



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-1327		
Induced Voltage (IV) calculation for PTCC proposal of a section of 220kV D/C transmission line on M/C towers from 765kV Shikrapur S/S to Loc NO 35A which is a part of reorientation work of existing 220 kV S/C U-Tech - Ranjangaon transmission line and 220 kV S/C Lonikand II – Ranjangaon line. [Length=4.166km]		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/IN/B-621/NO.8197	17.09.2025
(ii)	MSETCL: Email_sld	10.12.2025
(iii)	BSNL: IC/MBI/PTCC/MRA-2750/03	07.11.2025
(iv)	Central Railway: N.705/T/PTCC/220kV/MAH-981	20.11.2025
(v)	Defense: B/46937/Sigs 7(b)/5142	04.11.2025

The PTCC proposal submitted vide above references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL 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 BSNL under Single Line to Ground fault condition is enclosed at Annexure-I. The screening factors as applicable have been considered. Central Railway and DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iv) and (v) respectively.

As all the associated S/s are existing ones, therefore EPR zone verification is not warranted.

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	'D' wing, III floor, Administrative Bldg., Telecom complex, Juhu Tara Road, Santacruz (West) Mumbai-400054	Annexure-I
2.	Chief Engineer (Projects)	Chief Engineer (Projects Schemes) Maharashtra State Electricity Transmission CO. Ltd. Plot No. C-19 E-Block, BKC, Bandra (E), Mumbai- 400 051	Copy for information.

ANNEXURE-I

CEA Case No. : MRA-1327					
Name of the Power line: 220kV D/C transmission line on M/C towers from 765kV Shikrapur S/S to Loc NO 35A which is a part of reorientation work of existing 220 kV S/C U-Tech - Ranjangaon transmission line and 220 kV S/C Lonikand II – Ranjangaon line. [Length=4.166km]		Map Scale : 1 cm= 500 m			
		Total Length : 4.166 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.
BSNL Letter No.: IC/MBI/PTCC/MRA-2750/03 Dated 07.11.2025					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Koregaon Ex to koregon(B1)	Outside IV consideration zone			
2.	BKG Ex to Sanaswadi(B2)	Outside IV consideration zone			
3.	Sanaswadi to Nareshwarrrd(B3)	Outside IV consideration zone			
4.	BKG Exchange to Sanaswadi(B4)	Outside IV consideration zone			
5.	Sanaswadi to Grmpancapat(B5)	Outside IV consideration zone			
6.	Sanaswadi to LPTchowk(B6)	Out of Parallelism			
7.	Sanaswadi to LPTchowk(B7)	Out of Parallelism			
8.	Koregaon to Wadhu(B8)	Outside IV consideration zone			
9.	BKG to koregaon(B9)	Out of Parallelism			
10.	Koregaon to Derne (B10)	Out of Parallelism			
11.	Shikrapur to bajrangwadi (S1)	Out of Parallelism			
12.	SKP- Talegaon Danandere(S2)	Out of Parallelism			
13.	SKP- DALMILL(S3)	0.2	0.00071	302	0.2164V
14.	KondaDori to Highway (K2)	0.4	0.00092	1498	1.39V
15.	SKP- MALTAN PHATA(S4)	Out of Parallelism			
16.	TALEGAON to SKP(T1)	Out of Parallelism			

17.	Talegaon to Vitthalwadi(T2)	Out of Parallelism
18.	Kondado R1 to village (K1)	Out of Parallelism
19.	Rangangnon Highway(R1)	Outside IV consideration zone
20.	Rangaon village (R2)	Outside IV consideration zone
21.	Karegaon MIDC Highway(KM-1)	Outside IV consideration zone
22.	Karegaon MIDC village(KM-2)	Outside IV consideration zone