

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-1072					
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C Feeder-12 from 220/33 kV Pooling Substation, Thondihala Koppal to Double Pole yard Tapping Point L2-20 of RSOPL Peak Power Wind farm. (Length: 9.2 kms)					
S. No	Reference No.	Dated			
(i)	RSOPL/Peak power/33kV/PTCC/24-25/018	18.01.2024			
(ii)	RSOPL E-mail:	10.07.2024			
(iii)	BSNL: SR-PTCC/SKT5822/2	10.05.2024			
(iv)	South Western Railway: SG/SWR/PTCC/KNK1072/2727	03.06.2024			
(v)	Defense: B/46937/Sigs 7(b)/3727	16.05.2024			

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 reference (iv) has been computed. The voltage likely to be induced on paralleling communication 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 (iii) and DG Signals, MoD vide reference (v) has given their NOC for charging the line.

EPR Zones for proposed substations are mentioned below.

Name of the	Half	Fault	Resistance	d (mts)	d (mts)	d (mts)	d (mts) at
proposed SS	Diagonal	Current,	of earthmat,	at 430	at 650	at 7 kV	10 kV
	Distance,	I (kA)	R (Ohms)	V	V		
	D/2 (mts)						
220/33 kV	88.46	24	0.1201	505	304	NA	NA
Pooling							
Substation,							
Thondihala							
Koppal							
33 kV Feeder-12	6.01	6.2	0.429	31	19	NA	NA
Double Pole yard							
Tapping Point L2-							
20							

Taking 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	O/o CGM, QA&I circle,		
	(PTCC), Southern Zone	CC), Southern Zone 2 nd floor, Sanchar Complex, WMS		
		Compound, Jayanagar, 5th block, 9th main,		
		47 th cross, Bengaluru- 560 041		
2.	GM (S&T), South	South Western Railway Headquarter, Rail		
	Western Railway	Soudha, Hubbali – 580 023		
	M/a DaNaw Suma Oias	ReNew Hub, Commercial Block-1, Zone-6,		
3.	M/s ReNew Surya Ojas Private Limited	Golf Course Road, DLF City Phase-V,	Copy for information	
		Gurugram – 122 009		

ANNEXURE-I

CEA Case No.: KNK-1072

Map Scale : 1 cm= 500 m

Total Length: 9.2 kms

Name of the Power line: 33 kV S/C Feeder-12 from 220/33 kV Pooling Substation, Thondihala Koppal to Double Pole yard Tapping Point L2-20

of RSOPL Peak Power Wind farm.

S.R. Value: 25000 Ohm-cm

		Length of Parallelis m	Mutual Coupling	Effective Fault current	I.V in
S.No.	Telecom. Details	in Km.	in Ohms.	in Amps.	Volts.

South Western Railway: SG/SWR/PTCC/KNK1072/2727 Dated: 03.06.2024						
1	RLP-SOQ	1.7	0.000071	14084	1	
2	SOQ-BNA	2.1	~ 0	-	~ 0	

E-mail: webstar@nic.in

Directorate General of Signals KNK-1072 Signals - 7 General Staff Branch Integrated HQ of MoD, (Army) DHQ PO. New Delhi - 110011

L May 2024

B/46937/Sigs 7(b)/3727

Senior Manager, Projects ReNew Surva Ojas 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 12) FROM THE 220/33 KV POOLING S/S AT THONDIHALA VILLAGE, YELBURGA TALUK, KOPPAL DISTRICT TO PROPOSED RENEW (RSOPL) WIND 33KV WIND POWER DOUBLE POLE YARD TAPPING POINT LS-20

- Refer your letter No RSOPL/Peak Power/33kV/PTCC/MoD/24-25/E/042 dt 03 Feb 2024 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheet received vide your letter mentioned above.
- 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)

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 Depth PGM (North), QA & Inspection Circle, Tax Building, Eastern Court, Janpath

New Delhi-110001

for information

Central Electricity Authority

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