

I/26664/2023



सत्यमेव जयते



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

CEA Case No. : MRA-1208		
PTCC approval for U/G cable LILO of existing 220 kV Boisar (PGCIL) – Vasai D/C line (loc. no. 4) at proposed 220 kV Panchali TSS - regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-591/06329	01.09.2022
(ii)	MSETCL: Email	01.03.2023
(iii)	MSETCL: MSETCL/CO/CE-PS/PTCC/GEN/01638	10.03.2023
(iv)	BSNL: IC/MBI/PTCC/MRA-2568/03	19.12.2022
(v)	Western Railway: SG. 158/28/09/328 (E-227780)	15.11.2022

The PTCC proposal and details submitted vide reference (i) & (ii) have been examined. Vide above reference (iv), BSNL has communicated NIL telecom details, hence, IV is not required for BSNL telecom cables. The LF induction on communication circuits of Western Railway with respect to details furnished vide above reference (v) has been computed. The voltages likely to be induced on paralleling communication circuits of Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered.

Telecommunication details from Defense are awaited. Vide reference (iii) above, MSETCL has shown urgency for charging the transmission line and has requested for Provisional RAC.

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 Panchali TSS	50.74	50	0.313	1795.8	1170.8	62.7	28.7

As per the details submitted by BSNL vide reference (iii) above, no telephone exchanges are falling in the EPR zone of the proposed 220 kV Panchali TSS.

Taking above into consideration, necessary action for issuance of provisional 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.	General Manager (S&T)	Western Railway, O/o PCSTE, S&T Dept., 5 th floor, Station Building, Churchgate, Mumbai - 400020	

I/26664/2023

3.	Lt. Col., GSO 1 (Comm)	Directorate General of Signals, Signals 7, General Staff Branch, Integrated HQ of MoD (Army), DHQ PO, New Delhi – 110011	With a request to forward TD/NOC at the earliest for IV calculation and recommendation for Final RAC
4.	Superintending Engineer (Project Schemes)	MSETCL, O/o Superintending Engineer (Project Schemes Dept.), Prakashganga, P. No. C19, #E, BKC, Bandra (East), Mumbai - 400051	Copy for information

I/26664/2023

ANNEXURE-I

CEA Case No.: MRA-1208 Name of the Power line: U/G cable LILO of existing 220 kV Boisar (PGCIL) – Vasai D/C line (loc. no. 4) at proposed 220 kV Panchali TSS		Map Scale : 1 cm= 500 m Total Length : 1.2 km S.R. Value : 20000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Western Railway Letter No: SG. 158/28/09/328 (E-227780) Date: 15.11.2022					
Affected Block & Telecom Circuits					
1	Palghar - Umroli	1.2	0.0018	20218	36
2	Umroli - Boisar	Out of parallelism			0
3	Boisar - Vangaon				0