



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. : MRA-1287		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV D/C Kalmeshwar – Warud line at 220 kV Yenwa SS (0.293 km)- regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-608/08439	10.12.2024
(ii)	MSETCL : Email	18.08.2025
(iii)	BSNL: IC/MBI/PTCC/MRA-2693/04	07.07.2025
(iv)	Central Railway: N.705/T/PTCC/220kV/MAH-933	21.01.2025
(v)	Defense: B/46937/Sigs 7(b)/4426	09.04.2025

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

ADG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (v) above (attached as Annexure –II).

EPR Zones for proposed substation are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	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 Yenwa SS	116.7	40	0.14	1403	889	NA	NA

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

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC.

Encl.: As above

Chief Engineer,

To,

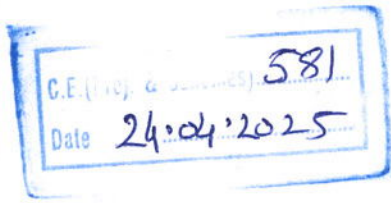
1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
2.	SSTE/TELE/HQ	O/o Principal Chief Signal & Telecom Engineer, S&T Department, 3 rd Floor, Annexe Building Chhatrapati Shivaji Maharaj Terminus, Mumbai-400001	
3.	Chief Engineer (Projects Schemes)	MahaTransco C.O., ‘Prakashganga’ Plot No C-19, E- Block, BKC, Bandra(E) , Mumbai-400051	Copy for information

ANNEXURE-I

CEA Case No.: MRA-1287 Name of the Power line: LILO of 220kV DC Kalmeshwar– Warud line at 220 kV Yenwa SS			Map Scale : 1 cm= 500 m Total Length : 0.293 km S.R. Value : 15000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Central Railway Letter No: N.705/T/PTCC/220kV/MAH-933 Dated 21.01.2025

1.	KATL - KLBA	0.293	0.000073	27837	2
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Directorate General of Signals
(Signals 7)
General Staff Branch
Integrated HQ of MoD (Army)
Room No 648A
DHQ PO, New Delhi - 110011

B/46937/Sigs-7(b)/4426

09 Apr 2025

Chief Engineer (Project Schemes Deptt)
Maharashtra State Electricity Transmission Co. Ltd.
MahaTransco C.O. Prakashganga
Plot No. C-19, E-Block, BKC, Bandra (E),
Mumbai – 400 051

**PTCC PROPOSAL FOR 220KV DC LINE, LILO ON ONE OF CKTS. OF
220KV KALMESHWAR-WARUD DC LINE AT PROPOSED 220KV
YENWA S/S, LENGTH=0.293 KMS.**

1. Ref Maharashtra State Electricity Transmission Co. Ltd. Letter No MSETCL/CO/PS/PTCC/In/B-608/08439 dt 10 Dec 2024.
2. No Objection Certificate (**NOC**) is **accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(Puneet Lakhnarpal)
Lieutenant Colonel
General Staff Officer Grade-1 (Communication)
for Additional Director General (Telecommunication)

Enclosures: As above

Internal:-

HQ Southern Comd (Sigs) - for info pl.

*Dycc
Pl-do update
the proposal
29/5/25*

*BE (PTCC/MERC)
24/04*

