

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 Cas	CEA Case No.: KNK-1118				
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV Feeder-7 (partially S/C and partially D/C) from the 220/33kV Pooling Substation of M/s RSRPL at Huyilagola village, Gadag to 33kV wind power Double pole yard tapping point K012N2 of RSRPL (Length: 4.9 kms D/C + 9.4 kms S/C: Total = 14.3 kms).					
S. No	Reference No.	Dated			
(i)	RSRPL/RTC1-W2/33 kV/PTCC/CEA/24-25/E/078	22.04.2024			
(ii)	BSNL: SR-PTCC/SKT6137/7	20.09.2024			
(iii)	South Western Railway: SG/SWR/PTCC/KNK1118/2751	03.07.2024			
(iv)	Defense: B/46937/Sigs 7(b)/3939	22.07.2024			

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

EPR Zones for	nronosed	cubetations	are mention	aned below
LI IX LUIIUS IUI	proposeu	substations	are menu	JIICU UCIUW.

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)						
220/33kV Pooling	97.5	24	0.2005	994	624	NA	NA
Substation of M/s							
RSRPL at							
Huyilagola							
village, Gadag							
33kV wind power	14.5	25	0.1143	82	49	NA	NA
Double pole yard							
tapping point K012N2							

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 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	O/o CGM, QA&I circle,		
	(PTCC), Southern Zone	2 nd floor, Sanchar Complex, WMS Compound,		
		Jayanagar, 5 th block, 9 th main, 47 th cross,		
		Bengaluru- 560 041		
2.	PCSTE/SWR	Principal Chief Signal & Telecom Engineer,		
		Rail Soudha, Gadag Road, Hubballi-580020		
2	M/s ReNew Surya	ReNew Hub, Commercial Block-1, Zone-6,	Copy	for
3.	Roshni Private Limited	Golf Course Road, Gurugram – 122 009	information	

ANNEXURE-I

CEA Case No.: KNK-1118

Name of the Power line: 33 kV Feeder-7 (partially S/C and partially D/C) from the 220/33kV Pooling Substation of M/s RSRPL at Huyilagola village, Gadag to 33kV wind power Double pole yard tapping point

K012N2 of RSRPL

Map Scale : 1 cm = 500 m

Total Length: 4.9 kms D/C + 9.4 kms

S/C: Total = 14.3 kms

S.R. Value : 30000 Ohm-cm

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: SG/SWR/PT	CC/KNK1118/	/2751 Date: 03.	07.2024	
1	GDG to HBL	Out of parallelism			
2	HBL to BLR	1.8	0.00516	19961	103
3	BLR to MLP	Out of parallelism			

als 1/43398/2024

Directorate General of Signals Signals 7

General Staff Branch

nch KNK-1118 MoD. (Army)

Integrated HQ of MoD, (Army) DHQ PO, New Delhi – 110011

Jul 2024

W

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

B/46937/Sigs 7(b)/3939/

33KV FEEDER NO-7 PTCC PROPOSAL (PARTIALLY SC AND PARTIALLY DC LINE) FROM THE 220/33KV POOLING S/S AT HUYILAGOLA VILLAGE TO PROPOSED RENEW (RSRPL) WIND 33KV WIND POWER DOUBLE POLE YARD TAPPING POINT K012N2

- 1. Refer your letter No. RSRPL/RTC1-W2/33 KV/PTCC/MoD /24-25/E/098 dt 06 May 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. Documen's 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