



सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली संचार विकास प्रभाग
Power System Communication Development

CEA Case No. : GOA-05		
Induced Voltage (IV) calculation in respect of PTCC proposal for 220KV D/C line from Xeldom (Existing) to Xeldom (New) (22.2 km)- regd.		
S. No	Reference No.	Dated
(i)	GTTPL: GTTPL/TL/PTCC/23-24/49	04.08.2023
(ii)	GTTPL: GTTPL/TL/PTCC/23-24/51	01.07.2024
(iii)	GTTPL: GTTPL/TL/PTCC/23-24/66	25.07.2024
(iv)	BSNL: IC/MBI/PTCC/MRA-2617/03	03.02.2024
(v)	South Western Railway: SG/SWR/PTCC/GTTPL/29/1913	29.12.2023

The PTCC proposal submitted vide reference (i), (ii) & (iii) has been examined. The LF induction on Block and Telecom circuits of South Western Railway with respect to details furnished vide above reference (v) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET, PTCC (Mumbai) has given NOC vide above reference (iv).

EPR Zones for proposed substations are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (k A)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220kV Xeldom(New) SS, Dharbandora	125.66	6	1.07	1750	1115	NA	NA

As per the details submitted by BSNL vide reference (iv) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

Telecommunication details from DG Signals, MoD are awaited however, vide reference (iii), GTTPL has shown urgency for charging the line for power evacuation and has requested for provisional PTCC clearance. GTTPL has submitted an undertaking that in case of any damage to telecom assets/ personnel of Defense due to the charging of this line, GTTPL shall bear the cost for remediation of the same.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office.

Encl.: As above

Chief Engineer,

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 2 nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5 th Block, 9 th Main, 47 th Cross, Bangalore-560041	
2.	PCSTE/SWR	Principal Chief Signal & Telecom Engineer, Rail Soudha, Gadag Road, Hubballi-580020	
3.	Project Manager	M/s GTTPL, DLF Cyber Park, Tower – B, 9 th floor, Udyog Vihar Phase – III, Sector – 20, Gurugram - 122008	Copy for Information

ANNEXURE-I

CEA Case No.: GOA-05 Name of the Power line: 220KV D/C line from Xeldom (Existing) to Xeldom (New)			Map Scale : 1 cm= 500 m Total Length : 22.2 km S.R. Value : 20000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

SWR Letter No: SG/SWR/PTCC/GTTPL/29/1913 Dated 29.12.2023					
1.	QLM-KM	Outside IV consideration zone			
2.	KM-SVM	6.667	0.0045	19822	89
3.	SVM-CNR	4.856	0.008	25104	201
4.	CNR-MAO	Out of Parallelism			

Ref. no.-GTTPL/TL/PTCC/23-24/66

Dated – 25.07.2024

To,
The Chief Engineer, PSCD Division,
Room No. 02 (North Wing)
Central Electricity Authority (CEA)
Sewa Bhawan, R.K Puram, Sector 1, New Delhi, 110066

Subject: Request for provisional PTCC Route Approval with reference to installation of **220 kV D/C Xeldem (Existing) - Xeldem (New) Transmission Line through Tamnar Transmission Project Limited** Under the Scheme "Additional 400kV feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool".

Ref:

1. **PTCC Scrutiny letter from CEA for Case No: Goa -05 dated 22-11-2023.**
2. **GTTPL letter to DG Signals 7 GTTPL/TL/PTCC/23-24/49 dated 04-08-2023.**
3. **GTTPL mail to DG Signals 7 for NOC dated 12-04-2024.**
4. **GTTPL/TL/PTCC/23-24/ 51 dated 01-07-2024.**
5. **NOC B/46937/Sigs7(b)/1357 dated 21 Dec 2018**

Dear Sir,

At the outset, we thank you for your support and cooperation till date for implementation of national interest project.

We wish to update you on the PTCC NOC status. Initially, we received the NOC from Defence Signal, as per document B/46937/Sigs7(b)/1357 dated 21 Dec 2018. Subsequent changes in the substation's location necessitated a route alteration, prompting us to request a new PTCC NOC (referenced in Ref. 2). The awaited NOC from DG Signals 7 has delayed induced voltage calculations. The scrutiny letter dated 22-11-2023 led to BSNL and Railway sharing telecom details for induced voltage computations. Despite follow-ups, we await DG Signal-7's NOC. The PTCC NOC is critical for completing the transmission line and seeking PLCC frequency approval. Given the urgency of commencing the line, we kindly request you to expedite the approval process and accord the provisional PTCC NOC for commissioning of the above-mentioned transmission line.

We do hereby undertake, that if there will be any loss or damage to defence communication assets due to energization of our 220 kV D/C Xeldem (Existing) — Xeldem (New) Transmission Line, the risk and cost will be borne by GTTPL (if any).

We appreciate your prompt attention to this matter and look forward to your favourable response.

Thanking you,

Yours sincerely,

For Goa-Tamnar Transmission. Project Limited,


Project Manager

Encl: Copy of previously obtained PTCC NOC from DG- Signal of 220 kV D/C Xeldem (Existing)- Xeldem (New) Transmission Line.


Fw: Request for an update on the PTCC proposal for 220kV D/C Xeldem (Existing) – Xeldem (New) Transmission Line

Sistla Madhukar <sistla.madhukar@sterlite.com>

Fri 07-Jun-24 11:36 AM

To:webstar@nic.in <webstar@nic.in>

Cc:Devanand Singh <devanand.singh@sterlite.com>;Sankit Kumar <sankit.kumar@sterlitepower.in>;Siba Prasad Mishra <siba.mishra@sterlitepower.in>

 11 attachments (12 MB)

Letter reg PTCC XXTL_04.08.2023.pdf; 0.0 Index.pdf; 1.0 Questionnaire.pdf; 2.0 Tower Schedule.pdf; 3.0 Soil Resistivity Report.pdf; 4.0 Crossing Details.pdf; 5.0 EPR Calculation.pdf; 6.0 Protection Scheme.pdf; 7.0 Conductor and Tower details.pdf; 8.0 Single Line Diagram.pdf; 9.0 Route Map.pdf;

Dear Sir/Madam,

It is our humble request to kindly issue the NOC for the 220kV D/C Xeldem - Xeldem Transmission Line due to which the PTCC Induced Voltage Calculation for this line is on hold which is of utmost importance for commissioning of the above mentioned line.

Your urgent support in this matter would be solicited.

Kindly do the needful.

Warm Regards,
Sistla Madhukar
Mobile : 9977585032

From: Sistla Madhukar <sistla.madhukar@sterlite.com>**Sent:** Wednesday, May 15, 2024 12:48 PM**To:** webstar@nic.in <webstar@nic.in>**Cc:** Devanand Singh <devanand.singh@sterlite.com>**Subject:** Fw: Request for an update on the PTCC proposal for 220kV D/C Xeldem (Existing) – Xeldem (New) Transmission Line

Dear Sir/Madam,

Pls find attached herewith our proposal documents for PTCC approval which is pending for Induced Voltage calculation at Central Electricity Authority, as the NOC from DG Signals 7 is yet to be issued for 220kV D/C Xeldem - Xeldem Transmission Line.

In this regard, it our humble request to kindly issue the NOC from your end at the earliest for this project of national importance.

Kindly do the needful.

Warm Regards,
Sistla Madhukar
Mobile : 9977585032

From: Sankit Kumar <sankit.kumar@sterlitepower.in>

Sent: Friday, April 12, 2024 12:05 PM

To: webstar@nic.in <webstar@nic.in>

Cc: Vishal Sharma <vishal.sharma3@sterlite.com>; Devanand Singh <devanand.singh@sterlite.com>; Sistla Madhukar <sistla.madhukar@sterlite.com>

Subject: RE: Request for an update on the PTCC proposal for 220kV D/C Xeldem (Existing) – Xeldem (New) Transmission Line

Dear Sir/Madam,

Greetings of the day!!!

With respect to above cited subject, request your good office to kindly update on the said proposal as per the trailing mail. Soft copy of the proposal along with the index are again attached herewith for your reference.

Thanks & Regards
Sankit Kumar
Project Management Officer
Goa Tamnar Transmission Project Limited
Contact No. - +91 7063698985

From: Sankit Kumar

Sent: Tuesday, April 2, 2024 12:00 PM

To: 'webstar@nic.in' <webstar@nic.in>

Cc: Vishal Sharma <vishal.sharma3@sterlite.com>; Sistla Madhukar <sistla.madhukar@sterlite.com>; Devanand Singh <devanand.singh@sterlite.com>

Subject: Request for an update on the PTCC proposal for 220kV D/C Xeldem (Existing) – Xeldem (New) Transmission Line

Dear Sir/Madam,

Greetings of the day!!!

This is regarding the PTCC proposal submitted in the office of Director General of Signals, Signal-7, Sena Bhawan, New Delhi for 220kV D/C Xeldem (Existing) – Xeldem (New) transmission line vide letter ref no. GTTPL/TL/PTCC/23-24/49, dated 04.08.2023.

With respect to above cited subject, we have hereby attached the soft copy of the proposal and request your good office to kindly update on the said proposal & process further to the concerned office.

Thanks & Regards

Sankit Kumar

Project Management Officer

Goa Tamnar Transmission Project Limited

Contact No. - +91 7063698985

Goa- Transmission Project Limited,

1, Sea Breeze Apt, Dr. D.B. Road, Miramar, Panaji, Goa - 403001

Sterlite Power

Ref. no.-GTTPL/TL/PTCC/23-24/49

Dated 04/08/2023

The Director (PTCC), CEA,
Power Communication Development Division,
NREB Complex, 18 – A Shaheed Jeet Singh Marg,
Katwaria Sarai, New Delhi – 110016

Subject: Submission of amendment of PTCC Route Approval with reference to installation of 220 kV D/C Xeldem (Existing) – Xeldem (New) Transmission Line through Tamnar Transmission Project Limited Under the Scheme "Additional 400kV feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool".

Ref: i) Our letter wide ref no: GTTPL/TL/18-19/29 dated 30.10.2018

Dear Sir/Madam,

At the outset, we thank you for your support and cooperation till date for implementation of national interest project.

This is to inform your good office that in order to meet the growing power requirement of the State of Goa, Ministry of Power has decided to implement an additional 400kV Transmission System for Goa namely for "Additional 400kV feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool" ("Project"). The project is being implemented under Tariff Based Competitive Bidding (TBCB) route, and Sterlite Power has been selected as the successful bidder after quoting the lowest possible tariff. The Letter of Intent ("LOI") was issued vide letter No- 04-05/ITP-24/17-18/GTTPL/LOI dated 30th Nov 2017.

The Project is being developed through Special Purpose Vehicle namely "M/s Goa –Tamnar Transmission Project Limited", which has been authorized under Section – 68, of Electricity Act, 2003 for construction and operation of the Transmission System. The approval wide letter no K.V.PRA/26/3/PSPA-I/2017/491-492 dated 15.06.2017, and order of the Transmission License duly issued by CERC vide Petition No. 95/TL/2018 dated 13.06.2018.

In line with the cited subject matter, this is to bring to your kind notice that the substation is the common connection point among all the proposed transmission lines in Goa state. In light of the Hon'ble Supreme Court order dated 4th Feb 2015, No NOC can be issued to the said land parcels for issuance of Sanad Conversion and therefore, the Central Electricity Authority (CEA), Ministry of Power (MoP), Govt of India, has suggested to change the proposed substation location along with change in technology from AIS to GIS (MoM attached as Annexure-6). Further, the Hon'ble Supreme Court order dated 3rd June 2022 has directed that "no new permanent structure shall be permitted to come up for whatsoever the purpose within the ESZ.

Accordingly, due to change in substation location from Xeldem (Sangod) to Dharbandora and the aforementioned Hon'ble Supreme Court's order dated 03rd June 2022, realignment of 220



Goa- Transmission Project Limited,

1, Sea Breeze Apt, Dr. D.B. Road, Miramar, Panaji, Goa - 403001

Sterlite Power

kV Xeldem (Existing)-Xeldem (New) transmission line had to be done. Accordingly, modification in the transmission line route has been done and the revised PTCC proposal is hereby submitted for early processing and needful action at your end please.

Submitted for your continued support & co-operation for the successful execution of the above time bound and prestigious intra state transmission line project.

Thanking you,

Yours sincerely,
For Goa-Tamnar Transmission Project Limited,



(Devanand Singh)
Project Manager

Copies forwarded to the following for further needful action:

1. **The Divisional Engineer Telecom (PTCC)**, Western Region, Inspection Circle, BSNL, D-Wing, 3rd Floor, Administrative Building, Telecom Complex, Juhu-Tara Road, Santa Cruz (west), Mumbai - 400054
2. **Chief Signal & Telecommunication Engineer**, Konkan Railway Corporation Limited, Sector 11, CBD Belapur, Navi Mumbai, Maharashtra 400614
3. **Principal Chief Signal & Telecommunication Engineer**, South Western Railway, Hubli 580020
4. **The AGM(Planning)**, Third Floor, Goa Sanchar Bhavan, Patto Exchange, Panaji, Goa, 403001
5. **The Director General of Signals**, Signal - 7, General Staff Branch, Integrated HQ of MOD, (Army) Sena Bhawan, DHQ PO, New Delhi - 110011