



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-1097		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C Feeder-07 from 220/33 kV Pooling Substation of M/s RSRPL at Hirehandigol village, Gadag to 33 kV Wind Power Double pole yard tapping point NH-74 of RSRPL (Length: 26.4 kms).		
S. No	Reference No.	Dated
(i)	RSRPL/RTC1-W1/33 kV/PTCC/CEA/24-25/E/049	20.03.2024
(ii)	RSRPL E-mail	28.08.2024
(iii)	BSNL: SR-PTCC/SKT6122/7	14.08.2024
(iv)	South Western Railway: SG/SWR/PTCC/KNK1097/2742	03.07.2024
(v)	Defense: B/46937/Sigs 7(b)/3892	25.07.2024

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 references (iv) has 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 reference (v) have given their NOC for charging 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 of M/s RSRPL at Hirehandigol village, Gadag	93.51	24	0.2005	953	599	NA	NA
33 kV Wind Power Double pole yard tapping point NH-74	6.01	17.88	0.1201	24	14	NA	NA

As per the details submitted by BSNL, No Telephone exchange is falling within the EPR zone of proposed substation

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office.

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), Southern Zone	O/o CGM, QA&I 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 Surya Roshni Private Limited	ReNew Hub, Commercial Block-1, Zone-6, Golf Course Road, Gurugram – 122 009	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1097			Map Scale : 1 cm= 500 m		
Name of the Power line: 33 kV S/C Feeder-07 from 220/33 kV Pooling Substation of M/s RSRPL at Hirehandigol village, Gadag to 33 kV Wind Power Double pole yard tapping point NH-74 of RSRPL			Total Length : 26.4 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/KNK1096/2742 Date: 03.07.2024					
1	NGR to LKT	Out of parallelism			
2	LKT to BKIT	1.9	0.00047	12766	6
3	BKIT to GDGBP	Out of parallelism			
4	GDGBP to GDG	Out of parallelism			
5	GDG to HBL	5.1	0.00158	18354	29
6	HBL to BLR	6.3	0.0021	9524	20

Directorate General of Signals
Signals 7

General Staff Branch **KNK-1097**
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi - 110011

B/46937/Sigs 7(b)/3892/

Jul 2024

Senior Manager, Projects
ReNew Surya Roshni Private Limited
Corporate Off: ReNew Hub, Commercial Block-1
Zone-6, Golf Course Road
DLF City Phase-V, Gurugram-122009

**PTCC PROPOSAL FOR 33KV SCOH LINE (33KV FEEDER NO-7) FROM THE
220/33KV POOLING SUBSTATION, HIREHANDIGOL VILLAGE, GADAG TALUK,
GADAG DISTRICT TO 33KV WIND POWER DOUBLE POLE YARD TAPPING
POINT NH-74**

1. Refer your letter No. RSRPL/RTC1-W1/33 KV/PTCC/MOD/24-25/E/069 dt 22 Apr 2024 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documens 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)

Enclosures : As above

Copy to :-

The Divisional Engineer (PTCC)
'D' Wing, 3rd Floor, Admn Bdg
Telecom Complex,
Juhu Tara Road,
Santracruz West, Mumbai - 400054

Chief Engineer, PSCD Division
Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, R.K. Puram, Sector-1
New Delhi-110066

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

- for information

केन्द्रीय विद्युत प्राधिकरण
पी. सी. डी. प्रभाग
आयरी संख्या. ८०२/२०२४
दिनांक. ८.८.२४