



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-1236		
Induced Voltage (IV) calculation for PTCC proposal of LILO of both circuits of 220kV Eklahare- Navasari DC line at Akrale (Reliance Life Science Nashik Pvt Ltd.)SS, Nashik[Length – 0.607 km] – Regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-600/08897	29.12.2023
(ii)	BSNL: IC/MBI/PTCC/MRA-2618/03	28.05.2024
(iii)	Central Railway: N.153/PTCC/220kV/MAH-863	23.01.2024
(iv)	Defense: B/46937/Sigs7(b)/3661	09.04.2024

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

DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv).

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
220/33kV Akrale SS (Reliance Life Science Nashik Pvt Ltd.), Nashik	46.40	35	0.5	1842	1203	70	35

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 may be taken under intimation to this office.

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.	Chief Engineer (Projects Schemes Deptt.)	MahaTransco C.O., 'Prakashganga' Plot No C-19, E- Block, BKC, Bandra(E) , Mumbai-400051	Copy for Information

ANNEXURE-I

CEA Case No.: MRA-1236			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of both circuits of 220 kV Eklahare-Navasari DC line at Akrale (Reliance Life Science Nashik Pvt Ltd.) SS, Nashik			Total Length: 0.607 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.
BSNL Letter No: IC/MBI/PTCC/MRA-2618/03			Dated 28.05.2024		
1	Dindori TE to Yanarwadi phata				
2	Dindori TE to Madakijam				
3	Dindori TE to Nilwandi				
4	Dindori TE to Valkhed phata				IV less than 430 V
5	Dindori TE to Palkhed				Out of Parallelism
					IV less than 430 V