



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-1117		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV Feeder-5 (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 K014N2 of RSRPL (Length: 6.7 kms D/C + 15.5 kms S/C : Total = 22.2 kms).		
S. No	Reference No.	Dated
(i)	RSRPL/RTC1-W2/33 kV/PTCC/CEA/24-25/E/077	22.04.2024
(ii)	BSNL: SR-PTCC/SKT6138/7	19.08.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1117/2750	03.07.2024
(iv)	Defense: B/46937/Sigs 7(b)/3938	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 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
220/33kV Pooling Substation of M/s RSRPL at Huyilagola village, Gadag	97.5	24	0.2005	994	624	NA	NA
33kV wind power Double pole yard tapping point K014N2	14.5	25	0.1143	82	49	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 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.	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-1117		Map Scale : 1 cm= 500 m			
Name of the Power line: 33 kV Feeder-5 (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 K014N2 of RSRPL (Length:)		Total Length : 6.7 kms D/C + 15.5 kms S/C : Total = 22.2 kms			
		S.R. Value : 30000 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/KNK1117/2750 Date: 03.07.2024					
1	GDG to HBL	Out of parallelism			
2	HBL to BLR	2.3	0.01386	20124	279
3	BLR - MLP	Out of parallelism			

Directorate General of Signals
Signals 7

General Staff Branch **KNK-1117**
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi – 110011


B/46937/Sigs 7(b)/3938/

2 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

33KV FEEDER NO-5 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 K014N2

1. Refer your letter No. RSRPL/RTC1-W2/33 KV/PTCC/MoD/24-25/E/097 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. 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
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... 01.08.24
दिनांक... 01.08.24

Directorate General of Signals
Signals 7

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