



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-1288		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV D/C New Koyna – Lote line at 220 kV GIS of M/s Vinati Organics Ltd. (0.791 km)- regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-609/08684	18.12.2024
(ii)	MSETCL : Email	25.07.2025
(iii)	BSNL: IC/MBI/PTCC/MRA-2695/03	29.04.2025
(iv)	Konkan Railway: KR/RN/S&T/PTCC/Koyna-Lote/2025/1	25.07.2025
(v)	Defense: B/46937/Sigs 7(b)/4389	28.03.2025

The PTCC proposal submitted vide above references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of Konkan 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 Konkan 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 M/s Vinati Organics Ltd GIS SS	54.79	30.39	0.3	1107	714	17	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.	RRM (Konkan Railway)	Office of Regional Railway Manager Railway Complex, Mirjole M.I.D.C. Ratnagiri-415639	
3.	Chief Engineer (Projects Schemes)	MahaTransco C.O., ‘Prakashganga’ Plot No C-19, E- Block, BKC, Bandra(E) , Mumbai-400051	

ANNEXURE-I

CEA Case No.: MRA-1288 Name of the Power line: LILO of 220kV DC New Koyna – Lote line at 220 kV GIS of M/s Vinati Organics Ltd.			Map Scale : 1 cm= 500 m Total Length : 0.791 km S.R. Value : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Konkan Railway Letter No: KR/RN/S&T/PTCC/Koyna-Lote/2025/1 Dated 25.07.2025

1.	Anjani - Chiplun	0.3	0.000077	27557	2
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Annexure II



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)/4389

28 Mar 2025

SDE (PTCC)
Chief Engineer (Project Schemes)
Maharashtra State Electricity Transmission
Co. Ltd. MahaTransco C.O. Prakashganga
Plot No. C-19, E-Block, BKC, Bandra E ,
Mumbai-400051

**PTCC PROPOSAL FOR 220KV DC LINE, LILO ON EXISTING 220KV
NEW KOYNA-LOTE LINE AT PROPOSED 220KV GIS OF M/S VINATI
ORGANICS LTD. PLOT., No. A-20, MIDC INDUSTRIAL AREA LOTE
PARSHURAM, TAL-KHED, DIST, RATNAGIRI, LENGTH = 0.791KMS**

1. Ref your letter No MSETCL/CO/PS/PTCC/In/B-609/No 08684 dt 18 Dec 2024 (copy att).
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.



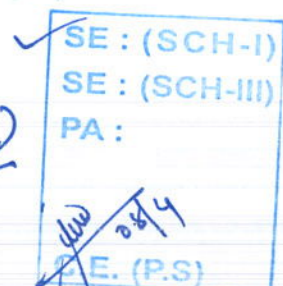
(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-1 (Communication)
for Additional Director General (Telecommunication)

Enclosures: As above

Internal: -

HQ Southern Comd (Sigs) - for info pl

EEC PTCC/MERC



Dyee (PTCC)
pls do need
8/4/25

28/3/25