

I/25503/2023



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

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ONE EARTH - ONE FAMILY - ONE FUTURE

CEA Case No. : MRA-1211		
PTCC approval for 220 kV S/C line on D/C tower UTCL Awarpur – Manikgarh Cement Gadchandur (3.436 km) – Regd.		
S. No	Reference No.	Dated
(i)	UTCL: UTCL/MCW/220kV-Projt/1122	11.11.2022
(ii)	UTCL: UTCL/MCW/220kV-Projt/786	29.12.2022
(iii)	BSNL: IC/MBI/PTCC/MRA-2575/02	30.12.2022
(iv)	South Central Railway: SG.85/4/3/PTCC/SCR/2022-23/MH-8 RTD	29.11.2022

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL and South Central Railway with respect to details furnished vide above reference (iii) & (iv) respectively have been computed. The voltages likely to be induced on paralleling communication cables of BSNL and South Central Railway under Single Line to Ground fault conditions are enclosed at Annexure-I & II respectively. The screening factors as applicable have been considered.

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 earth mat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220 kV Manikgarh Cement Gadchandur	43	20	0.16	277	168.7	NIL	NIL

Telecommunication details from DG Signals, MoD are awaited however, vide reference (ii) above, M/s UTCL have informed that erection and testing of the subject line is completed and Final Charging Permission from Electrical Inspector Office, Nagpur region has also been received. M/s UTCL have requested for provisional PTCC clearance so that the line can be charged.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office. LF induction on telecommunication circuits of Defense will be communicated after the receipt of details from DG Signals, MoD.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 <sup>st</sup> floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
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2.	GM/Tele	South Central Railway, Office of PCSTE, 7 <sup>th</sup> floor, Rail Nilayam, Secunderabad - 500025	Annex-II
3.	Senior Manager (E&I)	UTCL, P.O. Gadchandur, Tah. Korpana, Dist. Chandrapur, Maharashtra - 442908	Copy for information
4.	Director General of Signals	General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ, PO, New Delhi- 110 105	With a request to provide details of Telecom assets/ NOC at the earliest for IV calculation and issuance of final RAC.

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ANNEXURE-I

CEA Case No.: MRA-1211 Name of the Power line: 220 kV S/C line on D/C tower UTCL Awarpur – Manikgarh Cement Gadchandur			Map Scale : 1 cm= 500 m Total Length : 3.436 km S.R. Value : 5000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>BSNL Letter No: IC/MBI/PTCC/MRA-2575/02 Date: 30.12.2022</b>					
1	200Pr UG cable b/w Gadchandur Exch and Axis Bank ATM	0.3	0.0095	20000	190

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ANNEXURE-II

CEA Case No.: MRA-1211 Name of the Power line: 220 kV S/C line on D/C tower UTCL Awarpur – Manikgarh Cement Gadchandur			Map Scale : 1 cm= 500 m Total Length : 3.436 km S.R. Value : 5000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>SOUTH CENTRAL RAILWAY: SG.85/4/3/PTCC/SCR/2022-23/MH-8 RTD Date: 29.11.2022</b>					
1	Gadchandur (GDCR) – Maratha Cement Works (MCW)	1.3	0.0005	24800	12
	Maratha Cement Works (MCW) – Pandar Pawani (PRPI)	Out of parallelism			0