



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. : RAJ - 847		
Induced Voltage (IV) calculation for LILO of 220 kV S/C KTPS - Beawar Transmission line at existing 220 kV GSS Bundi [Length- 5 km]-Regd.		
S. No	Reference No.	Dated
(i)	RRVPNL: RVPN/SE (QC, insp. & Montg.)/XEN (PTCC)/F.2103-A-00389 Rajkaj No. 15090115	05.05.2025
(ii)	RRVPNL: e-mail	18.03.2026
(iii)	BSNL: DE/PTCC/NZ/BSNL-TD/DV-10587/Raj-1621/2025-26 received via e-mail on 18.03.2026	26.08.2025
(iv)	West Central Railway: WCR/N-HQ/120 PTCC-T-50-Pt-III Caes-483	31.07.2025
(v)	Defense: B/46937/Sigs-7(b)/4786	23.06.2025

The PTCC proposal submitted vide references (i) and (ii) has been examined. As per the Telecom Details submitted by BSNL vide above reference (iii), there is no copper cable or armoured OFC within 8 km boundary and hence IV computation is not done. The LF induction on Block and Telecom circuits of West Central Railway with respect to details furnished vide above reference (iv) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of West Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (v).

Since all substations are already existing, EPR zone calculation is not warranted.

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.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Northern Zone	O/o GM(N), QA & Inspection circle, D-Tax Building, Eastern Court Janapath, New Delhi-110001	
2.	GM (S&T) WCR	O/o GM (S&T), 1st Floor, Annex II building, P.F.No. 6, Jabalpur	Annexure-I
3.	SE (QC, Insp. & Montg.)	O/o Superintending Engineer (QC, Inspection & Monitoring) Room No. 320, Vidyut Bhawan, Jyoti Nagar, Jaipur - 302005	Copy for information.

ANNEXURE-I

CEA Case No.: RAJ - 847			Map Scale : 1 cm= 500 m		
Name of the Power line: PTCC proposal for LILO of 220 kV S/C KTPS - Beawar Transmission line at existing 220 kV GSS Bundi.			Total Length : 5 km		
			S.R. Value : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
West Central Railway: WCR/N-HQ/120 PTCC-T-50-Pt-III Caes-483 Dated 31.07.2025					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Bundi – Srinagar Rajasthan	1.85	0.00275	24000	66
2.	Srinagar Rajasthan - Jalindari	3.05	0.00308	26000	80