per books	9,005.38	0.00	9,005.38
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	164.88	0.00	164.88

As on relevant date :2028-29

a) Opening Gross Block Amount as per books	9,005.38	0.00	9,005.38
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	164.88	0.00	164.88

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	9,005.38	0.00	9,005.38
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	71.53	0.00	71.53
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	164.88	0.00	164.88

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2024-2025	2025-2026	2026-2027					
Opening balance of liability	7,045.00	6,851.58	809.38	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Discharge of liability by payment and claimed as ACE	193.42	6,042.20	809.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	6,851.58	809.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00


 (Petitioner)


Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Projects

Name of the Communication Element

1x1500 mVA ICT 3 at Banaskantha along with associated bays

New Projects**Capital Cost Estimates**

Board of Directors / Agency approving the Capital cost Estimates:	Board of Directors	
Date of approval of Capital cost estimates:	06-07-2022	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of 2nd Quarter 2022	As on COD of the transmission element (i.e., 21-11-2024)
Foreign Exchange rate considered for the Capital cost Estimates	0.00	0.00
CAPITAL COST EXCLUDING IDC, IEDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0.00
Domestic Component (Rs. Lakh)	7321.00	8726.85
Total CAPITAL COST excluding IDC, IEDC, FC, FERV & Hedging Cost (Rs. in Lakh)	7321.00	8726.85
IDC, IEDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0.00
Domestic Component (Rs. in Lakh)	1909.12	271.53
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. In Lakh)	1909.12	271.53
Rates of Taxes & Duties considered	GST @ 18% & Entry Tax @ 4%	GST @ 18%
Capital cost including IDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0
Domestic Component (Rs. in Lakh)	9230.12	8998.38
Capital Cost including IDC, IEDC & FC (Rs. in Lakh)	9230.12	8998.38
Schedule of Commissioning		
OPGW Addl requirement	NA	



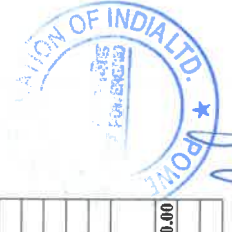
Element wise Break-up of Project Cost for Transmission System

FORM-5

Name of the Communication Asset

1x1500 mVA ICT 3 at Banaslantha along with associated bays

Sl. No. (1)	Particulars (2)	As per original Estimate (3) *			Actual Capital Expenditure (Gross Block) as on COD as per Books of Account (4)			Projected/actual cost of Deferred work to be capitalised after COD but before cut-off date (6)	Variation between actual Cost and IA/RCE cost as on COD (7=(4-5+6)-(3))	Reasons for Variation (8)	Undischarged Liabilities included in Col (4) (9)	Admitted Cost (10)	Capital Work in progress as per Books of Account as on COD (11)
		Quantity	Rate	Estimated Cost	Quantity	Rate	Actual Cost						
1	2	3	4	5	6	7	8	9	10	11			
A. TRANSMISSION LINE													
1.0	Preliminary works												
1.1	Design & Engineering												
1.2	Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works, etc.												
1.3	Total Preliminary Works			0.00			0.00	0.00	0.00		0.00	0.00	0.00
2.0	Transmission Line materials												
2.1	Tower Steel (MT)												
2.2	Earthing for Towers (Nos.)												
2.3	Conductor ACSR MOOSE (km)												
2.4	GS Earth Wire (km)												
2.5	Insulators - 160KN (Nos.)												
2.6	Hardware Fittings (Set)												
2.7	Conductor, Tower & Earthwire accessories (Nos.)												
2.8	Total Spares (MT)												
2.9	Erection, Stringing & Civil works including foundation												
	(i) Stringing for 220KV D/C (normal)												
	Total Transmission line material			0.00			0.00	0.00	0.00		0.00	0.00	0.00
3.0	Taxes & Duties												
3.1	Custom Duty												
3.2	Other Taxes & Duties												
	Total Taxes & Duties			0.00			0.00	0.00	0.00		0.00	0.00	0.00
	Total - Transmission Lines			0.00			0.00	0.00	0.00		0.00	0.00	0.00
B. SUBSTATIONS													
4.0	Preliminary works & Land												
4.1	Design & Engineering												
4.2	Land												
4.3	Site Preparation (Survey & Soil Investigation and infrastructure)	1.00	0.00	0.00			0.00		0.00		0.00	0.00	0.00
	Total Preliminary works & Land			0.00			0.00	0.00	0.00		0.00	0.00	0.00
5.0	Civil Works												



5.1	Control Room, Office Building including HVAC & GIS Hall					8.6						-8.59				
5.2	Township & Colony											0.00				
5.3	Roads & Drainage					29.9						-29.89				
5.4	Foundation for structures											0.00				
	i) Excavation for soil & rock (CuM)	1.00	272.92			272.9	1.00	12.22	12.22	0.00		-260.70			2.4	
	ii) PCC & RCC (CuM)					94.5	1.00	125.13	125.13	0.00		30.63			24.1	
	iii) Steel Reinforcement & Misc. Structural Steel (MT)					52.9	1.00	70.73	70.73	0.00		17.87			13.6	
5.5	Misc. civil works	1.00	69.15			69.2	1.00	32.23	32.23	346.62		309.70			6.2	
	Total Civil Works					577.93			240.32	346.62		59.02			46.22	0.00
6.0	Substation Equipments											0.00				
6.1	Switchgear (CT, PT, Circuit Breaker, Isolator, etc.)											0.00				
A.	765 KV											0.00				
(a)	765KV, 2000A Isolator, 3-Ph (Nos.)	10.00	19.67			196.7	10.00	11.82	118.21			-78.45	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		22.7	
(b)	SURGE ARRESTER, 1-PH, 624KV (Nos.0	3.00	12.25			36.8	3.00	9.91	29.73			-7.03	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		5.7	
(c)	765 KV, 1Ph, 4400pF, CVT (Nos.)								0.00			0.00	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		0.0	
(d)	765KV, 1600A Circuit Breaker, 3ph (Nos.)	1.00	162.62			162.6	1.00	115.35	115.35			-47.27	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		22.2	
(e)	765KV, 1600A Current Transformer, 1-Ph (Nos.)	3.00	33.68			101.0	3.00	18.60	55.81			-45.22	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		10.7	
(f)	765 KV BUS POST INSULATOR	3.00	2.27			6.8	3.00	1.40	4.20			-2.62	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package		0.8	
B	400KV											0.00				

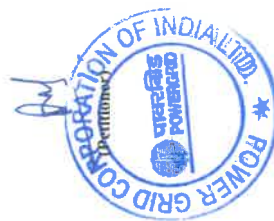




(a)	420KV, 1600A Circuit Breaker, 3ph (Nos.)	1.00	227.59	227.6	1.00	44.53	44.53				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-183.06	8.6	
(b)	420KV, 1600A Isolator, 3-ph (Nos.)	4.00	67.95	271.8	4.00	13.48	53.93				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-217.86	10.4	
(c)	420KV, 1600A Current Transformer, 1-Ph (Nos.)	6.00	20.19	121.2	6.00	7.48	44.87				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-76.28	8.6	
(d)	216KV Lightning Arrestor, 1-Ph (Nos.)	3.00	3.47	10.4	3.00	2.02	6.07				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-4.34	1.2	
(e)	420KV, 4400PF, 1PH CVT	1.00	30.64	30.6	1.00	0.00	0.00				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-30.64	0.0	
(f)	420KV, 1PH BUS POST INSULATORS	1.00	39.70	39.7	1.00	10.44	10.44				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-29.25	2.0	
											Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.00	0.0	
(a)	33KV CT, SUP STR & TC FOR T/F NEUTRAL	1.00	1.75	1.7	1.00	1.10	1.10				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	-0.65	0.2	
6.2	(a) 765/400/33 kV, 500MVA, 1-Ph Transformer (Nos.)	3.00	1413.93	4241.8	3.00	2217.54	6652.61	0.00			Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.00	0.0	
	(b) 400/220/33 kV, 500MVA, 3-Ph Transformer (Nos.)										Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	2410.83	6652.6	
	(c) 33kV & 66kV XLPE Cable and Cable termination kits										Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.00		
6.3	Compensating Equipment (Nos.)										Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.00		
6.4	400KV GIS bay equipments (Nos.)			0.0		0.00	0.00				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.00		
6.5	(a) 765KV Control, Relay & Protection Panel and Augmentation of Substation Automation System (Nos.)	1.00	21.43	21.4	1.00	68.91	68.91				Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	47.47	13.3	



	(b) 400kV Control, Relay & Protection Panel and Augmentation of Substation Automation System (Nos.)	1.00	49.87	49.9	1.00	53.06	53.06		3.19	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	10.2	
	(c) 220kV Control, Relay & Protection Panel (Nos.)	1.00	0.00	0.0	1.00	0.00	0.00		0.00			
6.5	PLCC equipments (Nos.)	0.00	0.00	52.9		3.50			-49.43		0.7	
6.6	HVDC package			0.0					0.00			
6.7	Bus Bars / conductors / insulators	1.00	112.17	112.2	1.00				-112.17			
6.8	i) Lighting System	1.00	10.24	10.2	1.00	5.03	5.03		-5.20	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	1.0	
	ii) Power & Control Cables (Lot)	1.00	178.17	178.2	1.00	87.33	87.33		-90.84	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	16.8	
	iii) Fire fighting (Nos.)	1.00	43.79	43.8	1.00	67.96	67.96		24.17	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	13.1	
	iv) Air Conditioning & Ventilation (Nos.)	1.00	8.16	8.2	1.00	5.84	5.84		-2.32	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	1.1	
	v) Battery & Battery Charger (220V & 48V) (Nos.)	1.00	0.00	0.0	1.00	0.00	0.00		0.00		0.0	
	vi) L.T Switchgear (Nos.)			0.0		0.00	0.00		0.00		0.0	
6.9	Emergency D.G. Set (Nos.)			0.0		0.00	0.00		0.00		0.0	
6.10	Grounding System (km)	1.00	0.00	0.0		0.00	0.00		0.00		0.0	
6.11	Structure for switchyard (MT)	1.00	547.92	547.9	1.00	617.60	617.60		69.69	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	118.8	
6.10	IT	1.00	79.86	79.9	1.00	93.82	93.82		13.96		18.0	
	Total Substation Equipments			6553.22		8139.91	8139.91	0.00	1586.68		6938.67	0.00
7.0	Spares (excluding taxes)								0.00			
	Spares of AIS	1.00	214.09	214.1	1.00	157.46	157.46		-56.63			
	Spares of GIS	1.00	0.00	0.0					0.00			
	Total Spares			214.09		157.46	157.46	0.00	-56.63		0.00	0.00
8.0	Taxes & Duties								0.00			
8.1	Custom Duty & Handling charges								0.00			
8.2	Other Taxes & Duties			0.0					0.00			

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FORM-5 Part-B

B) Summary of Capital Cost as on COD										
Particular	Plant & Machinery Cost including initial spare but excluding IDC & IEDC	Initial spare capitalised	IEDC Capitalised	IDC Capitalised	Loan FERV	Gross Block as per books of account as on COD	Deduction from Gross Block	Gross block meant for tariff as on COD / 01.04.19 (after deductions)	Undischarged liability included in 8	Capital Cost on Cash basis for tariff as on COD / as on 01-04-19
	1	2	3	4	5	6 = (1+3+4+5)	7	8 = (6-7)	9	10 = (8-9)
Land (Freehold Land)										
Land (Leasehold)										
Building & Civil Works	0	0	0	0	0	0.00		0.00		
Transmission Line										
Sub-Station	8318.02	157.46	156.37	67.84		8542.24		8542.24	7020.01	1522.22
PLCC	3.50		0.33	0.15		3.99		3.99	0.00	3.99
IT Equipment and Software	93.82	0.00	8.16	3.54		105.52		105.52	0.00	105.52
Total Capital Cost as per Books of Account	8415.35	157.46	164.87	71.53	0	8651.74	0	8651.74	7020.01	1631.73
Less: Un-discharged liabilities	0.00									
Total Capital Cost Claimed for tariff	8415.35	157.46	164.87	71.53	0.00	8651.74	0.00	8651.74	7020.01	1631.73
% of IDC / IEDC on the base of (Plant & Machinery cost including initial spare as per Books of Account)										
Means of Finance										
Equity										
Debt										



Sr. No.	Name / No. of Construction / supply / service package	Scope of works (in line with head of cost break-ups as applicable)	Whether awarded through ICB / DCB / Departmentally / Deposit work, etc.	No. of bids received	Date of Award	Date of start of work	Actual Date of completion of work	Value of Award in (Amount Rs in Lakh)	Firm or With escalation in price	Actual Expenditure till the completion or up to COD whichever is earlier (Amount Rs in Lakh)	Taxes & Duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total
	M/s. Unxion India Pvt Ltd	Supply, F & I & Ere	Domestic		04-10-2023	04-10-2023	21-11-2024	Supply - INR 215837604		1186.879	373.34	71.53	1,631.74
	G02002280/SUB-STATION (Excluding/DOW/A08-CC-CS-7/NOA-I/W/R2-400013	*	*					F & I - INR 5515079					
								Erection - INR 77317323.64					
	Narad Heavy Electricals Limited	Material W, P & I & Ere	Domestic		44778	44778	45617	Supply - INR 544358232 F & I - 8500883		0.00	0.00	0.00	0.00
	H02002184/TRANSFORMER/DOW/A04-CC-CS-5/NOA-I/W/R2-100007	Material delivered from @ health iii)						Erection - 11706840					
										0.00	0.00	0.00	0.00
	Oil, Land & Others												
	TOTAL	*	*							1,186.88	373.34	71.53	1,631.74

 (Signatures)


DETAILS OF ELEMENTWISE COST OF THE PROJECT

Name of the Communication Project
SCOD 21.11.2024

Transmission Network Expansion at Gujarat to increase ATC from ISTS - Part C

Sl. No.	Name of asset	COD	Delay in No. of Days	Apportioned approved Cost (Lakh)	Revised cost estimates, if applicable (Lakh)	Completed Cost (Lakh)	Covered in the present	
							Yes / No	If No, Petition No.
1	1x1500 mVA ICT 3 at Banaskantha along with associated bays	21-11-2024	NIL	9230.12	0.00	8998.38	Yes	
	GRAND TOTAL			9230.12		8998.38		


(Petitioner)



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	6,461.084	INR	1,129.63		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	2,769.036	INR	484.13		0.00
Total Equity	INR	2,769.036	INR	484.13		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	9,230.12	INR	1,613.76		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			193.42
Addcap for 2025 - 2026			6,250.17
Addcap for 2026 - 2027			948.03
Addcap for 2027 - 2028			0.00



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Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		58.03	
Debt		135.39	
Total		193.42	
Addcap for 2025 - 2026			
Equity		1,875.05	
Debt		4,375.12	
Total		6,250.17	
Addcap for 2026 - 2027			
Equity		284.41	
Debt		663.62	
Total		948.03	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		9,005.38	



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Un-discharged liability included in (2-4-5)			
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	183.44	183.44	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	9.58	9.58	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	193.42	193.42	0.00
ACE for the year :2025-26 (Actual/Projected)									



Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	207.97	0.00	0.00	0.00	0.00	0.00	0.00	207.97	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	6,033.92	6,033.92	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	7.95	7.95	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	207.97	0.00	0.00	0.00	0.00	0.00	6,042.20	6,250.17	0.00
ACE for the year :2026-27 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	138.65	0.00	0.00	0.00	0.00	0.00	0.00	138.65	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	809.38	809.38	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	138.65	0.00	0.00	0.00	0.00	0.00	809.38	948.03	0.00
ACE for the year :2027-28 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



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Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)	
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation	
Region	Western Region	DOCO Date Nov 21, 2024

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected					Admitted			
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28
Amount capitalized in Work/ Equipment									
Financing Details									
Total Loan	135.39	4,375.12	663.62	0.00	0.00				
Equity	58.03	1,875.05	284.41	0.00	0.00				
Total	193.42	6,250.17	948.03	0.00	0.00				



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	131.00	365.00	365.00	366.00	365.00
Opening Normative Equity	484.13	542.16	2,417.21	2,701.62	2,701.62
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	484.13	542.16	2,417.21	2,701.62	2,701.62
Add: Increase in Equity due to addition during the year / period	0.00	62.39	41.60	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	58.03	1,812.66	242.81	0.00	0.00
Closing Normative Equity	542.16	2,417.21	2,701.62	2,701.62	2,701.62
Average Normative Equity	513.15	1,479.69	2,559.42	2,701.62	2,701.62
Rate of return on Equity (%)	18.176	18.176	18.176	18.176	18.176
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.00	15.00	15.00	15.00	15.00
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.176	18.176	18.176	18.176	18.176
Return on Equity	93.27	268.95	465.20	491.05	491.05
Pro rata return on Equity	33.47	268.95	465.20	491.05	491.05



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Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)			
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation			
Region	Western Region	DOCO Date	Nov 21, 2024	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI-04 -DOCO FUNDING					
Gross Loan- Opening	23.06	23.06	23.06	23.06	23.06
Cumulative repayments of Loans upto previous year	4.30	4.30	6.80	9.30	11.80
Net loan-Opening	18.76	18.76	16.26	13.76	11.26
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	2.50	2.50	2.50	2.50
Net Loan-Closing	18.76	16.26	13.76	11.26	8.76
Average Net Loan	18.76	17.51	15.01	12.51	10.01
Rate of Interest on Loan on Annual Basis	8.50	8.50	8.50	8.50	8.50
Interest on loan	1.5946	1.4884	1.2759	1.0634	0.8509

SBI-04 -DOCO FUNDING					
Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	9.32	9.32	14.74	20.17	25.59
Net loan-Opening	40.68	40.68	35.26	29.83	24.41
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	5.42	5.42	5.42	5.42
Net Loan-Closing	40.68	35.26	29.84	24.41	18.99



Average Net Loan	40.68	37.97	32.55	27.12	21.70
Rate of Interest on Loan on Annual Basis	8.50	8.50	8.50	8.50	8.50
Interest on loan	3.4578	3.2275	2.7668	2.3052	1.8445

SBI-04 -DOCO FUNDING					
Gross Loan- Opening	30.00	30.00	30.00	30.00	30.00
Cumulative repayments of Loans upto previous year	5.60	5.60	8.85	12.11	15.36
Net loan-Opening	24.40	24.40	21.15	17.89	14.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	3.25	3.25	3.25	3.25
Net Loan-Closing	24.40	21.15	17.90	14.64	11.39
Average Net Loan	24.40	22.78	19.53	16.27	13.02
Rate of Interest on Loan on Annual Basis	8.50	8.50	8.50	8.50	8.50
Interest on loan	2.074	1.9363	1.6601	1.383	1.1067

SBI-04 -DOCO FUNDING					
Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	9.32	9.32	14.74	20.17	25.59
Net loan-Opening	40.68	40.68	35.26	29.83	24.41
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	5.42	5.42	5.42	5.42
Net Loan-Closing	40.68	35.26	29.84	24.41	18.99
Average Net Loan	40.68	37.97	32.55	27.12	21.70
Rate of Interest on Loan on Annual Basis	8.50	8.50	8.50	8.50	8.50
Interest on loan	3.4578	3.2275	2.7668	2.3052	1.8445



SBI-04 -DOCO FUNDING

Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	9.32	9.32	14.74	20.17	25.59
Net loan-Opening	40.68	40.68	35.26	29.83	24.41
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	5.42	5.42	5.42	5.42
Net Loan-Closing	40.68	35.26	29.84	24.41	18.99
Average Net Loan	40.68	37.97	32.55	27.12	21.70
Rate of Interest on Loan on Annual Basis	8.50	8.50	8.50	8.50	8.50
Interest on loan	3.4578	3.2275	2.7668	2.3052	1.8445

Canara-01 -DOCO FUNDING

Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	0.00	2.78	8.33	13.89	19.44
Net loan-Opening	50.00	47.22	41.67	36.11	30.56
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.78	5.56	5.56	5.56	5.56
Net Loan-Closing	47.22	41.66	36.11	30.55	25.00
Average Net Loan	48.61	44.44	38.89	33.33	27.78
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	3.9617	3.6219	3.1695	2.7164	2.2641

Canara-01 -DOCO FUNDING

Gross Loan- Opening	200.00	200.00	200.00	200.00	200.00
Cumulative repayments of Loans upto previous year	0.00	11.11	33.33	55.56	77.78
Net loan-Opening	200.00	188.89	166.67	144.44	122.22



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	11.11	22.22	22.22	22.22	22.22
Net Loan-Closing	188.89	166.67	144.45	122.22	100.00
Average Net Loan	194.45	177.78	155.56	133.33	111.11
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	15.8477	14.4891	12.6781	10.8664	9.0555

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	55.13	55.13	55.13	55.13	55.13
Cumulative repayments of Loans upto previous year	0.00	3.06	9.19	15.31	21.44
Net loan-Opening	55.13	52.07	45.94	39.82	33.69
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.06	6.13	6.13	6.13	6.13
Net Loan-Closing	52.07	45.94	39.81	33.69	27.56
Average Net Loan	53.60	49.01	42.88	36.76	30.63
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	4.3684	3.9943	3.4947	2.9959	2.4963

BOND LXX (70) -DOCO FUNDING					
Gross Loan- Opening	6.57	6.57	6.57	6.57	6.57
Cumulative repayments of Loans upto previous year	1.15	1.31	1.97	2.63	3.29
Net loan-Opening	5.42	5.26	4.60	3.94	3.28
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.16	0.66	0.66	0.66	0.66
Net Loan-Closing	5.26	4.60	3.94	3.28	2.62
Average Net Loan	5.34	4.93	4.27	3.61	2.95



Rate of Interest on Loan on Annual Basis	7.40	7.40	7.40	7.40	7.40
Interest on loan	0.3952	0.3648	0.316	0.2671	0.2183

Bond LXXIV (74) -DOCO FUNDING

Gross Loan- Opening	242.00	242.00	242.00	242.00	242.00
Cumulative repayments of Loans upto previous year	24.20	24.20	48.40	72.60	96.80
Net loan-Opening	217.80	217.80	193.60	169.40	145.20
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	24.20	24.20	24.20	24.20
Net Loan-Closing	217.80	193.60	169.40	145.20	121.00
Average Net Loan	217.80	205.70	181.50	157.30	133.10
Rate of Interest on Loan on Annual Basis	7.70	7.70	7.70	7.70	7.70
Interest on loan	16.7706	15.8389	13.9755	12.1121	10.2487

Bond LXXV (75) -DOCO FUNDING

Gross Loan- Opening	300.00	300.00	300.00	300.00	300.00
Cumulative repayments of Loans upto previous year	0.00	30.00	60.00	90.00	120.00
Net loan-Opening	300.00	270.00	240.00	210.00	180.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	30.00	30.00	30.00	30.00	30.00
Net Loan-Closing	270.00	240.00	210.00	180.00	150.00
Average Net Loan	285.00	255.00	225.00	195.00	165.00
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	21.8025	19.5075	17.2125	14.9175	12.6225

Bond LXXVI (76) -DOCO FUNDING



Gross Loan- Opening	65.99	65.99	65.99	65.99	65.99
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	65.99	65.99	65.99	65.99	65.99
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	65.99	65.99	65.99	65.99	65.99
Average Net Loan	65.99	65.99	65.99	65.99	65.99
Rate of Interest on Loan on Annual Basis	7.35	7.35	7.35	7.35	7.35
Interest on loan	4.8503	4.8503	4.8503	4.8503	4.8503

Canara-02 -ACCRUAL IDC					
Gross Loan- Opening	0.00	16.19	16.19	16.19	16.19
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	1.16
Net loan-Opening	0.00	16.19	16.19	16.19	15.03
Add: Drawl(s) during the year	16.19	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	1.16	2.31
Net Loan-Closing	16.19	16.19	16.19	15.03	12.72
Average Net Loan	8.10	16.19	16.19	15.61	13.88
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	0.6602	1.3195	1.3195	1.2722	1.1312

Canara-02 -DOCO FUNDING					
Gross Loan- Opening	1.99	1.99	1.99	1.99	1.99
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.14
Net loan-Opening	1.99	1.99	1.99	1.99	1.85
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



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Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.14	0.28
Net Loan-Closing	1.99	1.99	1.99	1.85	1.57
Average Net Loan	1.99	1.99	1.99	1.92	1.71
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	0.1622	0.1622	0.1622	0.1565	0.1394

HDFC-03 -ACCRUAL IDC					
Gross Loan- Opening	0.00	0.00	1.29	1.29	1.29
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	1.29	1.29	1.29
Add: Drawl(s) during the year	0.00	1.29	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.18
Net Loan-Closing	0.00	1.29	1.29	1.29	1.11
Average Net Loan	0.00	0.65	1.29	1.29	1.20
Rate of Interest on Loan on Annual Basis	7.72	7.72	7.72	7.72	7.72
Interest on loan	0.00	0.0502	0.0996	0.0996	0.0926

Summary					
Gross Loan- Opening	1,124.74	1,140.93	1,142.22	1,142.22	1,142.22
Cumulative repayments of Loans upto previous year	63.21	110.32	221.09	331.91	443.98
Net loan-Opening	1,061.53	1,030.61	921.13	810.31	698.24
Add: Drawl(s) during the year	16.19	1.29	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	47.11	110.78	110.78	112.08	113.55
Net Loan-Closing	1,030.61	921.12	810.35	698.23	584.69
Average Net Loan	1,046.08	975.88	865.75	754.28	641.48



Rate of Interest on Loan on Annual Basis	7.9211	7.9217	7.9139	7.9037	7.8896
Interest on loan	82.8608	77.3059	68.5143	59.616	50.61



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)			
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation			
Region	Western Region	DOCO Date	Nov 21, 2024	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	131.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	1,129.63	1,265.02	5,640.14	6,303.76	6,303.76
Cumulative repayments of Normative loan upto previous year	0.00	29.32	247.04	615.55	1,003.46
Net normative loan-Opening	1,129.63	1,235.70	5,393.10	5,688.21	5,300.30
Addition in normative loan towards the ACE	135.39	4,375.12	663.62	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	29.32	217.72	368.51	387.91	387.91
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	1,235.70	5,393.10	5,688.21	5,300.30	4,912.39
Average normative loan	1,182.67	3,314.40	5,540.66	5,494.26	5,106.35
Weighted Average Rate of interest on actual loan	7.9211	7.9217	7.9139	7.9037	7.8896
Interest on normative loan	93.68	262.56	438.48	434.25	402.87
Pro rata interest on normative loan	33.62	262.56	438.48	434.25	402.87



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	1,530.60	183.44	1,714.04	1,622.32	4.22	24.57
Comm. Sys. excluding Fiber Optic	3.27	0.40	3.67	3.47	15.00	0.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/ SCADA,etc	79.89	9.58	89.47	84.68	15.00	4.56
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,613.76	193.42	1,807.18	1,710.47	0.00	29.32
Weighted Average Rate of Depreciation(%)					1.714149	

2025-26						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00



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Civil & Building	0.00	207.97	207.97	103.99	3.34	3.47
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	1,714.04	6,033.92	7,747.96	4,731.00	4.22	199.65
Comm. Sys. excluding Fiber Optic	3.67	0.33	4.00	3.84	15.00	0.58
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	89.47	7.95	97.42	93.45	15.00	14.02
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,807.18	6,250.17	8,057.35	4,932.28	0.00	217.72
Weighted Average Rate of Depreciation(%)					4.414186	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	207.97	138.65	346.62	277.30	3.34	9.26
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	7,747.96	809.38	8,557.34	8,152.65	4.22	344.04
Comm. Sys. excluding Fiber Optic	4.00	0.00	4.00	4.00	15.00	0.60
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	97.42	0.00	97.42	97.42	15.00	14.61
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	8,057.35	948.03	9,005.38	8,531.37	0.00	368.51
Weighted Average Rate of Depreciation(%)					4.31947	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	346.62	0.00	346.62	346.62	3.34	11.58
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	8,557.34	0.00	8,557.34	8,557.34	4.22	361.12
Comm. Sys. excluding Fiber Optic	4.00	0.00	4.00	4.00	15.00	0.60
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	97.42	0.00	97.42	97.42	15.00	14.61
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	9,005.38	0.00	9,005.38	9,005.38	0.00	387.91
Weighted Average Rate of Depreciation(%)					4.307536	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	346.62	0.00	346.62	346.62	3.34	11.58
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	8,557.34	0.00	8,557.34	8,557.34	4.22	361.12
Comm. Sys. excluding Fiber Optic	4.00	0.00	4.00	4.00	15.00	0.60
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	97.42	0.00	97.42	97.42	15.00	14.61
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	9,005.38	0.00	9,005.38	9,005.38	0.00	387.91



Weighted Average Rate of Depreciation(%)					4.307536	
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Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	131.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	24.00	24.00	24.00	24.00	24.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	1.00	2.00	3.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	24.00	24.00	23.00	22.00	21.00
Capital Base					
1.4 Opening capital cost	1,613.76	1,807.18	8,057.35	9,005.38	9,005.38
1.5 Additional Capital Expenditure dr. the year	193.42	6,250.17	948.03	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	1,807.18	8,057.35	9,005.38	9,005.38	9,005.38
1.8 Average capital cost	1,710.47	4,932.28	8,531.37	9,005.38	9,005.38
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	84.68	93.45	97.42	97.42	97.42
1.11 Asset having 10% salvage value included in 1.8	1,625.79	4,838.83	8,433.95	8,907.96	8,907.96
1.12 Depreciable Value(1.10+90% of 1.11)	1,547.89	4,448.40	7,687.98	8,114.59	8,114.59
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	1.714149	4.414186	4.31947	4.307536	4.307536



1.14 Depreciation(for the period)	29.32	217.72	368.51	387.91	387.91
1.15 Depreciation(Annualised)	29.32	217.72	368.51	387.91	387.91
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	29.32	247.04	615.55	1,003.46
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	29.32	247.04	615.55	1,003.46	1,391.37



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Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	131.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	38.66	40.72	42.79	45.01	47.50
Maintenance spares 15% of O&M Expenses	69.58	73.29	77.03	81.02	85.49
Receivables equivalent to 45 days of AFC	93.26	156.58	225.22	233.12	233.68
Total Working capital	201.50	270.59	345.04	359.15	366.67
Bank Rate as on 01.04.2024 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	23.98	32.20	41.06	42.74	43.63
Pro rata interest on working capital	8.61	32.20	41.06	42.74	43.63

(Petitioner)



Name of the Petitioner : **POWERGRID Corporation Of India Limited.**
 Name of the Region : **Western Region**
 Name of the Project / Element : **765 kV ICT TR01 Project at Banaskantha s/s**

Sl. No.	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual/Anticipated Schedule (As per Actual)		Time Over Run		Agency responsible and whether such time over run was beyond the control of the Transmission Licensee	Reason for Delay	Other Activity affected (Mention Sl. No. of activity affected)
		Start date	Completion Date	Start date	Completion Date		Months			
A	765 kV ICT TR01 Projct at Banaskantha s/s	13.10.23	31.12.24	07.09.24	16.11.24					-
1	Land Acquisition	-	-	-	-				As per IA , Commissioning schedule was March 25, Actual	
2	Award of supply & erection package	13.10.23	13.10.23	13.10.23	13.10.23				commissioning was on 21.11.24.	
3	Supply	28.07.24	30.11.24	07.09.24	05.10.24				Hence No delay with the respect to IA Sch.	
4	Foundation									
5	Erection	10.06.24	30.12.24	12.09.24	15.11.24					
6	Testing & Commissioning	30.09.24	31.12.24	12.09.24	16.11.24					

PART-III
FORM- 12A

Incidental Expenditure during Construction

Name of the Petitioner: M/s Power Grid Corporation of India Ltd.
Name of the Region: Western Region
Name of the Project: Transmission Network Expansion at Gujarat to increase ATC from ISTS - Part C
Name of the Transmission Element: 1x1500 MVA ICT 3 at Banaskantha along with associated bays

ASSET 1	Asset Details	2022-23	2023-24	2024-25	TOTAL
DOCO	21.11.2024				
1	Employees Remuneration & Benefits	1.09	97.29	66.49	164.88
2	Finance Costs	-	-	-	-
3	Water Charges	-	-	-	-
4	Communication Expenses	-	-	-	-
5	Power charges	-	-	-	-
6	Other Office & Admin Exps	-	-	-	-
7	Others	-	-	-	-
8	Other Pre operating Expenses	-	-	-	-
	TOTAL	1.09	97.29	66.49	164.88
1	Income from sale of tenders	-	-	-	-
2	Income from guest house	-	-	-	-
3	Income recovered from contractors	-	-	-	-
4	Interest on deposits	-	-	-	-
	TOTAL	-	-	-	-
	IEDC TAKEN TO CERTIFICATES	1.09	97.29	66.49	164.88



Drawdown schedule Calculation of IDC & Financing Charges

Form No. - 12B

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	765/400kV, 1x1500 MVA ICT-3 along with associated 765kV and 400kV ICT bays at Banaskantha Substation		
Region	Western Region	DOCO Date	Nov 21, 2024

(Amount in Rs. Lakh)

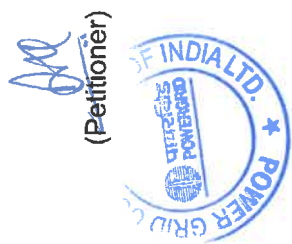
Particulars	Quarter 1		Quarter 2		Quarter n (COD)	
	Quantum in FC	Ex. Rate on Drawn Date	Quantum in FC	Ex. Rate on Drawn Date	Quantum in FC	Ex. Rate on Drawn Date
Loans						
Foreign Loans						
Total of Foreign Loans						
Indian Loans						
SBI-04 -DOCO FUNDING						
Draw Down Account						23.06
IDC						
Financing Charges						
SBI-04 -DOCO FUNDING						



[illegible]

[illegible]

[illegible]



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B) Determination of Plant & Machinery Cost for ceiling of Initial Spares											
Particulars	Gross Block of Asset as on COD	Less: Amount included in Col.B towards					Plant & Machinery cost as on COD for Initial Spare purpose	Plant & Machinery Capitalised as ACE up to cut off date			Plant & Machinery cost as on cut off date for the purpose of initial spare
		Land Cost	Cost of Civil Works	IEDC	IDC	Initial Spare		2024-25	2025-26	2026-27	
a	b	c	d	e	f	g	h=b-c-d-e-f-g	i	j	k	l=h+i+j+k
Transmission Line											
Substation Green Field							-			-	-
Substation Brown Field	8,651.76	-	240.32	164.88	71.53	157.46	8,017.57	100.00	16.33		8,133.90
Series Compensation devices and HVDC Stations							-				-
GIS/S- Green field							-				-
GIS/S- Brown field							-				-
Communication System		-	-	-	-	-	-	-	-	-	-
Static Synchronous Compensator	-						-				-

Note: The cost details for the year in which cut off date falls has to be provide only upto cut off date.

Note: The cost details for the year in which cut off date falls has to be provide only upto cut off date.

**Name of the
Petitioner:** M/s Power Grid Corporation of India Ltd.

Name of the Region: Western Region

Name of the Project: Transmission Network Expansion at Gujarat to increase ATC from ISTS - Part C

**Name of the
Transmission
Element** 1x1500 MVA ICT 3 at Banaskantha along with associated bays

DOCO	Asset Details	(In Lacs) up to DOCO
1	Interest on Loans and Advances	
a)	Interest From Contractor	-
b)	Interest From Employee Loans and Advances	
2	Income from Sale of Scrap	
3	Misc Receipts	
a)	Other Recoveries From Contractors/Suppliers	
b)	Recovery of Rent from Emp Res Buildings	
c)	Electy Charges Recovered Frm Emp Res Bldgs	
d)	Liquidated Damages Recovered	
e)	Other Miscellaneous Receipts	-
f)	Interest from Indian Banks	
	Total	-
	Less: Income transferred to expenditure during construction (Net) - Adjusted in Cost of Asset	-
	Net Income	-



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	0.00	365.00	365.00	366.00	365.00
Tariff Days	0.00	363.00	365.00	366.00	365.00
Depreciation-Form No. 10A	0.00	334.94	389.64	403.93	403.93
Interest on Loan-Form No. 9E	0.00	383.00	420.90	407.91	376.85
Return on Equity-Form No. 8	0.00	400.15	466.49	484.03	484.03
Int. on Working capital-Form No.11	0.00	20.77	23.41	23.85	23.64
Op. and maintenance-Form No.2	0.00	81.62	86.37	90.90	95.67
Total AFC	0.00	1,220.48	1,386.81	1,410.62	1,384.12

(Petitioner)

Summary of Asset Level Cost

Form No. - 1A

Name of the Transmission Licensee	Power Grid Corporation of India Limited
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S
Region	Western Region
	DOC Date Apr 3, 2025

A) Summary of Capital Cost, Means of Finance of the Asset

(Amount in Rs. Lakh)

Particular	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Expenditure incurred						
	As Per IA	As per RCE	As on COD / 01.04.2024	2024-25	2025-26	2026-27	2027-28	2028-29	As on 31.03.2029
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	5,361.74	0.00	1,099.47	471.16	0.00	0.00	6,932.37
Substations	0.00	0.00	1,621.88	0.00	0.00	0.00	0.00	0.00	1,621.88
Comm. Sys. excluding Fiber Optic	0.00	0.00	161.61	0.00	0.00	0.00	0.00	0.00	161.61
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/	0.00	0.00	98.13	0.00	0.00	0.00	0.00	0.00	98.13
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	62.82	0.00	0.00	0.00	0.00	0.00	62.82
Total Capital Cost as per Books	0.00	0.00	7,306.18	0.00	1,099.47	471.16	0.00	0.00	8,876.81
Less: Liability	0.00	0.00	781.90	0.00	0.00	0.00	0.00	0.00	0.00
Add:discharge of liability	0.00	0.00	0.00	0.00	609.64	172.26	0.00	0.00	0.00
De cap During Year As per Books	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital incurred	0.00	0.00	6,524.28	0.00	1,709.11	643.42	0.00	0.00	8,876.81
Equity	2,816.793	0.00	1,957.28	0.00	512.73	193.03	0.00	0.00	2,663.04
Debt	6,572.517	0.00	4,567.00	0.00	1,196.37	450.39	0.00	0.00	6,213.76

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)	
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S	
Region	Western Region	DOC Date Apr 3, 2025

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/ HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
400 KV D/C TL	AC	DC	2	400 KV	0.000	0.000	21.978	Apr 3, 2025	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.00	0.906	0.953	1.003	1.056
No. of Units - (Length in KM)	0.00	21.978	21.978	21.978	21.978
O&M Claimed	0.00	19.80	20.95	22.04	23.21

2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/Reactor/SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		Yes	If No, Petition No.
Banaskantha:400 KV LINE BAYS AT BANASKANTA	Conventional	400 KV			2.000							Apr 3, 2025	Y	

Summary:

O&M Expenses For Substations Covered in the instant petition												2028-29	
400KV SUB-STATION												2027-28	
Normative Rate of O&M as per Regulation				0.00		31.08		32.71		34.43		36.23	
No. of Units				0.00		2.00		2.00		2.00		2.00	
O&M Claimed				0.00		61.82		65.42		68.86		72.46	

3. Communication System

Summary:

-
-
-
-
-

Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M	.				
Transmission Line	0.00	19.80	20.95	22.04	23.21
Substation	0.00	61.82	65.42	68.86	72.46
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	81.62	86.37	90.90	95.67
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	0.00	81.62	86.37	90.90	95.67

(Petitioner)

Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0.305	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322

220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/MW)	0.00	1.83	1.92	2.03	2.13	2.24

(Petitioner)

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

A) Details of All the Asset Covered under the Scope of the Project

Asset Name	(Amount in Rs. Lakh)					
	Actual COD of the asset	COD considered for tariff purpose	Effective COD for the project as whole (Refer C)	Weighted Average useful life of the project (Refer D)	Lapsed useful Life of the project as on 01.04.2024 (Refer E)	Balance useful Life of the project as on 01.04.2024 (Refer E)
400 kV D/C (Ckt-3 & 4) Banaskanita- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S	Apr 3, 2025	Apr 3, 2025				
Summary			Apr 3, 2025	32		

B) Details as on 01.04.2024 for determination of Single Tariff for the Project Commissioned prior to 01.04.2024

Asset Name	Capital Cost as on 31.03.2024	Cumulative Dep. as on 31.03.2024	Debt Equity Ratio as on 31.03.2024	Gross Equity for normative ROE as on 31.03.2024	Gross Loan as on 31.03.2024	Cumulative Re-payment of Loan as on 31.03.2024
400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S	6,524.28	0.00	0:0	0.00	0.00	0.00
Total	6,524.28	0.00	0:0	0.00	0.00	0.00

C) Computation of Effective COD for determining lapsed useful life of the project as whole

Asset Name	Actual COD of the asset	COD considered for tariff purpose	No of days between the COD of the asset considered for tariff and the COD of the Project	True Up Capital Cost as on 31.03.2024	Weight of the Cost of an asset (in %)	Weighted Days
400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S	Apr 3, 2025	Apr 3, 2025	0	6,524.28	100	0
Total			0	6,524.28	100	0
Effective COD	Apr 3, 2025					

D) Weighted Average useful Life of the Project as whole

Asset Name	Freehold Land	Building & Other Civil Works	Transmission Lines	Sub-Station Equipments	PLCC	Leasehold Land	IT Equipments & S/W	Batteries	Fiber Optic/ OPGW	Total Cost
400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij	0.00	0.00	4,714.90	1,546.73	110.39	0.00	89.75	0.00	62.51	6,524.28
Combined Cost	0.00	0.00	4,714.90	1,546.73	110.39	0.00	89.75	0.00	62.51	6,524.28
Useful life / Extended life	0.00	25.00	35.00	25.00	7.00	25.00	7.00	10.00	15.00	0.00
Weighted Cost	0.00	0.00	165,021.5	38,668.25	772.73	0.00	628.25	0.00	937.65	206,028.38
Weighted Average Life										32.00

E) Lapsed Weighted average useful life of the project & Balance weighted average Useful life

This refers to the No. of completed years from the effective COD till the last day of the previous tariff period (i.e. 31.03.2024)

1) Effective COD	Apr 3, 2025
2) Last date of the previous tariff control period	Mar 31, 2024

3) No. of Completed years lapsed as on 01.04.2024 (2) - (1)	
4) Remaining useful life (in year) (WAL-lapsed year)	

(Petitioner)

Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2025-26			
a) Opening Gross Block Amount as per books	7,306.18	781.90	6,524.28
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	324.55	32.30	292.25
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.98	0.00	184.98
a) Addition in Gross Block Amount during the period	1,099.47	0.00	1,099.47
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books	8,405.65	172.26	8,233.39
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	324.55	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.98	0.00	184.98
As on relevant date :2026-27			
a) Opening Gross Block Amount as per books	8,405.65	172.26	8,233.39
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	324.55	0.00	324.55

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.98	0.00	184.98
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a) Addition in Gross Block Amount during the period	471.16	0.00	471.16
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books*	8,876.81	0.00	8,876.81
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	324.55	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.98	0.00	184.98

As on relevant date :2027-28			
a) Opening Gross Block Amount as per books	8,876.81	0.00	8,876.81
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	324.55	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.98	0.00	184.98

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	8,876.81	0.00	8,876.81
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	324.55	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.98	0.00	184.98

As on relevant date :2028-29			
a) Opening Gross Block Amount as per books	8,876.81	0.00	8,876.81
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	324.55	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.98	0.00	184.98

a) Addition in Gross Block Amount during the period		0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above		0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above		0.00	0.00	0.00
d) De-cap in gross block amount during the year		0.00	0.00	0.00

a) Closing Gross Block Amount as per books	8,876.81	0.00	0.00	8,876.81
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	324.55	0.00	0.00	324.55
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.98	0.00	0.00	184.98

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2025-2026	2026-2027						
Opening balance of liability	781.90	172.26	0.00	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Discharge of liability by payment and claimed as ACE	609.64	172.26	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancellation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	172.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)

Details of all the assets covered in the project

Form No. - 5B

Name of the Transmission Licensee		Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)			
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S			
Region	Western Region	DOCO Date	Apr 3, 2025	SCOD

(Amount in Rs. Lakh)

(Petitioner)

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Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Projects

Name of the Communication Element

1. 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section
(Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400New ProjectsCapital Cost Estimates

Board of Directors / Agency approving the Capital cost Estimates:	Board of Directors	
Date of approval of Capital cost estimates:	06-07-2022	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of 2nd Quarter 2022	As on COD of the transmission element (i.e., 03-04-2025)
Foreign Exchange rate considered for the Capital cost Estimates	0.00	0.00
<u>CAPITAL COST EXCLUDING IDC, IEDC & FC</u>		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0.00
Domestic Component (Rs. Lakh)	8129.86	8231.26
Total CAPITAL COST excluding IDC, IEDC, FC, FERV & Hedging Cost (Rs. in Lakh)	8129.86	8231.26
<u>IDC, IEDC, FC, FERV & Hedging Cost</u>		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0.00
Domestic Component (Rs. in Lakh)	1259.44	509.53
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. In Lakh)	1259.44	509.53
Rates of Taxes & Duties considered	GST @ 18% & Entry Tax @ 4%	GST @ 18%
<u>Capital cost including IDC, FC, FERV & Hedging Cost</u>		
Foreign Component, if any (In Million US \$ or the relevant Currency)	0.00	0
Domestic Component (Rs. in Lakh)	9389.31	8740.78
Capital Cost including IDC, IEDC & FC (Rs. in Lakh)	9389.31	8740.78
Schedule of Commissioning	31-03-2025	
OPGW Addl requirement	NA	



Element wise Break-up of Project Cost for Transmission System

1. 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantl(GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).
2. Line bays at Banaskantha Substation

Name of the Communication Asset

Sl. No. (1)	Particulars (2)	As per original Estimate (3)			Actual Capital Expenditure (Gross Block) as on COD as per Books of Account (4)			Projected/actual cost of Deferred work to be capitalised after COD but before end of date (6)	Variation between actual Cost and IA/RCE cost as on COD (7-(4-5)+(3))	Reasons for Variation (8)	Undischarged Liabilities included in Col (4) (9)	Admitted Cost (10)	Capital Work in progress as per Books of Account as on COD (11)
		Quantity	Rate	Estimated Cost	Quantity	Rate	Actual Cost						
1			3				4	6	7	8	9	10	11
A. TRANSMISSION LINE													
1.0	Preliminary works												
1.1	Design & Engineering			0.00									
1.2	Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works, etc.	1.00	1329.99	1329.99	1.00	261.82	261.82	1570.6	502.5	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	0.0		
1.3	Total Preliminary Works			1329.99			261.82	1570.63	502.5		0.00	0.00	0.00
2.0 Transmission Line materials													
2.1	Tower Steel (MT)	1196.52	1.40	1680.09	1511.30	1.16	1755.34	0.0	75.2	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	235.7		
2.2	Earthing for Towers (Nos.)	111.00	0.12	13.26	131.00	0.12	15.43	0.0	2.2	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	2.1		
2.3	Conductor AL59 MOOSE (km)	273.00	5.65	1541.78	265.28	4.79	1271.20	0.0	-270.6	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	170.7		
2.4	GS Earth Wire (km)	23.00	0.76	17.42	22.11	0.84	18.61	0.0	1.2	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	2.5		
2.5	Insulators - 160KN (Nos.)	1267.00	0.06	80.09	1198.00	0.09	105.22	0.0	25.1	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	14.1		
2.6	Hardware Fittings (Set)	673.00	0.26	177.78	658.00	0.23	149.63	0.0	-28.2	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	20.1		
2.7	Conductor, Tower & Earthwire accessories (Nos.)	6534.00	0.03	191.07	6398.00	0.01	88.97	0.0	-102.1	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	11.9		
2.8	Total Spares	1.00	16.62	16.62	1.00	24.63	24.63	0.0	8.0				
2.9	Erection, Stringing & Civil works including foundation (i) Stringing for 220kV D/C (normal)	1.00	739.94	739.94	1.00	1239.69	1239.69	0.0	499.7	Variation in final execution is because of difference of per unit rate cost between FR and final awarded package	166.4		
	Total Transmission line material			4441.43			4644.08	0.00	202.7		623.50	0.00	0.00
3.0	Taxes & Duties								0.0				
3.1	Custom Duty								0.0				
3.2	Other Taxes & Duties								0.0				
	Total Taxes & Duties			0.00			0.00	0.00	0.0		0.00	0.00	0.00
	Total - Transmission Lines			5771.42			4905.89	1570.63	705.1		623.50	0.00	0.00
B. SUBSTATIONS													
4.0	Preliminary works & Land												
4.1	Design & Engineering								0.0				
4.2	Land								0.0				
4.3	Site Preparation (Survey & Soil Investigation and infrastructure)								0.0				
	Total Preliminary works & Land			0.00			0.00	0.00	0.0		0.00	0.00	0.00
5.0 Civil Works													
5.1	Control Room, Office Building including HVAC & GIS Hall						7.43	0.0	7.4	as per actual.	0.3		



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FORM-5, Part-B

B) Summary of Capital Cost as on COD										
	Plant & Machinery Cost including initial spare but excluding IDC & IEDC	Initial spare capitalised	IEDC Capitalised	IDC Capitalised	Loan FERV	Gross Block as per books of account as on COD	Deduction from Gross Block	Gross block meant for tariff as on COD / 01.04.19 (after deductions)	Undischarged liability included in 8	Capital Cost on Cash basis for tariff as on COD / as on 01-04-19
Particular	1	2	3	4	5	6 = (1+3+4+5)	7	8 = (6-7)	9	10 = (8-9)
Land (Freehold Land)										
Land (Leasehold)										
Building & Civil Works										
Transmission Line	4905.89	24.63	134.01	223.54		5263.44		5263.44	623.50	4639.95
Sub-Station	1349.19	52.93	43.55	87.04		1479.78		1479.78	67.49	1412.29
PLCC/Communication	316.86	0	4.89	8.92		330.67		330.67	50.67	280.00
IT Equipment and Software	88.69	0.00	2.53	5.05		96.26		96.26	7.94	88.32
Total Capital Cost as per Books of Account	6660.63	77.55	184.98	324.55	0	7170.16	0	7170.16	749.60	6420.56
Less: Un-discharged liabilities										
Total Capital Cost Claimed for tariff	6660.63	77.55	184.98	324.55	0.00	7170.16	0.00	7170.16	749.60	6420.56
% of IDC / IEDC on the base of (Plant & Machinery cost including initial spare as per Books of Account)										
Means of Finance										
Equity										
Debt										



Break-up of Construction / Supply / Service Packages

FORM-5A

1. 400 kV D/C (Ckts-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).

2. Line bays at Banaskantha Substation

Sl. No.	Name / No. of Construction / supply / service package	Scope of works (in line with head of cost break-ups as applicable)	Whether awarded through ICB / DCB / Departmentally / Deposit work, etc.	No. of bids received	Date of Award	Date of start of work	Actual Date of completion of work	Value of Award in (Amount Rs in Lakh)	Firm or With escalation in price	Actual Expenditure till the completion or up to COD whichever is earlier (Amount Rs in Lakh)	Taxes & Duties and IBDC	IDC, FC, FERV & Hedging cost	Sub-total
	M/s. Unxon India Pvt Ltd	Supply, F & I & E	Domestic		04-10-2023	04-10-2023	03-04-2025	Supply - INR 216637604		1571.609	49.18	98.31	1,719.10
	S/02002280/SUB-STATION (Excluding/DOM/A06-CC-C5-7/NOA-I/WR2-4/20013							F & I - INR 5515079					
								Erection - INR 77317323 #4					
	M/s NEC International Ltd	Supply, F & I & E	Domestic		11-08-2022	22-09-2022	29-03-2025	Supply - INR 208,36,23,222		4,339.43	135.80	226.24	4,701.47
	S/02002222/TOWER/DOM/A02-CC-C5-3/CA-I/WR2-400009 dated 08.09.2022 & S/02002222/TOWER/DOM/A02-CC-C5-3/CA-I/WR2-400010 dated 08.09.2022							F&I - INR 3,18,06,198					
								Erection-INR 74,12,09,972		5,911.03	184.98	324.55	6,420.56
	TOTAL												



DETAILS OF ELEMENTWISE COST OF THE PROJECT

Name of the Communication Project
SCOD 31-03-2025

Transmission Network Expansion in Gujarat to increase ATC from ISTS - Part C

Sl. No.	Name of asset	COD	Delay in No. of Days	Apportioned approved Cost (Lakh)	Revised cost estimates, if applicable (Lakh)	Completed Cost (Lakh)	Covered in the present	
							Yes / No	If No, Petition No.
1	1. 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO). 2. Line bays at Banaskantha Substation	03-04-2025	0.00	9389.31	0.00	0.00	Yes	
	GRAND TOTAL			9389.31		0.00		

(Petitioner)



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	6,572.517	INR	4,567.00		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	2,816.793	INR	1,957.28		0.00
Total Equity	INR	2,816.793	INR	1,957.28		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	9,389.31	INR	6,524.28		0.00

Particulars	Debt	Equity	Total
Addcap for 2025 - 2026			1,709.10
Addcap for 2026 - 2027			643.42
Addcap for 2027 - 2028			0.00
Addcap for 2028 - 2029			0.00

Particulars	Actual	Normative	
Addcap for 2025 - 2026			
Equity		512.73	
Debt		1,196.37	
Total		1,709.10	
Addcap for 2026 - 2027			
Equity		193.03	
Debt		450.39	
Total		643.42	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		8,876.80	

(Petitioner)

Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (If any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2025-26 (Actual/Projected)									

Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	1,099.47	0.00	0.00	0.00	0.00	0.00	487.75	1,587.22	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	75.15	75.15	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	38.05	38.05	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	8.38	8.38	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31	0.00
Total	1,099.47	0.00	0.00	0.00	0.00	0.00	609.64	1,709.11	0.00
ACE for the year :2026-27 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	471.16	0.00	0.00	0.00	0.00	0.00	159.09	630.25	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	13.17	13.17	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	471.16	0.00	0.00	0.00	0.00	0.00	172.26	643.42	0.00
ACE for the year :2027-28 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)

Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanita- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected					Admitted			
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28
Amount capitalized in Work/ Equipment									
Financing Details									
Total Loan	0.00	1,196.37	450.39	0.00	0.00				
Equity	0.00	512.73	193.03	0.00	0.00				
Total	0.00	1,709.10	643.42	0.00	0.00				

(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	0.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	0.00	363.00	365.00	366.00	365.00
Opening Normative Equity	0.00	1,957.28	2,470.01	2,663.04	2,663.04
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	0.00	1,957.28	2,470.01	2,663.04	2,663.04
Add: Increase in Equity due to addition during the year / period	0.00	329.84	141.35	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	182.89	51.68	0.00	0.00
Closing Normative Equity	0.00	2,470.01	2,663.04	2,663.04	2,663.04
Average Normative Equity	0.00	2,213.65	2,566.53	2,663.04	2,663.04
Rate of return on Equity (%)	0.00	18.176	18.176	18.176	18.176
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	0.00	15.00	15.00	15.00	15.00
MAT/Corporate Rate	0.00	17.472	17.472	17.472	17.472
Grossed up rate of ROE	0.00	18.176	18.176	18.176	18.176
Return on Equity	0.00	402.35	466.49	484.03	484.03
Pro rata return on Equity	0.00	400.15	466.49	484.03	484.03

(Petitioner)

Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)				
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S				
Region	Western Region	DOCO Date	Apr 3, 2025		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI-04 -DOCO FUNDING					
Gross Loan- Opening	0.00	60.00	60.00	60.00	60.00
Cumulative repayments of Loans upto previous year	0.00	7.16	14.21	21.25	28.30
Net loan-Opening	0.00	52.84	45.79	38.75	31.70
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	7.05	7.05	7.05	7.05
Net Loan-Closing	0.00	45.79	38.74	31.70	24.65
Average Net Loan	0.00	49.32	42.27	35.23	28.18
Rate of Interest on Loan on Annual Basis	0.00	8.55	8.55	8.55	8.55
Interest on loan	0.00	4.2169	3.6141	3.0122	2.4094

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	250.00	250.00	250.00	250.00
Cumulative repayments of Loans upto previous year	0.00	13.89	41.67	69.44	97.22
Net loan-Opening	0.00	236.11	208.33	180.56	152.78
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	27.78	27.78	27.78	27.78
Net Loan-Closing	0.00	208.33	180.55	152.78	125.00

Average Net Loan	0.00	222.22	194.44	166.67	138.89
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	17.5554	15.3608	13.1669	10.9723

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	44.87	44.87	44.87	44.87
Cumulative repayments of Loans upto previous year	0.00	2.49	7.48	12.46	17.45
Net loan-Opening	0.00	42.38	37.39	32.41	27.42
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	4.99	4.99	4.99	4.99
Net Loan-Closing	0.00	37.39	32.40	27.42	22.43
Average Net Loan	0.00	39.89	34.90	29.92	24.93
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	3.1513	2.7571	2.3637	1.9695

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	5.56	16.67	27.78	38.89
Net loan-Opening	0.00	94.44	83.33	72.22	61.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	11.11	11.11	11.11	11.11
Net Loan-Closing	0.00	83.33	72.22	61.11	50.00
Average Net Loan	0.00	88.89	77.78	66.67	55.56
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	7.0223	6.1446	5.2669	4.3892

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	5.56	16.67	27.78	38.89
Net loan-Opening	0.00	94.44	83.33	72.22	61.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	11.11	11.11	11.11	11.11
Net Loan-Closing	0.00	83.33	72.22	61.11	50.00
Average Net Loan	0.00	88.89	77.78	66.67	55.56
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	7.0223	6.1446	5.2669	4.3892

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	5.56	16.67	27.78	38.89
Net loan-Opening	0.00	94.44	83.33	72.22	61.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	11.11	11.11	11.11	11.11
Net Loan-Closing	0.00	83.33	72.22	61.11	50.00
Average Net Loan	0.00	88.89	77.78	66.67	55.56
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	7.0223	6.1446	5.2669	4.3892

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	0.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	5.56	16.67	27.78	38.89
Net loan-Opening	0.00	94.44	83.33	72.22	61.11

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	11.11	11.11	11.11	11.11
Net Loan-Closing	0.00	83.33	72.22	61.11	50.00
Average Net Loan	0.00	88.89	77.78	66.67	55.56
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	7.0223	6.1446	5.2669	4.3892

BOND LXX (70) -DOCO FUNDING

Gross Loan- Opening	0.00	1,043.43	1,043.43	1,043.43	1,043.43
Cumulative repayments of Loans upto previous year	0.00	208.69	313.03	417.37	521.72
Net loan-Opening	0.00	834.74	730.40	626.06	521.71
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	104.34	104.34	104.34	104.34
Net Loan-Closing	0.00	730.40	626.06	521.72	417.37
Average Net Loan	0.00	782.57	678.23	573.89	469.54
Rate of Interest on Loan on Annual Basis	0.00	7.40	7.40	7.40	7.40
Interest on loan	0.00	57.9102	50.189	42.4679	34.746

BOND LXXIII (73) -DOCO FUNDING

Gross Loan- Opening	0.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	10.00	20.00	30.00	40.00
Net loan-Opening	0.00	90.00	80.00	70.00	60.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	10.00	10.00	10.00	10.00
Net Loan-Closing	0.00	80.00	70.00	60.00	50.00
Average Net Loan	0.00	85.00	75.00	65.00	55.00

Rate of Interest on Loan on Annual Basis	0.00	7.50	7.50	7.50	7.50
Interest on loan	0.00	6.375	5.625	4.875	4.125

Bond LXXIV (74) -DOCO FUNDING

Gross Loan- Opening	0.00	258.00	258.00	258.00	258.00
Cumulative repayments of Loans upto previous year	0.00	25.80	51.60	77.40	103.20
Net loan-Opening	0.00	232.20	206.40	180.60	154.80
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	25.80	25.80	25.80	25.80
Net Loan-Closing	0.00	206.40	180.60	154.80	129.00
Average Net Loan	0.00	219.30	193.50	167.70	141.90
Rate of Interest on Loan on Annual Basis	0.00	7.70	7.70	7.70	7.70
Interest on loan	0.00	16.8861	14.8995	12.9129	10.9263

Bond LXXV (75) -DOCO FUNDING

Gross Loan- Opening	0.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	0.00	70.00	140.00	210.00	280.00
Net loan-Opening	0.00	630.00	560.00	490.00	420.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	70.00	70.00	70.00	70.00
Net Loan-Closing	0.00	560.00	490.00	420.00	350.00
Average Net Loan	0.00	595.00	525.00	455.00	385.00
Rate of Interest on Loan on Annual Basis	0.00	7.65	7.65	7.65	7.65
Interest on loan	0.00	45.5175	40.1625	34.8075	29.4525

Bond LXXVI (76) -DOCO FUNDING

Gross Loan- Opening	0.00	74.01	74.01	74.01	74.01
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	74.01	74.01	74.01	74.01
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	74.01	74.01	74.01	74.01
Average Net Loan	0.00	74.01	74.01	74.01	74.01
Rate of Interest on Loan on Annual Basis	0.00	7.35	7.35	7.35	7.35
Interest on loan	0.00	5.4397	5.4397	5.4397	5.4397

Canara-02 -DOCO FUNDING

Gross Loan- Opening	0.00	46.50	46.50	46.50	46.50
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	3.32
Net loan-Opening	0.00	46.50	46.50	46.50	43.18
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	3.32	6.64
Net Loan-Closing	0.00	46.50	46.50	43.18	36.54
Average Net Loan	0.00	46.50	46.50	44.84	39.86
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	3.6735	3.6735	3.5424	3.1489

Canara-02 -DOCO FUNDING

Gross Loan- Opening	0.00	400.00	400.00	400.00	400.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	28.57
Net loan-Opening	0.00	400.00	400.00	400.00	371.43
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00

Less: Repayment(s) of loan during the year	0.00	0.00	0.00	28.57	57.14
Net Loan-Closing	0.00	400.00	400.00	371.43	314.29
Average Net Loan	0.00	400.00	400.00	385.72	342.86
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	31.60	31.60	30.4719	27.0859

Canara-02 -DOCO FUNDING

Gross Loan- Opening	0.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	3.57
Net loan-Opening	0.00	50.00	50.00	50.00	46.43
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	3.57	7.14
Net Loan-Closing	0.00	50.00	50.00	46.43	39.29
Average Net Loan	0.00	50.00	50.00	48.22	42.86
Rate of Interest on Loan on Annual Basis	0.00	7.90	7.90	7.90	7.90
Interest on loan	0.00	3.95	3.95	3.8094	3.3859

SBI-05 -DOCO FUNDING

Gross Loan- Opening	0.00	362.64	362.64	362.64	362.64
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	362.64	362.64	362.64	362.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	51.81
Net Loan-Closing	0.00	362.64	362.64	362.64	310.83
Average Net Loan	0.00	362.64	362.64	362.64	336.74
Rate of Interest on Loan on Annual Basis	0.00	7.79	7.79	7.79	7.79

Interest on loan	0.00	28.2497	28.2497	28.2497	26.232
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SBI-05 -DOCO FUNDING					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	0.00	7.79	7.79	7.79	7.79
Interest on loan	0.00	0.00	0.00	0.00	0.00

SBI-05 -DOCO FUNDING					
Gross Loan- Opening	0.00	275.62	275.62	275.62	275.62
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	275.62	275.62	275.62	275.62
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	39.38
Net Loan-Closing	0.00	275.62	275.62	275.62	236.24
Average Net Loan	0.00	275.62	275.62	275.62	255.93
Rate of Interest on Loan on Annual Basis	0.00	7.79	7.79	7.79	7.79
Interest on loan	0.00	21.4708	21.4708	21.4708	19.9369

HDFC-03 -ACCRUAL ADD CAP LOAN					
Gross Loan- Opening	0.00	0.00	22.60	22.60	22.60

Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	22.60	22.60	22.60
Add: Drawl(s) during the year	0.00	22.60	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	3.23
Net Loan-Closing	0.00	22.60	22.60	22.60	19.37
Average Net Loan	0.00	11.30	22.60	22.60	20.99
Rate of Interest on Loan on Annual Basis	0.00	7.72	7.72	7.72	7.72
Interest on loan	0.00	0.8724	1.7447	1.7447	1.6204

HDFC-03 -DOCO FUNDING

Gross Loan- Opening	0.00	400.00	400.00	400.00	400.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	400.00	400.00	400.00	400.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	57.15
Net Loan-Closing	0.00	400.00	400.00	400.00	342.85
Average Net Loan	0.00	400.00	400.00	400.00	371.43
Rate of Interest on Loan on Annual Basis	0.00	7.72	7.72	7.72	7.72
Interest on loan	0.00	30.88	30.88	30.88	28.6744

HDFC-03 -DOCO FUNDING

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00

Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	0.00	7.72	7.72	7.72	7.72
Interest on loan	0.00	0.00	0.00	0.00	0.00

HDFC-03 -DOCO FUNDING

Gross Loan- Opening	0.00	6.72	6.72	6.72	6.72
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	6.72	6.72	6.72	6.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.96
Net Loan-Closing	0.00	6.72	6.72	6.72	5.76
Average Net Loan	0.00	6.72	6.72	6.72	6.24
Rate of Interest on Loan on Annual Basis	0.00	7.72	7.72	7.72	7.72
Interest on loan	0.00	0.5188	0.5188	0.5188	0.4817

Summary

Gross Loan- Opening	0.00	4,471.79	4,494.39	4,494.39	4,494.39
Cumulative repayments of Loans upto previous year	0.00	360.27	654.67	949.04	1,278.91
Net loan-Opening	0.00	4,111.52	3,839.72	3,545.35	3,215.48
Add: Drawl(s) during the year	0.00	22.60	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	294.40	294.40	329.86	517.85
Net Loan-Closing	0.00	3,839.72	3,545.32	3,215.49	2,697.63
Average Net Loan	0.00	3,975.65	3,692.55	3,380.46	2,956.60
Rate of Interest on Loan on Annual Basis	0.00	7.7058	7.7105	7.715	7.7171

Interest on loan	0.00	306.3565	284.7136	260.8011	228.1636
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(Petitioner)

Loans in Foreign Currency

Form No. - 9D

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Petitioner)

Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)			
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S			
Region	Western Region	DOCO Date	Apr 3, 2025	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	0.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	0.00	363.00	365.00	366.00	365.00
Gross normative loan-Opening	0.00	4,567.00	5,763.37	6,213.76	6,213.76
Cumulative repayments of Normative loan upto previous year	0.00	0.00	334.94	724.58	1,128.51
Net normative loan-Opening	0.00	4,567.00	5,428.43	5,489.18	5,085.25
Addition in normative loan towards the ACE	0.00	1,196.37	450.39	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.00	334.94	389.64	403.93	403.93
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	5,428.43	5,489.18	5,085.25	4,681.32
Average normative loan	0.00	4,997.72	5,458.81	5,287.22	4,883.29
Weighted Average Rate of interest on actual loan	0.00	7.7058	7.7105	7.715	7.7171
Interest on normative loan	0.00	385.11	420.90	407.91	376.85
Pro rata interest on normative loan	0.00	383.00	420.90	407.91	376.85

(Petitioner)

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2025-26						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	4,714.90	1,587.22	6,302.12	5,508.51	4.22	231.19
Sub Station	1,546.73	75.14	1,621.87	1,584.30	4.22	66.49
Comm. Sys. excluding Fiber Optic	110.39	38.04	148.43	129.41	15.00	19.30
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	89.75	8.39	98.14	93.95	15.00	14.01
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	62.51	0.31	62.82	62.67	6.33	3.95
TOTAL	6,524.28	1,709.10	8,233.38	7,378.84	0.00	334.94
Weighted Average Rate of Depreciation(%)					4.539196	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	6,302.12	630.25	6,932.37	6,617.25	4.22	279.25
Sub Station	1,621.87	0.00	1,621.87	1,621.87	4.22	68.44
Comm. Sys. excluding Fiber Optic	148.43	13.17	161.60	155.02	15.00	23.25
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	98.14	0.00	98.14	98.14	15.00	14.72
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	62.82	0.00	62.82	62.82	6.33	3.98
TOTAL	8,233.38	643.42	8,876.80	8,555.10	0.00	389.64
Weighted Average Rate of Depreciation(%)					4.554476	

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	6,932.37	0.00	6,932.37	6,932.37	4.22	292.55
Sub Station	1,621.87	0.00	1,621.87	1,621.87	4.22	68.44
Comm. Sys. excluding Fiber Optic	161.60	0.00	161.60	161.60	15.00	24.24
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	98.14	0.00	98.14	98.14	15.00	14.72
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	62.82	0.00	62.82	62.82	6.33	3.98
TOTAL	8,876.80	0.00	8,876.80	8,876.80	0.00	403.93
Weighted Average Rate of Depreciation(%)					4.550401	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	6,932.37	0.00	6,932.37	6,932.37	4.22	292.55
Sub Station	1,621.87	0.00	1,621.87	1,621.87	4.22	68.44
Comm. Sys. excluding Fiber Optic	161.60	0.00	161.60	161.60	15.00	24.24
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	98.14	0.00	98.14	98.14	15.00	14.72
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	62.82	0.00	62.82	62.82	6.33	3.98
TOTAL	8,876.80	0.00	8,876.80	8,876.80	0.00	403.93
Weighted Average Rate of Depreciation(%)					4.550401	

(Petitioner)

Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)				
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S				
Region	Western Region	DOCO Date	Apr 3, 2025		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	0.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	0.00	363.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	32.00	32.00	32.00	32.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	1.00	2.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	32.00	32.00	31.00	30.00
Capital Base					
1.4 Opening capital cost	0.00	6,524.28	8,233.38	8,876.80	8,876.80
1.5 Additional Capital Expenditure dr. the year	0.00	1,709.10	643.42	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	8,233.38	8,876.80	8,876.80	8,876.80
1.8 Average capital cost	0.00	7,378.84	8,555.10	8,876.80	8,876.80
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	93.95	98.14	98.14	98.14
1.11 Asset having 10% salvage value included in 1.8	0.00	7,284.89	8,456.96	8,778.66	8,778.66
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	6,650.35	7,709.41	7,998.93	7,998.93
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	4.539196	4.554476	4.550401	4.550401

1.14 Depreciation(for the period)	0.00	334.94	389.64	403.93	403.93
1.15 Depreciation(Annualised)	0.00	334.94	389.64	403.93	403.93
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	334.94	724.58	1,128.51
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	0.00	334.94	724.58	1,128.51	1,532.44

(Petitioner)

Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskanta- Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	DOCO Date	Apr 3, 2025

(Amount in Rs. Lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	0.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	0.00	363.00	365.00	366.00	365.00
O&M Expenses-one month	0.00	6.84	7.20	7.58	7.97
Maintenance spares 15% of O&M Expenses	0.00	12.31	12.96	13.64	14.35
Receivables equivalent to 45 days of AFC	0.00	151.30	170.98	173.44	170.64
Total Working capital	0.00	170.45	191.14	194.66	192.96
Bank Rate as on 01.04.2024 or as on 01st April of the COD year, whichever is later.	0.00	12.25	12.25	12.25	12.25
Interest on working capital	0.00	20.88	23.41	23.85	23.64
Pro rata interest on working capital	0.00	20.77	23.41	23.85	23.64

(Petitioner)

Drawdown schedule Calculation of IDC & Financing Charges

Form No. - 12B

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS (Part C)		
Element Description	400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S		
Region	Western Region	•	DOC Date Apr 3, 2025

(Amount in Rs. Lakh)

Particulars	Quarter 1			Quarter 2			Quarter n (COD)		
	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee
Loans									
Foreign Loans									
Total of Foreign Loans									
Indian Loans									
SBI-04 -DOCO FUNDING									
Draw Down Account									60.00
IDC									
Financing Charges									
Canara-01 -DOCO FUNDING									

[illegible]

Details of Time Over Run

Name of the Petitioner : POWERGRID Corporation Of India Limited.

Name of the Region : Western Region-II

Name of the Project / Element : 1. 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Pranti (GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO).

Sl. No.	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual/Anticipated Schedule (As per Actual)		Time Over Run		Agency responsible and whether such time over run was beyond the control of the Transmission Licensee	Reason for Delay	Other Activity affected (Mention Sl. No. of activity affected)
		Start date	Completion Date	Start date	Completion Date	Start date	Completion Date			
A	765/400 kV Line Bays at Banaskantha s/s	8-Sep-2022	7-May-2024	8-Sep-2022	4-Dec-2024					
	As per Master Network									
1	Land Acquisition								As per IA, Commissioning schedule of 2nd Banaskantha-Sankhari 400kV D/C Line was March 25. Actual commissioning was on 01.04.25. Hence No delay with the respect to IA Sch.	
2	Award of supply & erection package	8-Sep-2022	8-Sep-2022	8-Sep-2022	8-Sep-2022					
3	Supply	19-Sep-2022	30-Nov-2023	19-Sep-2022	30-Nov-2023					
4	Foundation	15-Jan-2023	28-Apr-2024	26-Mar-2023	8-Jan-2025					
5	Erection	1-Aug-2023 *	7-May-2024	9-Nov-2023	4-Dec-2024					
6	Testing & Commissioning	15-Mar-2024	7-May-2024	15-Mar-2024	4-Dec-2024					
B	2nd Banaskantha-Sankhari 400kV D/C Line	27-Sep-2022	10-Sep-2024	22-Sep-2022	29-Mar-2025					
	As per Master Network									
1	Land Acquisition								As per IA, Commissioning schedule of 2nd Banaskantha-Sankhari 400kV D/C Line was March 25. Actual commissioning was on 01.04.25. Hence No delay with the respect to IA Sch.	
2	Award of supply & erection package	11-Aug-2022	11-Aug-2022	11-Aug-2022	11-Aug-2022					
3	Supply	16-Aug-2022	30-Nov-2023	14-Oct-2022	30-Nov-2023					
4	Foundation	20-Jan-2023	20-Jan-2024	10-Nov-2022	8-Jan-2025					
5	Erection	10-Feb-2023	10-Mar-2024	11-Sep-2023	18-Mar-2025					
6	Testing & Commissioning	1-Jul-2024 *	10-Sep-2024	28-Mar-2025	29-Mar-2025					

1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings.



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Name of the Petitioner : *POWERGRID Corporation Of India Limited.*

Name of the Region : *Western Region*

Name of the Project / Element : *1. 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).*

ASSET 2	Asset Details	2022-23	2023-24	2024-25	2024-25	TOTAL
DOCO	03.04.2025					
1	Employees Remuneration & Benefits	42.00	63.11	36.28	-	141.39
2	Finance Costs	-	-	-	-	-
3	Water Charges	-	-	-	-	-
4	Communication Expenses	-	-	-	-	-
5	Power charges	-	-	-	-	-
6	Other Office & Admin Exps	-	-	-	-	-
7	Others	5.60	25.60	12.15	0.24	43.59
8	Other Pre operating Expenses	-	-	-	-	-
	TOTAL	47.60	88.71	48.43	0.24	184.98
1	Income from sale of tenders	-	-	-	-	-
2	Income from guest house	-	-	-	-	-
3	Income recovered from contractors	-	-	-	-	-
4	Interest on deposits	-	-	-	-	-
	TOTAL	47.60	88.71	48.43	0.24	184.98
	IEDC TAKEN TO CERTIFICATES	47.60	88.71	48.43	0.24	184.98



Details of Initial Spares													
Name of Petitioner Claimed / Admitted COD		Powergrid Corporation of India Limited 03-04-2025		A) Determination of Excess Initials spare and its adjustment from Capital cost						Cut-Off Date of the Asset 31.03.2029			
Particulars	Plant and machinery cost as on cut-off Date1	Initial Spare Capitalised as per Books of Account up to Cut-off Date				Ceiling limit as mentioned in Regulations 23	Entitled Initial Spare as per Regulations	Excess of capitalised Initial Spare to be reduced from Capital cost	Adjustment of Excess Initial Spare from Capital cost of Plant and Machinery				
		As on COD	As ACE during 2019-20	As ACE during 2020-21	As ACE during 2021-22				Total as on Cut off Date3	COD	ACE for 2019-20	ACE for 2020-21	ACE for 2021-22
1	2	3	4	5	6	7	8	9	10=7-9 (Note 2)	11	12	13	14
Transmission Line	4,619.46	24.63				24.63	1.00%	46.66	0.00				
Substation Green Field						-	4.00%						
Substation Brown Field	1,406.10	52.93				52.93	6.00%	89.76	0.00				
Series Compensation devices and HVDC Stations						-	4.00%						
GIS/S- Green field						-	5.00%						
GIS/S- Brown field						-	7.00%						
Communication System	57.03	-		-	-	-	3.50%	2.07	0.00				
Static Synchronous Compensator							6.00%						
Initial spare as per Books of Account		77.55				77.55							
Un-Discharge liabilities Included above						-							
Total Capitalized Initial Spare													
Note: 1) Plant and machinery cost as on cut-off Date for the purpose of initial spare (As computed in Col. L of the below table)													
Note: 2) The column 10 has to be shown as nil in case the claimed Initial spare is with in the ceiling limit.													
Note: 3) Total cost should be excluding IDC and IEDC.													

Note: 1) Plant and machinery cost as on cut-off Date for the purpose of initial spares (As computed in Col. L of the below table)

2) The column 10 has to be shown as nil in case the claimed initial spares is with in the ceiling limit.

3) Total cost should be excluding IDC and IEDC.

B) Determination of Plant & Machinery Cost for ceiling of Initial Spares													
Particulars	Gross Block of Asset as on COD	Less: Amount included In Col.B towards					Plant & Machinery cost as on COD for Initial Spare purpose	Plant & Machinery Capitalised as ACE up to cut off date				Plant & Machinery cost as on cut off date for the purpose of initial spare	
		Land Cost	Cost of Civil Works	IEDC	IDC	Initial Spare		2025-26	2026-27	2027-28			
a	b	c	d	e	f	g	h=b-c-d-e-f-g	i	j	k	l=h+i+j+k		
Transmission Line	4,885.47			134.01	223.54	24.63	4,503.30	77.27	38.89	-	4,619.46		
Substation Green Field							-				-		
Substation Brown Field	1,611.00	-	-	50.96	101.01	52.93	1,406.10				1,406.10		
Series Compensation devices and HVDC Stations							-				-		
GIS/S- Green field							-				-		
GIS/S- Brown field							-				-		
Communication System	57.03	-	-	0.00	0.00	-	57.03	-	-	-	57.03		
Static Synchronous Compensator							-				-		

Note: The cost details for the year in which cut off date falls has to be provide only upto cut off date.



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Name of the Petitioner: M/s Power Grid Corporation of India Ltd.

Name of the Region: Western Region

Name of the Project: Transmission Network Expansion at Gujarat to increase ATC from ISTS - Part C

Name of the Transmission Element: 400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO) along with associated line bays at Banaskantha Substation

DOCO	Asset Details	(In Lacs) up to DOCO
1	Interest on Loans and Advances	
a)	Interest From Contractor	37.66
b)	Interest From Employee Loans and Advances	
2	Income from Sale of Scrap	
3	Misc Receipts	
a)	Other Recoveries From Contractors/Suppliers	
b)	Recovery of Rent from Emp Res Buildings	
c)	Electy Charges Recovered Frm Emp Res Bldgs	
d)	Liquidated Damages Recovered	
e)	Other Miscellaneous Receipts	-
f)	Interest from Indian Banks	
	Total	37.66
	Less: Income transferred to expenditure during construction (Net) - Adjusted in Cost of Asset	-
	Net Income	37.66





18.01.2025 as per mail dtd 18.06.2025-Jahlu-

CC Comm Fin
Transmission Network Expenditure in Gujarat to Increase its ATC from 575 (Part-C)

755/400 KV, 2X1500 MVA ICT 3 along with associated 755S 400 KV ICT Bays at Banasankha S/S

DOCO: Actual	Gross Loan	Drawl Date	Repayment	Net Loan	Interest Rate	Interest Start Date	Interest End Date	2022-23	2023-24	2024-25	2025-26	Total	Cash Payment Date	Cash IDC	Accrual Date
Bond LXX	6.57	17-Feb-23	0.00	6.57	7.40%	17-Feb-23	31-Mar-23	0.06				0.06	17-Nov-24	0.06	16-Feb-25
Bond LXX			0.00	6.57	7.40%	01-Apr-23	16-May-23		0.06			0.06	17-Nov-24	0.06	16-Feb-25
Bond LXX			0.16	6.41	7.40%	17-May-23	16-Jun-23					0.12	17-Nov-24	0.12	16-Feb-25
Bond LXX			0.16	6.24	7.40%	17-Aug-23	16-Sep-23					0.12	17-Nov-24	0.12	16-Feb-25
Bond LXX			0.16	6.08	7.40%	17-Nov-23	16-Dec-23					0.11	17-Nov-24	0.11	16-Feb-25
Bond LXX			0.00	5.91	7.40%	17-Feb-24	16-Mar-24		0.05			0.05	17-Nov-24	0.05	16-Feb-25
Bond LXX			0.00	5.75	7.40%	01-Apr-24	16-May-24			0.05		0.05	17-Nov-24	0.05	16-Feb-25
Bond LXX			0.16	5.58	7.40%	17-May-24	16-Jun-24			0.10		0.10	17-Nov-24	0.10	16-Feb-25
Bond LXX			0.16	5.42	7.40%	17-Nov-24	16-Dec-24			0.00		0.00	17-Nov-24	0.00	16-Feb-25
Bond LXX	23.06	10-Jul-23	0.00	23.06	8.10%	10-Jul-23	09-Aug-23		0.11			0.11	04-Nov-24	0.11	30-Nov-24
Bond LXX			0.00	23.06	8.10%	10-Aug-23	09-Sep-23		0.05			0.05	04-Nov-24	0.05	30-Nov-24
Bond LXX			0.00	23.06	8.15%	10-Sep-23	09-Oct-23		0.15			0.15	04-Nov-24	0.15	30-Nov-24
Bond LXX			0.00	23.06	8.15%	01-Oct-23	31-Nov-23		0.16			0.16	04-Nov-24	0.16	30-Nov-24
Bond LXX			0.00	23.06	8.15%	01-Nov-23	30-Dec-23		0.05			0.05	04-Nov-24	0.05	30-Nov-24
Bond LXX			0.00	23.06	8.15%	01-Dec-23	31-Jan-24		0.15			0.15	04-Nov-24	0.15	30-Nov-24
Bond LXX			0.00	21.51	8.15%	01-Jan-24	31-Feb-24		0.04			0.04	04-Nov-24	0.04	30-Nov-24
Bond LXX			0.00	21.51	8.15%	01-Feb-24	29-Mar-24		0.10			0.10	04-Nov-24	0.10	30-Nov-24
Bond LXX			0.00	21.51	8.20%	01-Mar-24	31-Apr-24		0.15			0.15	04-Nov-24	0.15	30-Nov-24
Bond LXX			0.00	21.51	8.20%	01-Apr-24	30-May-24			0.14		0.14	04-Nov-24	0.14	30-Nov-24
Bond LXX			0.00	21.51	8.20%	01-May-24	09-Jun-24			0.10		0.10	04-Nov-24	0.10	30-Nov-24
Bond LXX			0.00	20.11	8.20%	10-Jun-24	30-Jul-24			0.14		0.14	04-Nov-24	0.14	30-Nov-24
Bond LXX			0.00	20.11	8.20%	01-Jul-24	31-Aug-24			0.14		0.14	04-Nov-24	0.14	30-Nov-24
Bond LXX			0.00	20.11	8.20%	10-Aug-24	09-Sep-24			0.10		0.10	04-Nov-24	0.10	30-Nov-24
Bond LXX			0.00	20.11	8.40%	10-Sep-24	30-Oct-24			0.14		0.14	04-Nov-24	0.14	30-Nov-24
Bond LXX			0.00	20.11	8.40%	01-Oct-24	31-Nov-24		0.03			0.03	04-Nov-24	0.03	30-Nov-24
Bond LXX			0.00	20.11	8.40%	01-Nov-24	07-Dec-24		0.01			0.01	04-Nov-24	0.01	30-Nov-24
Bond LXX			0.00	18.76	8.40%	08-Dec-24	29-Jan-25			0.05		0.05	04-Nov-24	0.05	30-Nov-24
Bond LXX			0.00	50.00	8.10%	21-Jul-23	20-Nov-24		0.12			0.12	04-Nov-24	0.12	30-Nov-24
Bond LXX	50.00	21-Jul-23	0.00	50.00	8.10%	01-Aug-23	09-Aug-23		0.10			0.10	04-Nov-24	0.10	30-Nov-24
Bond LXX			0.00	50.00	8.15%	10-Sep-23	31-Aug-23		0.33			0.33	04-Nov-24	0.33	30-Nov-24
Bond LXX			0.00	50.00	8.15%	01-Oct-23	30-Sep-23		0.35			0.35	04-Nov-24	0.35	30-Nov-24
Bond LXX			0.00	50.00	8.15%	01-Nov-23	09-Nov-23		0.10			0.10	04-Nov-24	0.10	30-Nov-24
Bond LXX			0.00	50.00	8.15%	10-Dec-23	31-Nov-23		0.22			0.22	04-Nov-24	0.22	30-Nov-24
Bond LXX			0.00	46.64	8.15%	01-Jan-24	31-Dec-23		0.32			0.32	04-Nov-24	0.32	30-Nov-24
Bond LXX			0.00	46.64	8.15%	01-Feb-24	31-Jan-24		0.09			0.09	04-Nov-24	0.09	30-Nov-24
Bond LXX			0.00	46.64	8.20%	01-Mar-24	31-Feb-24		0.21			0.21	04-Nov-24	0.21	30-Nov-24
Bond LXX			0.00	46.64	8.20%	01-Apr-24	30-Mar-24		0.32			0.32	04-Nov-24	0.32	30-Nov-24
Bond LXX			0.00	46.64	8.20%	01-May-24	09-May-24		0.08			0.08	04-Nov-24	0.08	30-Nov-24
Bond LXX			0.00	46.64	8.20%	10-Jun-24	31-May-24		0.21			0.21	04-Nov-24	0.21	30-Nov-24
Bond LXX			0.00	43.90	8.20%	01-Jul-24	30-Jun-24		0.30			0.30	04-Nov-24	0.30	30-Nov-24
Bond LXX			0.00	43.90	8.20%	01-Aug-24	09-Aug-24		0.09			0.09	04-Nov-24	0.09	30-Nov-24
Bond LXX			0.00	43.90	8.40%	10-Aug-24	31-Aug-24		0.22			0.22	04-Nov-24	0.22	30-Nov-24
Bond LXX			0.00	43.90	8.40%	01-Sep-24	30-Sep-24		0.30			0.30	04-Nov-24	0.30	30-Nov-24
Bond LXX			0.00	43.90	8.40%	01-Oct-24	31-Oct-24		0.31			0.31	04-Nov-24	0.31	30-Nov-24
Bond LXX			0.00	43.90	8.40%	01-Nov-24	07-Nov-24		0.07			0.07	04-Nov-24	0.07	30-Nov-24
Bond LXX			2.92	40.67	8.40%	08-Nov-24	20-Nov-24		0.02			0.02	04-Nov-24	0.02	30-Nov-24
Bond LXX			0.00	40.67	8.50%	25-Jul-23	20-Nov-24		0.05			0.05	04-Nov-24	0.05	30-Nov-24
Bond LXX	30.00	25-Jul-23	0.00	30.00	8.10%	01-Aug-23	09-Aug-23		0.06			0.06	04-Nov-24	0.06	30-Nov-24
Bond LXX			0.00	30.00	8.10%	10-Aug-23	31-Aug-23		0.15			0.15	04-Nov-24	0.15	30-Nov-24
Bond LXX			0.00	30.00	8.15%	01-Sep-23	30-Sep-23		0.20			0.20	04-Nov-24	0.20	30-Nov-24
Bond LXX			0.00	30.00	8.15%	01-Oct-23	31-Oct-23		0.21			0.21	04-Nov-24	0.21	30-Nov-24
Bond LXX			0.00	30.00	8.15%	01-Nov-23	09-Nov-23		0.06			0.06	04-Nov-24	0.06	30-Nov-24
Bond LXX			2.02	27.98	8.15%	10-Nov-23	30-Nov-23		0.13			0.13	04-Nov-24	0.13	30-Nov-24
Bond LXX			0.00	27.98	8.15%	01-Dec-23	31-Dec-23		0.19			0.19	04-Nov-24	0.19	30-Nov-24
Bond LXX			0.00	27.98	8.15%	01-Jan-24	31-Jan-24		0.06			0.06	04-Nov-24	0.06	30-Nov-24
Bond LXX			0.00	27.98	8.15%	10-Feb-24	29-Feb-24		0.19			0.19	04-Nov-24	0.19	30-Nov-24
Bond LXX			0.00	27.98	8.20%	01-Mar-24	29-Feb-24		0.13			0.13	04-Nov-24	0.13	30-Nov-24
Bond LXX			0.00	27.98	8.20%	01-Apr-24	30-Apr-24		0.06			0.06	04-Nov-24	0.06	30-Nov-24
Bond LXX			0.00	27.98	8.20%	10-May-24	09-May-24		0.13			0.13	04-Nov-24	0.13	30-Nov-24
Bond LXX			1.60	26.16	8.20%	01-Jun-24	30-Jun-24		0.18			0.18	04-Nov-24	0.18	30-Nov-24
Bond LXX			0.00	26.16	8.20%	01-Jul-24	30-Jul-24		0.05			0.05	04-Nov-24	0.05	30-Nov-24
Bond LXX			0.00	26.16	8.20%	10-Aug-24	31-Aug-24		0.13			0.13	04-Nov-24	0.13	30-Nov-24
Bond LXX			0.00	26.16	8.40%	01-Sep-24	31-Aug-24		0.13			0.13	04-Nov-24	0.13	30-Nov-24

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DOCO Cost	1606.77
IR AS ON DOCO	492.03
IR % AS ON DOCO	30.00%
Estimated Expenditure from 21.11.2024 to 31.03.2025	6694.79
Estimated Expenditure from 21.11.2024 to 31.03.2025 (Accrual IDC)	29.13
Canara-02 (2024-2025) (C4) (02.01.2025) (IR Replacement) (2024-25) (Add Cap Loan) (Accrual IDC)	16.19
Estimated Expenditure from 01.04.2025 to 31.03.2026	671.85
Estimated Expenditure from 01.04.2025 to 31.03.2026 (Accrual IDC)	1.84
HCP-C03 (2025-2026) (C11) (02.04.2025) (IR Replacement) (2025-26) (Add Cap Loan) (Accrual IDC)	1.29
Total Projected Cost	8956.38

0.00

CERC DOCO Cost
CERC DOCO Loan Given
1581.81
1124.74
-17.47



17.06.2025 as per mail dtd 06.08.2025-Urvish-WR2

Transmission Network Expansion in Gujarat to Increase its ATC from ISTS (Part-C)									
400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 KV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).									
DOCO: Actual	03-Apr-25	Gross Loan	Drawl Date	Repayment	Net Loan	Interest Rate	Interest Start Date	Interest End Date	

Bond LXX	1043.43	1043.43	17-Feb-23	0.00	1043.43	7.40%	17-Feb-23	31-Mar-23					
Bond LXX		1043.43		0.00	1043.43	7.40%	01-Apr-23	16-May-23	9.10		9.73		
Bond LXX		1017.34		26.09	1017.34	7.40%	17-May-23	16-Aug-23			18.98		
Bond LXX		991.26		26.09	991.26	7.40%	17-Aug-23	16-Nov-23			18.49		
Bond LXX		965.17		26.09	965.17	7.40%	17-Nov-23	16-Feb-24			18.00		
Bond LXX		939.09		26.09	939.09	7.40%	17-Feb-24	31-Mar-24			8.35		
Bond LXX		913.00		0.00	939.09	7.40%	01-Apr-24	16-May-24			8.73		
Bond LXX		886.92		26.09	913.00	7.40%	17-May-24	16-Aug-24			16.98		
Bond LXX		860.83		26.09	886.92	7.40%	17-Aug-24	16-Nov-24			16.50		
Bond LXX		834.74		26.09	860.83	7.40%	17-Nov-24	16-Feb-25			16.01		
Bond LXX		834.74		0.00	834.74	7.40%	17-Feb-25	31-Mar-25			7.28		
Bond LXXIII	100.00	100.00	24-Aug-23	0.00	834.74	7.40%	01-Apr-25	02-Apr-25					0.34
Bond LXXIII		100.00		0.00	100.00	7.50%	24-Aug-23	31-Mar-24			4.53		
Bond LXXIII		90.00		10.00	100.00	7.50%	01-Apr-24	23-Aug-24					
Bond LXXIII		90.00		0.00	90.00	7.50%	24-Aug-24	31-Mar-25					
Bond LXXIV	258.00	258.00	12-Oct-23	0.00	258.00	7.50%	01-Apr-25	02-Apr-25					0.04
Bond LXXIV		258.00		0.00	258.00	7.70%	12-Oct-23	31-Mar-24			9.34		
Bond LXXIV		232.20		25.80	232.20	7.70%	01-Apr-24	11-Oct-24					
Bond LXXIV		232.20		0.00	232.20	7.70%	12-Oct-24	31-Mar-25			10.53		
Bond LXXIV		60.00	28-Mar-24	0.00	232.20	8.20%	01-Apr-25	02-Apr-25			8.38		
SBI-04 (2023-2024) (Q4) (28.03.2024)	60.00	60.00		0.00	60.00	8.20%	28-Mar-24	31-Mar-24			0.05		
SBI-04 (2023-2024) (Q4) (28.03.2024)		60.00		0.00	60.00	8.20%	01-Apr-24	30-Apr-24					0.40
SBI-04 (2023-2024) (Q4) (28.03.2024)		60.00		0.00	60.00	8.20%	01-May-24	09-May-24					0.12
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		3.65	56.35	8.20%	10-May-24	31-May-24					0.28
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.20%	01-Jun-24	30-Jun-24					0.38
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.20%	01-Jul-24	31-Jul-24					0.39
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.20%	01-Aug-24	09-Aug-24					0.11
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.40%	10-Aug-24	31-Aug-24					0.28
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.40%	01-Sep-24	30-Sep-24					0.39
SBI-04 (2023-2024) (Q4) (28.03.2024)		56.35		0.00	56.35	8.40%	01-Oct-24	31-Oct-24					0.40
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		3.51	56.35	8.40%	01-Nov-24	07-Nov-24					0.09
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.50%	08-Nov-24	09-Nov-24					0.02
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.50%	10-Nov-24	30-Nov-24					0.26
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.50%	01-Dec-24	31-Dec-24					0.38
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.50%	31-Jan-25	31-Jan-25					0.38
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.50%	01-Feb-25	09-Feb-25					0.11
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.55%	10-Feb-25	28-Feb-25					0.24
SBI-04 (2023-2024) (Q4) (28.03.2024)		52.84		0.00	52.84	8.55%	01-Mar-25	31-Mar-25					0.38
SBI-04 (2023-2024) (Q4) (28.03.2024)		700.00	11-Jan-24	0.00	52.84	8.55%	01-Apr-25	02-Apr-25					
Bond LXXV	700.00	700.00		0.00	700.00	7.65%	11-Jan-24	31-Mar-24			11.85		
Bond LXXV		700.00		0.00	700.00	7.65%	01-Apr-24	10-Jan-25					41.70



NOTIONAL IDC CALCULATION ASSET-1

Sl. No.	Particulars	Year	EGDA	ENODA	SOCD	Q1-24	NO. OF DAYS	EXP_Q3	EXP_ADD	EXP_Q3	FUNDING_Q3	GRAVIL_LOAN	REPAYMENT	FUNDING_Q3	DC-BASE	RATE	Notional IDC
0740001	4	2022	01-01-2023	31-03-2023	21-11-2024	90	11.27	0.00	11.27	11.27	0.00	6.57	0.00	7.89	1.32	1.82	0.02
0740001	1	2023	01-04-2023	30-06-2023	21-11-2024	91	11.27	69.50	80.77	80.77	6.57	0.00	0.16	56.54	50.13	1.84	0.92
0740001	2	2023	01-07-2023	30-09-2023	21-11-2024	92	80.77	222.45	303.22	303.22	6.41	203.06	0.16	212.25	2.94	2.04	0.06
0740001	3	2023	01-10-2023	31-12-2023	21-11-2024	92	303.22	432.68	735.90	735.90	209.31	242.00	13.81	437.50	77.83	1.99	1.54
0740001	4	2023	01-01-2024	31-03-2024	21-11-2024	91	735.90	533.10	1,269.00	1,269.00	437.50	385.99	0.16	803.33	84.97	1.94	1.65
0740001	1	2024	01-04-2024	30-06-2024	21-11-2024	91	1,269.00	87.24	1,356.24	1,356.24	803.33	50.00	12.51	840.82	108.55	1.94	2.10
0740001	2	2024	01-07-2024	30-09-2024	21-11-2024	92	1,356.24	151.69	1,507.93	1,507.93	840.82	255.13	0.16	1,095.79	0.00	1.98	-
0740001	3	2024	01-10-2024	31-12-2024	21-11-2024	92	1,507.93	88.85	1,606.78	1,606.78	1,095.79	1.99	36.22	1,124.75	63.19	1.99	0.70
Total						51			1,606.78		1,606.78	1,124.74	63.18				6.99



NOTIONAL IDC CALCULATION ASSET-2

SL NO.	ELEMENTS	QUARTER	YEAR	BEODA	SHODA	DOCO	SI	NO OF DAYS	EXP_OR	EXP_ADD	CAP_CB	FUNDING_OR	DRAWAL_LOAN	REPAYMEN T LOAN	FUNDING_CB	WORK_FUNDING	IDC_BASE	RATE	Notional IDC
07400002	2	2022	01-07-2022	30-09-2022	03-04-2025	92		92	0.00	267.57	267.57	0.00	0.00	0.00	0.00	187.30	187.30	1.75	3.28
07400002	3	2022	01-10-2022	31-12-2022	03-04-2025	92		92	267.57	73.21	340.78	0.00	0.00	0.00	0.00	238.55	238.55	1.75	4.17
07400002	4	2022	01-01-2023	31-03-2023	03-04-2025	90		90	340.78	1,227.97	1,568.75	0.00	1,043.43	0.00	1,043.43	1,098.13	54.70	1.82	1.00
07400002	1	2023	01-04-2023	30-06-2023	03-04-2025	91		91	1,568.75	110.26	1,679.01	1,043.43	0.00	26.09	0.00	1,017.34	157.97	1.84	2.91
07400002	2	2023	01-07-2023	30-09-2023	03-04-2025	92		92	1,679.01	812.00	2,491.01	1,017.34	100.00	26.09	1,091.25	1,743.71	652.46	1.86	12.14
07400002	3	2023	01-10-2023	31-12-2023	03-04-2025	92		92	2,491.01	1,417.62	3,908.63	1,091.25	258.00	26.09	1,323.16	2,736.04	1,412.88	1.88	26.49
07400002	4	2023	01-01-2024	31-03-2024	03-04-2025	91		91	3,908.63	657.92	4,566.55	1,323.16	834.01	26.09	2,131.08	3,196.59	1,066.51	1.87	19.94
07400002	1	2024	01-04-2024	30-06-2024	03-04-2025	91		91	4,566.55	273.04	4,840.19	2,131.08	250.00	29.74	2,351.34	3,388.13	1,036.79	1.89	19.55
07400002	2	2024	01-07-2024	30-09-2024	03-04-2025	92		92	4,840.19	716.51	5,556.70	2,351.34	444.87	36.09	2,760.12	3,889.69	1,129.57	1.93	21.75
07400002	3	2024	01-10-2024	31-12-2024	03-04-2025	92		92	5,556.70	316.82	5,873.52	2,760.12	496.50	55.40	3,201.22	4,111.46	910.24	1.95	17.78
07400002	4	2024	01-01-2025	31-03-2025	03-04-2025	90		90	5,873.52	504.41	6,377.93	3,201.22	1,038.26	134.69	4,104.79	4,464.55	359.76	1.91	6.86
07400002	1	2025	01-04-2025	30-06-2025	03-04-2025	91		2	6,377.93	10.33	6,388.26	4,104.79	0.00	0.00	4,104.79	4,471.78	366.99	1.92	0.15
										6,388.26			4,465.07	360.28					136.02
Total																			



Name of Petitioner
Project Name

Power Grid Corporation of India Ltd

Liability Flow Statement

"Transmission Network Expansion in Gujarat to increase its ATC from ISTS (PartC)

400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij(GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari(GETCO) S/S as an interim arrangement made by GETCO).

Asset

DOCO 03.04.2025

LIABILITY DATA

LIABILITY DATA											Rs in Lakhs				
Asset No.	Headwise /Partywise	Particulars	Year of Actual Capitalisation	Outstanding Liability as on DOCO	2025-26	2026-27	2027-28	2028-29	Total (19-24)	2025-26	2026-27	2027-28	2028-29	Total (24-29)	Outstanding Liability as on 31.03.2029
			2024-25						-					-	-
	LAND/Crop Tree Compensation		2024-25						-	1,022.20	432.27			1,454.47	-
	OTHERS TL/SS	TL	2024-25						-	77.27	38.89			116.16	-
	Building and Civil Works		2024-25						-					-	-
	Tr. Line	M/s. KEC International Limited	2024-25		464.41	159.09			623.50					-	
	Sub-Station	M/s. Linxon India Pvt Ltd	2024-25		67.49				67.49					-	
	OPGW	M/s. Linxon India Pvt Ltd	2024-25		-				-					-	
	PLCC	M/s. KEC International Limited	2024-25		37.50	13.17			50.67					-	
	I. T Equipment incl. software, UNIMS, URT	M/s. Linxon India Pvt Ltd	2024-25		7.94				7.94					-	
	Batteries				-				-					-	
	Total			-	577.34	172.26	-	-	749.60	1,099.47	471.16	-	-	1,570.63	-



Name of Petitioner

Power Grid Corporation of India Ltd

Project Name

"Transmission Network Expansion in Gujarat to increase its ATC from ISTS (Part

Asset

765/400 kV, 1X1500 MVA/ICT 3 along with associated 765& 400 kV ICT Bays at Banaskantha S/S)

DOCO

21.11.2024

Liability Flow Statement

LIABILITY DATA

Asset No.	Headwise /Partywise	Particulars	Year of Actual Capitalisation	Outstanding Liability as on DOCO	Discharge						Works deferred for execution						Outstanding Liability as on 31.03.2029
					DOCO to 2025	2025-26	2026-27	2027-28	2028-29	Total (24-29)	DOCO to 2025	2025-26	2026-27	2027-28	2028-29	Total (24-29)	
	CROP		2024-25							-						-	-
	LAND Compensation		2024-25							-						-	-
	OTHERS TL/SS	Sub-Station	2024-25			28.10	7.02			35.12						-	(35.12)
	Building and Civil Works		2024-25							-			138.65			346.62	-
	Tr. Line	M/s. Linxon India Pvt Ltd	2024-25			-				-						-	-
	Sub-Station	ICT At Banaskantha M/s BHEL	2024-25			5,850.25	802.36			6,652.61						-	-
	Sub-Station	M/s. Linxon India Pvt Ltd	2024-25		161.50	153.83											-
	Fiber Optic/OPGW/PLCC	M/s. Linxon India Pvt Ltd	2024-25		0.35	0.33				0.68						-	-
	I. T Equipment incl. software, UNN	M/s. Linxon India Pvt Ltd	2024-25		8.43	7.86				16.29						-	-
	Batteries				-	-				-						-	-
	Total				170.27	6,040.37	809.38	-	-	6,669.58	-	207.97	138.65	-	-	346.62	-



Petitioner



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Summary of issue involved in the petition

PART-III
FORM- 15

1. Name of the Petitioner	Power Grid Corporation of India Limited			
2. Petition Category	Transmission			
3. Tariff Period	2024-29			
4. Name of the Project	Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C			
5. Investment Approval date	07.07.2022			
6. SCOD of the Project	31.03.2025			
7. Actual COD/ECOD of the project	03.04.2025			
8. Whether entire scope is covered in the present petition.	Yes			
9. No. of Assets covered in instant petition	1			
10. No. of Assets having time over run	NA			
11. Estimated Project Cost as per IA	Rs.18619.43 Lakh			
12. Is there any REC? if so, provide the date	Yes			
13. Revised Estimated Project Cost (if any)				
14. Completion cost for all the assets covered in the instant petition.	Rs. 17782.17 Lakh			
15. No. of Assets covered in instant petition and having cost overrun.	N.A.			
16	Prayer in brief			
17	Key details and any Specific issue involved			
18	Respondents			
	Name of Respondents			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD	5	DNHDD POWER DISTRIBUTION CORPORATION LIMITED
	2	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	6	CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD
	3	GUJARAT URJA VIKAS NIGAM LTD.	7	MAHARASHTRA STATE ELECTRICITY TRANSMISSION COMPANY LIMITED, MUMBAI
	4	ELECTRICITY DEPARTMENT, GOA	8	CENTRAL TRANSMISSION UTILITY OF INDIA LTD, GURUGRAM





PART-III															
Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.															
Name of the Petitioner		Powergrid Corporation of India Limited													
Tariff Period		2024-29													
Name of the Transmission Project		Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-C													
COD/E-COD of the Project (if entire scope of project is completed)		03.04.2025													
A) Summary of Capital Cost as on COD and Additional Capital Expenditure claimed for all the assets Covered in the instant petition.															
S. No.	Asset No.	COD/E-COD	Cut-off Date	i) Apportioned Approved Cost			ii) Summary of Actual / Projected Capital Cost								Capital Cost as on Cut-off Date
				As per IA	As per RCE	Cost as on COD/ 31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost as on cut of date			
1	Asset-1	21.11.2024	31.03.2028	9230.12	-	1613.76	193.4	6250.18	948.03						
2	Asset-2	03.04.2025	31.03.2029	9389.31	-	6524.28	1709.1	643.42	-	0	0				
TOTAL				18619.43	-	8138.04	1902.50	6893.60	948.03	0.00	0.00				
B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the instant petition.															
S. No.	Asset No.	Asset Name and its location													
1	Asset-1	765/400 kV, 1x1500 MVA ICT-3 along with associated 765 & 400 kV ICT bays at Banaskantha Substation													
2	Asset-2	400 kV D/C (Ckt-3 & 4) Banaskantha-Sankhari section (Powergrid scope of work) of Banaskantha-Prantij (GETCO) 400 kV D/C line, along with associated line bays at Banaskantha S/S (Both the circuits are terminated at Sankhari (GETCO) S/S as an interim arrangement made by GETCO)													
Total AFC															
Note: 1) The purpose of this form is to summarise the Capital cost & AFC claimed for all the assets covered in the instant petition.															

INDEX
Checklist of Forms and other information/ documents for tariff filing for
Transmission System & Communication System

PART-III
Check List

Form No.	Title of Tariff Filing Forms (Transmission & Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	✓
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	N.A.
FORM- 4A	Statement of Capital cost	✓
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	N.A.
FORM-5	Element wise Break-up of Project/ Asset/ Element Cost for Transmission System or Communication System	✓
FORM-5A	Break-up of Construction/Supply/Service packages	✓
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	✓
FORM- 7	Statement of Additional Capitalisation after COD	✓
FORM- 7A	Financing of Additional Capitalisation	✓
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
FORM-9A	Details of Project Specific Loans	N.A.
FORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	N.A.
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	N.A.
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	N.A.
FORM- 12A	Incidental Expenditure during Construction	✓
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
FORM- 13	Details of Initial spares	✓
FORM- 14	Non-Tariff Income	✓
FORM- 15	Summary of issue involved in the petition	N.A.
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	N.A.

Other Information/ Documents

S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	N.A.
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.

Note 1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.

