



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-1193		
Induced Voltage (IV) calculation for PTCC proposal of 220 KV SC line from 220/66 KV Ayyanahalli S/s to proposed 220/66 KV Switchyard Integrated Steel plant (ISP) of M/s RBSSN Ferrous Industries at Hampapattama village, Hagaribommanahalli taluk, Vijayanagara District (7.459 km)- regd.		
S.No.	Reference	Dated
(i)	KPTCL: KPTCL: CEE/SLDC/PTCC/F-3849/4210-218	16.07.2025
(ii)	KPTCL: Email EMD parameters	05.03.2026
(iii)	BSNL: SR-PTCC/F-3849/5	02.02.2026
(iv)	South Western Railway: SG/SWR/PTCC/F-3849/2926	05.11.2025
(v)	Defense: B/46937/Sigs 7(b)/4961	29.09.2025

The PTCC proposal submitted vide above reference(s) (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), Southern Zone has given NOC vide reference (iii) above.

ADG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (v) above (attached as Annexure –II).

EPR Zones for proposed substations are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220/66 kV ISP of M/s RBSSN Ferrous Industries	118.5	20	0.95	5118	3345	203	107

As per the details submitted by BSNL vide reference (iii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

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.	DET (PTCC), Southern Zone	BSNL, Inspection Circle, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th Main, 47th Cross ,Bangalore-560041	
2.	PCSTE (South Western Railway)	Principal Chief Signal & Telecom Engineer, Rail Soudha, Gadag Road, Hubballi-580020	
3.	Member (Power), KPTCL	Chief Engineer Electricity, SLDC #28, Race Course Road, Bengaluru-560009	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1193 Name of the Power line: 220 KV SC line from 220/66 KV Ayyanahalli S/s to proposed 220/66 KV Switchyard Integrated Steel plant (ISP) of M/s RBSSN Ferrous Industries at Hampapattama village, Hagaribommanahalli taluk, Vijayanagara District			Map Scale : 1 cm= 500 m Total Length: 7.459 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 Letter No: SG/SWR/PTCC/F-3849/2926 Dated 05.11.2025					
1.	HPT-VYS	Out of Parallelism			
2.	VYS-VC				
3.	VC-RMGD				
4.	VC-HBI	7	0.04	14562	582

Directorate General of Signals (Signals-7)
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi -11

KNK - 1193

B/46937/Sigs-7(b)/4961 dt 29 Sep 2025

O/o Chief Engineer Electricity
State Load Karnataka Power Transmission Corporation Ltd
Dispatch Centre # 28, Race Course Cross Road
Bengaluru- 560 009

PTCC PROPOSAL FOR CONSTRUCTION OF 220KV SC LINE ON DC TOWER FROM EXISTING 220/66KV AYYANAHALLI SS TO THE PROPOSED 220/6.6KV SWITCHYARD INTEGRATED STEEL PLANT (ISP) OF M/s RBSSN FERROUS INDUSTRIES AT HAMPAPATTANA VILLAGE HAGARIBOMMANAHALLI TALUK VIJAYANAGARA DISTRICT

1. Ref your letter No CEE/SLDC/PTCC/F-3849/4210-218 dt 16 Jul 2025.
2. No Objection Certificate (NOC) is **accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-1 (Communication)
for Additional Director General (Telecommunication)



Encls: As above

Copy to: -

HQ Southern Comd (Sigs)

Chief Engineer, PSCD Division
Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, RK Puram, Sector-1
New Delhi-110 066

for info pl.

Ms Pragnya (DD)
16/10

Central Electricity Authority

PSCD Division

Diary No. 1486

Date 13-10-2025