



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-1048		
Induced Voltage (IV) Calculation for PTCC proposal of 220 kV S/C line on D/C and M/C towers from the proposed 220/33 kV Pooling Substation, Huyilagola village, Gadag to proposed 400/220 kV Gadag PS (ISTS) (Length: 38.16 km)		
S. No	Reference No.	Dated
(i)	RSPPL/RTC-W3/220 kV/PTCC/AUG/23-24/E/001	03.08.2023
(ii)	RSPPL E-mail:	06.08.2024
(iii)	BSNL: SR-PTCC/SKT6106/7	06.08.2024
(iv)	South Western Railway: SG/SWR/PTCC/RENEW/2642	08.02.2024
(v)	Defense: B/46937/Sigs7(b)/3493	19.10.2023

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on communication circuits of South Western Railway with respect to details furnished vide above reference (iv) have been computed. The voltage likely to be induced on paralleling communication cables 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 (iii) and DG Signals, MoD vide above reference (v) (enclosed as Annexure-II) have issued their No Objection Certificate (NOC) for charging of the line.

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
220/33 kV Pooling Substation, Huyilagola village, Gadag	97.5	28	0.1079	588	356	NA	NA
400/220 kV Gadag PS (ISTS)	116	47.88	0.11403	1357	858	NA	NA

Taking the above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC)	O/o CGM, QA & Inspection circle, 2 nd Floor, Sanchar complex, WMS compound, Jayanagar, 5 th block, 9 th main, 47 th cross, Bengaluru- 560 041	
2.	GM (S&T), South Western Railway	South Western Railway Headquarter, Rail Soudha, Hubballi – 580 023	
3.	M/s Renew Solar Power Private Limited	Renew Hub, Commercial Block-1, Zone-6, Golf Course Road, DLF City Phase-V, Gurugram	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1048 Name of the Power line: 220 kV S/C line on D/C and M/C towers from the proposed 220/33 kV Pooling Substation, Huyilagola village, Gadag to proposed 400/220 kV Gadag PS (ISTS)			Map Scale : 1 cm= 500 m Total Length : 38.16 km S.R. Value : 2000 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/RENEW/2642 Date: 08.02.2024					
1	HBL to BLR		Out of parallelism		

Tele : 23019746

Directorate General of Signals

Signals - 7

General Staff Branch

Integrated HQ of MoD, (Army)

DHQ PO, New Delhi – 110011

KNK-1048

B/46937/Sigs 7(b)/3493

19 Oct 2023

Senior Manager, Projects
 ReNew Solar Power Private Limited
 ReNew Hub, Commercial Block-1, Zone-6
 Golf Course Road, DLF City Phase-V
 Gurugram-122009

**PTCC PROPOSAL FOR CONSTRUCTION OF RENEW SOLAR POWER PVT LTD
 220KV S/C LINE ON D/C AND M/C TOWERS FROM THE PROPOSED 220/33KV
 POOLING SUBSTATION, HUYILAGOLA VILLAGE, GADAG TALUK, GADAG
 DISTRICT TO THE PROPOSED 400/220KV GADAG PS (ISTS), GULAGULLI
 VILLAGE, GADAG DISTRICT**

1. Refer your letter No RSPPL/RTC-W2/220kV/PTCC/AUG/23-24/E/001 dt 15 Aug 2023 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(SP Choyal)

Lieutenant Colonel

General Staff Officer Grade 1 (Communication)

for Additional Director General (Telecommunication)

Enclosures : As above**Copy to :-**

The Director (PTCC), CEA
 Power Communication Development Division
 NRPC Complex, 18-A Shaheed Jeet Singh Marg
 Katwaria Sarai, New Delhi – 110016

- for information

The DET(PTCC), Northern Zone
 Bharat Sanchar Nigam Limited
 O/o PGM (North), QA & Inspection Circle,
 D-Tax Building, Eastern Court, Janpath
 New Delhi-110001

Central Electricity Authority

PCD Division

Diary No. 282/P

Date: 30/10/23

D.K. (PCD)
 30/10

Sh. Akshay DD
 30/10

Sh. Prateek
 30/10

Pls. examine & pu.
 31/10
 31/10

Sh. Prateek