

/28864/2023



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		
Revised IV and EPR details for PTCC proposal of 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/CE-PS/PTCC/GEN/04122	19.06.2023
(ii)	BSNL: IC/MBI/PTCC/MRA-2534/04	27.05.2023
(iii)	This Office: File No.CEA-PS-17-11(12)/6/2023-PCD Division I/27974/2023	24.05.2023
(iv)	This Office: File No.CEA-PS-17-11(12)/6/2023-PCD Division I/25823/2023	20.01.2023

With reference to the subject PTCC proposal, MSETCL had requested to review the IV and EPR details issued by CEA vide reference (iv) above. Considering the request of MSETCL, CEA, vide reference (iii), had requested BSNL and MSETCL to verify the telecom details and provide SLG fault level at 220 kV bus of Kurunda S/s based on load flow study considering all future expansions/connectivity.

In view of the replies received from MSETCL and BSNL vide references (i) and (ii) respectively, IV on BSNL telecom circuits and EPR for proposed Kurunda S/S have been re-calculated. The voltage likely to be induced on paralleling UG cables of BSNL under Single Line to Ground fault condition are enclosed at Annexure.

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 (ohm)	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	12.226	0.55	1390.1	887.8	NIL	NIL

As per the Telecom Details submitted by BSNL, no telecom assets are falling within the EPR zone 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

ewt
 Director 11.7.2023

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.	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

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	8042	645
2	1 X 50 Pair (2.7 km)	2.3	0.0696	8075	562
3	1 X 50 Pair (1.5 km)	1.3	0.0294	8203	241