

I/25823/2023



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-1195		
PTCC approval for LILO of one ckt of 220 kV D/C Girwali – Hingoli line at proposed 220 kV Kurunda GIS S/S- regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-586/01564	04.03.2022
(ii)	MSETCL: Email	26.12.2022
(iii)	BSNL: IC/MBI/PTCC/MRA-2534/03	21.10.2022
(iv)	South Central Railway: SG.85/4/3/PTCC/SCRMH202117 RTD	29.03.2022
(v)	Defense: B/46937/Sigs 7(b)/2816	10.05.2022

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on communication circuits of BSNL and South Central Railway with respect to details furnished vide above reference (iii) and (iv) respectively have been computed. The voltage likely to be induced on paralleling communication circuits of UG cables of BSNL and South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors as applicable have been considered. Vide reference (v) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed as Annexure-III).

EPR zone for the proposed substation is mentioned below:

Name of proposed substation	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 GIS Kurunda	95	30	0.55	3475.6	2267.8	126.2	60.5

As per the Telecom Details submitted by BSNL vide above reference (iii), Parbhani exchange of BSNL is falling within the EPR contour of 430 V of proposed 220 kV GIS Kurunda.

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/Tele	South Central Railway, Office of PCSTE, 7 th floor, Rail Nilayam, Secunderabad - 500025	

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3.	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
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ANNEXURE-I

CEA Case No.: MRA-1195 Name of the Power line: 220 kV DC line, LILO on one of the ckts of 220 kV Girwali – Hingoli D/C line for proposed 220 kV GIS Kurunda S/S			Map Scale : 1 cm= 500 m Total Length : 12.90 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-2534/03 Date: 21.10.2022					
<u>BSNL Parbhani</u>					
1	1 X 50 Pair (2.5 km)	2.7	0.0802	9663	775
2	1 X 50 Pair (2.7 km)	2.3	0.0696	9497	661
3	1 X 50 Pair (1.5 km)	1.3	0.0294	9661	284

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ANNEXURE-II

CEA Case No.: MRA-1195		Map Scale : 1 cm= 500 m			
Name of the Power line: 220 kV DC line, LILO on one of the ckts of 220 kV Girwali – Hingoli D/C line for proposed 220 kV GIS Kurunda S/S		Total Length : 12.90 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.
SOUTH CENTRAL RAILWAY Letter No: SG.85/4/3/PTCC/SCRMH202117 RTD Date: 29.03.2022					
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Marsul (MRV) – Basmath (BMF)	Out of parallelism			0
2	Basmath (BMF) – Chondi (CWI)	5.9	0.0021	9524	20
3	Chondi (CWI) – Sirli (SIF)	3.9	0.0108	8981	97

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Tele : 23019746

MRA - 1195
 Directorate General of Signals
 Signals 7
 General Staff Branch
 Integrated HQ of MoD (Army)
 DHQ PO, New Delhi - 110011


B/46937/Sigs 7(b)/2816/

10 May 2022

Office of the Superintending Engineer,
 Projects Schemes Department
 Maharashtra State Electricity Transmission Co. Ltd
 "Prakashganga", Plot No C-19, 'E' Block,
 Bandra - Kurla Complex, Bandra (East),
 Mumbai-400051

**PTCC PROPOSAL FOR 220KV DC LINE, LILO ON ONE OF THE CKTS OF
 220KV GIRWALI-HINGOLI DC LINE FOR PROPOSED 220KV KURUNDA S/S,
 LENGTH=12.90KMS**

1. Refer your letter No MSETCL/CO/PS/PTCC/In/B-586/No 01564 dt 04 Mar 2022 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


 (Anurag Mishra)
 Lt Col
 GSO 1 (Comm)
 for SO-in-C


Enclosures : As above

Copy to :-

✓ The Director (PTCC), CEA
 Power Communication Development Division
 NRPC Complex, 18-A Shaheed Jeet Singh Marg
 Katwaria Sarai, New Delhi - 110016

- for information

The DET(PTCC), Northern Zone
 O/o PGM (North), QA & Inspection Circle,
 D-Tax Building, Eastern Court, Janpath
 New Delhi-110001


 17/5/22

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