



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. : KNK - 1195		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV S/C Transmission Line on D/C Towers from proposed 250 MW Generating PS of M/s Project Nine Renewable Power Private Limited at Nidagundi Village in Gajendragada Taluk to 440/220 kV PGCIL Gadag-II PS in Gadag Dist. (Length: 33.749 km) - Regd.		
S. No	Reference No.	Dated
(i)	M/s Project Nine Renewable Power Private Limited : PNRPPL/KA/PTCC/2025-26/011	01.08.2025
(ii)	BSNL: SR-PTCC/KNK-1195/2	06.01.2026
(iii)	South Western Railway: SG/SWR/PTCC/Corres/E:2-12	18.12.2025
(iv)	Defense: B/46937/Sigs-7(b)/45026	15.10.2025

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of South Western Railway with respect to details furnished vide above reference (iii) 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, Vide reference (ii) and DG Signals, MoD vide reference (iv) has issued their respective No Objection Certificate (NOC).

EPR zone for proposed S/s is mentioned below:

Name of the proposed Substation	Half diagonal distance , D/2 (mts)	Fault Current I (A)	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
400/220 kV Gadag-II	197.55	63000	0.025	526.03	281.13	N.A	N.A
220 kV Generating PSS at Nidagundi Vil.	76	35000	0.23	1347	865	N.A	N.A

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.

Digitally signed by
Suman Kumar Maharana
Date: 09-01-2026
17:24:30
Chief Engineer

To,

1.	Divisional Engineer (PTCC), Southern Zone	O/o Divisional Engineer Telecom (PTCC) QA & Inspection circle, 2 nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5 th Block, 9 th main, 47 th 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.	Project Manager M/s Project Nine Renewable Power Private Limited	S2904 , 29 th Floor, World Trade Centre Brigade Gateway Campus Rajajinagar- Bangalore	Copy for information.

ANNEXURE-I

CEA Case No.: KNK-1195					
Name of the Power line: 220 kV S/C Transmission Line on D/C Towers from proposed 250 MW Generating PS of M/s Project Nine Renewable Power Private Limited at Nidagundi Village in Gajendragada Taluk to 440/220 kV PGCIL Gadag-II PS in Gadag Dist.			Map Scale : 1 cm= 500 m		
			Total Length : 33.749 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 Western Railway: SG/SWR/PTCC/Corres/E:2-12 Dated 18.12.2025					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	KGX-RLP	Out Of Parallelism			
2.	RLP-SOQ	2.0	0.0013	28000	36
3.	SOQ-BNA	Out Of Parallelism			