



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
Division



CEA Case No.: MRA-1332		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV DC line by making LILO of 220 kV Ahilyanagar - Bhoze line at 220 kV SUPA MIDC SS (16.791 km)- regd.		
S.No.	Reference	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-626/09226	24.10.2025
(ii)	BSNL: IC/MBI/PTCC/MRA-2759/03	07.03.2026
(iii)	Central Railway: N.705/T/PTCC/220kV/MAH-989	26.11.2025
(iv)	Defense: B/46937/Sigs 7(b)/5274	18.12.2025

The PTCC proposal submitted vide above reference(s) (i) has been examined. The LF induction on Block and Telecom circuits of Central Railway with respect to details furnished vide above reference (iii) 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), Western Zone has given NOC vide reference (ii) above.

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

EPR Zones for proposed substations 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
220 KV SUPA MIDC SS	145	50	0.2	3227	2086	62	NA

As per the details submitted by BSNL vide reference (ii) 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.	DET (PTCC), Western Zone	QA & Inspection circle, 1st floor, D- wing, BSNL Admin Bldg., Juhu Tara Road, Santacruz (West), Mumbai-400055	
2.	GM(S&T) (Central Railway)	S&T Department, 3rd 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-1332 Name of the Power line: 220 kV DC line by making LILO of 220 kV Ahilyanagar - Bhose line at 220 kV SUPA MIDC SS			Map Scale : 1 cm= 500 m Total Length: 16.791 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-989 Dated 26.11.2025					
1.	DD-ANG	8	0.0069	22977	159

Directorate General of Signals (Signals-7)
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi -11


MRA-1332

B/46937/Sigs-7(b)/5274 dt 18 Dec 2025

Chief Engineer (Projects Schemes)
Maharashtra State Electricity Transmission CO. Ltd.
Maha Transco C.O. Prakashganga Plot No. C-19,
E-Block, BKC, Bandra E, Mumbai- 400 051

**PTCC PROPOSAL FOR 220 KV DC LINE, LILO ON EXISTING 220 KV
AHILYANAGAR - BHOSE LINE TO PROPOSED 220 KV SUPA
MIDC S/S, LENGTH = 16.791 KMS**

1. Ref your letter No MSETCL/CO/PS/PTCC/IN/B-626/ NO 09226 dt 24 Oct 2025.
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 Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-1 (Communication)
for Additional Director General (Telecommunication)

Encls: As above

Copy to:-

HQ Southern Comd (Sigs)

Chief Engineer, PSCD Division
Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, RK Puram, Sector-1
New Delhi-110 066

for info pl.

Sh. Arun (DD)
B
02/01/2026

Central Electricity Authority

PSCD Division

Diary No. 2033

Date 30-12-2025