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
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CEA Case No. : KNK - 1211		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV D/C Transmission Line from Existing 220/66/11 kV Hootagalli to Existing 220/66/11 kV Vajamangala [Length – 19.518 km]-Regd.		
S. No	**Reference No.**	**Dated**
(i)	KPTCL: CEE/SLDC/PTCC/F-3887/7717-726	19.11.2025
(ii)	KPTCL: e-mail	13.03.2026
(iii)	BSNL: SR-PTCC/F-3887/5 received via e-mail on 13.03.2026	22.01.2026
(iv)	South Western Railway: SG/SWR/PTCC/Corres/E:2-12	06.03.2026
(v)	Defense: B/46937/Sigs-7(b)/5439	16.02.2026

The PTCC proposal submitted vide references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of South Western 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 South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET, PTCC, SZ, BSNL, and DG Signals, MoD have issued their No Objection Certificate (NOC) vide references (iii) and (v) respectively.

As all the associated S/s are existing ones, EPR zone verification 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

Digitally signed by
Suman Kumar Maharana
Date: 10-04-2026
17:12:02

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Southern Zone	O/o Divisional Engineer Telecom (PTCC) QA & Inspection circle, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th main, 47th Cross, Bengaluru - 560041	
2.	Principal Chief (S&T) SWR	South Western Railway, Principal Chief Signal & Telecom Engineer, Rail Soudha, Gadag Road, Hubballi-20	Annexure-I
3.	Chief Engineer Electricity, SLDC, KPTCL	O/o Chief Engineer Electricity, SLDC, # 28, R.C. Cross Road, Bangalore -560009	Copy for information.

ANNEXURE-I

CEA Case No.: KNK-1211 **Name of the Power line**: PTCC proposal of 220 kV D/C Transmission Line from Existing 220/66/11 kV Hootagalli to Existing 220/66/11 kV Vajamangala.			**Map Scale :** 1 cm= 500 m **Total Length :** 19.518 km **S.R. Value :** 30000 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 Western Railway: SG/SWR/PTCC/Corres/E:2-12 Dated 06.03.2026					
Affected Blocks & Telecom Circuits Details					
1.	MYS-AP	4.3	0.001165	25750	30
2.	AP-KDO	Out of IV Consideration Zone			
3.	MYS-MBBC	3.85	0.006630	25640	170
4.	MBBC-BLGA	2.5	0.005758	32300	186
5.	BLGA-STE	1.65	0.000546	36600	20
6.	BDRL-PANP	Out of IV Consideration Zone			
7.	PANP-NHY	0.95	0.000395	22790	9
8.	MYS-NHY	2.15	0.006639	24100	160

Note: The MYS–NHY Block Section was not mentioned in the letter; however, it was indicated in the topo sheet. Since this section falls within the Induced Voltage (IV) consideration zone, the induced voltage has been calculated.