



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. : GUJ-905		
Induced Voltage (IV) calculation for LILO of one circuit of 400 kV D/C Soja-Zerda Transmission Line at 400 kV Veloda S/s [Length- 30.471 km]– Regd.		
S. No	Reference No.	Dated
(i)	GETCO: CE(Project)/EE(TR-II)/T-5/6716	08.08.2024
(ii)	GETCO: CE(Project)/EE(TR-II)/T-5/5078 (received on 06.10.2025)	25.09.2025
(iii)	BSNL: IC/MBI/PTCC/GUJ-2986	22.10.2024
(iv)	Western Railway: SG/158/28/12(1421)	23.12.2024
(v)	Defense: B/46937/Sigs7(b)/4184 (Received via e-mail dated 08.09.2025)	10.12.2024

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

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.

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Bldg., Santa Cruz (West), Mumbai-400054	
2.	GM (S&T) Western Railway	O/o PCSTE, S&T Dept. Western Railway Church gate, Mumbai	
3.	Chief Engineer (Projects)- GETCO	Sardar Patel Vidyut Bhawan, Race Course GETCO, Vadodara	Copy for information

ANNEXURE-I

CEA Case No.: GUJ-905			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of one circuit of 400 kV D/C Soja-Zerda Transmission Line at 400 kV Veloda S/s.			Total Length : 30.471 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.

BSNL: IC/MBI/PTCC/GUJ-2986 Dated 22.10.2024

Affected Blocks & Telecom Circuits Details

1.	Wagdod & Kakoshi TE	IV less than 430 V
2.	Wagdod Exchange Local 50x1P	
3.	Wagdod Exchange Local 100x1P	
4.	Kakoshi Exchange Local 400x2 P	
5.	Kakoshi Exchange Local 100x2 P	
6.	Kakoshi Exchange Local 50x2 P	
7.	Kakoshi Exchange Local 200x1 P	

ANNEXURE-II

CEA Case No.: GUJ-905			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of one circuit of 400 kV D/C Soja-Zerda Transmission Line at 400 kV Veloda S/s.			Total Length : 30.471 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.
Western Railway: SG/158/28/12(1421) Dated 23.12.2024					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Shihori R/s to Wayad R/s	-Out of Parallelism-			
2.	Wayad R/s to Kansa R/s	4.5	0.0131	27000	354
3.	Kansa R/s to Khalipur R/s	-Out of Parallelism-			