

## 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-1091					
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C Feeder-01 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-36 of RSRPL (Length: 10.3 kms).					
S. No	Reference No.	Dated			
(i)	RSRPL/RTC1-W1/33 kV/PTCC/CEA/24-25/E/043	20.03.2024			
(ii)	RSRPL E-mail	28.08.2024			
(iii)	BSNL: SR-PTCC/SKT6117/2	14.08.2024			
(iv)	South Western Railway: SG/SWR/PTCC/KNK1091/2736	20.06.2024			
(v)	Defense: B/46937/Sigs 7(b)/3891	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	Fault Current,	Resistance of earthmat,	d (mts) at 430	d (mts) at 650	d (mts) at 7 kV	d (mts) at 10 kV
proposed bb	Distance, D/2 (mts)	I (kA)	R (Ohms)	V	V	ut / K V	10 KV
220/33kVPoolingSubstation of M/sRSRPLHirehandigolvillage, Gadag	93.51	24	0.2005	953	599	NA	NA
33 kV Wind Power Double pole yard tapping point NH-36	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) may be taken under intimation to this office.

As per the decision taken in 111<sup>th</sup> and 112<sup>th</sup> 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 <sup>nd</sup> floor, Sanchar Complex, WMS Compound, Jayanagar, 5 <sup>th</sup> block, 9 <sup>th</sup> main, 47 <sup>th</sup> cross,		
		Bengaluru- 560 041		
2	GM (S&T), South	South Western Railway Headquarter, Rail		
۷.	Western Railway	Soudha, Hubbali – 580 023		
3.	M/s ReNew Surya	ReNew Hub, Commercial Block-1, Zone-6,	Сору	for
5.	Roshni Private Limited	Golf Course Road, Gurugram – 122 009	information	

## ANNEXURE-I

Name of Substatic	se No.: KNK-1091 f the Power line: 33 kV S/C Feeder-01 from 220/3 on of M/s RSRPL at Hirehandigol village, Gadag to ouble pole yard tapping point NH-36 of RSRPL	U	Total Length	: 1 cm= 500 n : 10.3 km : 25000 Ohm-cn	
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
	South Western Railway Letter No SG/SW	 R/PTCC/KNK	1091/2736 Dat	e: 20.06.2024	
1	NGR to LKT	Out of parallelism			
2	LKT to BKIT	3.1	0.00618	11813	73
3	BKIT to GDG	Out of parallelism			

Directorate General of Signals Signals 7 General Staff Branch KNK-1091 Integrated HQ of MoD, (Army) DHQ PO, New Delhi – 110011

B/46937/Sigs 7(b)/3891/

√ 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-1) FROM THE 220/33KV POOLING SUBSTATION, HIREHANDIGOL VILLAGE, GADAG TALUK, GADAG DISTRICT TO 33KV WIND POWER DOUBLE POLE YARD TAPPING POINT NH-36

1. Refer your letter No. RSRPL/RTC1-W1/33 KV/PTCC/MOD/24-25/E/063 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, 3<sup>rd</sup> 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