



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-1238		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV D/C Kumbhargaoon - Kurunda line [Length – 61.44 km] – Regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-601/00373	16.01.2024
(ii)	BSNL: IC/MBI/PTCC/MRA-2619/02	24.06.2024
(iii)	South Central Railway: SG.85/4/3/PTCC/SCR/2023-24/MH-11 RTD	26.03.2024
(iv)	Defense: B/46937/Sigs7(b)/3704	01.04.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of South Central Railway 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 South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET,PTCC(Mumbai) has issued NOC vide above reference (ii).

DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv) (attached as Annexure –II).

Both substations are existing therefore, EPR calculation is not warranted.

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.	GM (S&T)	South Central Railway, O/o Principal Chief Signal & Telecom Engineer, 7 th Floor, Rail Nilayam, Secunderabad-500025	
3.	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-1238 Name of the Power line: 220 kV D/C Kumbhargaoon- Kurunda line			Map Scale : 1 cm= 500 m Total Length: 61.44 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.
SCR Letter No: SG.85/4/3/PTCC/SCR/2023-24/MH-11 RTD			Dated 26.03.2024		
1	Chudawa- Limbgaon	0.4	0.00009	12058	1
2	Limbgaon-H.S. Nanded	3.5	0.0007	12552	9
3	H.S. Nanded – Maltekdi	Outside IV consideration Zone			
4	Maltekdi-Mugat	Outside IV consideration Zone			
5	Mugat-Mudhked Jn	Outside IV consideration Zone			
6	Sirli-Chondi	Out of Parallelism			
7	Chondi-Basmat	0.753	0.00008	3790	0.3
8	Basmat-Marsul	Outside IV consideration Zone			