



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-1337		
Induced Voltage (IV) calculation for PTCC proposal for LILO of 220 kV S/c Miraj-Kadegaon Transmission Line at proposed 220 kV Kasabe Digraj S/s (Length- 16.262 km)-regd.		
S.No.	Reference	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-628/09837	14.11.2025
(ii)	MSETCL: Email	25.02.2025
(iii)	BSNL: IC/MBI/PTCC/MRA-2764/03	10.02.2026
(iv)	Central Railway: N.705/T/PTCC/220kV/MAH-1000	28.01.2026
(v)	Defense: B/46937/Sigs 7(b)/5363	04.02.2026

The PTCC proposal submitted vide above reference (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 (WZ), BSNL and DG Signals, MoD have issued No Objection Certificates (NOCs) vide references (iii) and (v) respectively.

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
KASABE DIGRAJ	108.5	28	0.504	3452	2247	110	45

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

Digitally signed by
 Suman Kumar Maharana
 Date: 17-03-2026
 11:36:39
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-1337 Name of the Power line: PTCC proposal for LILO of 220 kV S/c MIRAJ-KADEGAON Transmission Line at proposed 220 kV Kasabe Digraj S/s.			Map Scale : 1 cm= 500 m Total Length : 16.262 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-1000 Dated 28/01/2026					
1.	SLI-NDE	3.25	0.000943	21200	20V
2.	NDE-BVQ	2.25	0.00025	24000	6V