



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-1066		
Induced Voltage (IV) Calculation for PTCC proposal of 220 kV S/C line on Double circuit and multi-circuit tower from proposed 220/33 kV 300 MW, Hire Mannapur, Koppal PSS of M/s Green Infra Wind Energy Ltd. to 400/220 kV Gadag (PG) (Length: 54.169 kms)		
S. No	Reference No.	Dated
(i)	GIWEL/HMP-GLG/300MW/PTCC-1	18.01.2024
(ii)	BSNL: SR-PTCC/SKT 5889/2	10.06.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1066/2718	14.05.2024
(iv)	Defense: B/46937/Sigs 7(b)/3862	12.06.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL and South Western Railway with respect to details furnished vide above reference (ii) and (iii) respectively have been computed. The voltage likely to be induced on paralleling communication circuits of BSNL and South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors as applicable have been considered.

DG Signals, MoD vide reference (iv) above has 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 300 MW, Hire Mannapur, Koppal PSS of M/s GIWEL	86.66	28	0.2	1042	660	NA	NA
400/220 kV Gadag (PG) S/s	164.45	35	0.114	1361	845	NA	NA

As per details submitted by BSNL vide above reference (ii), No Telephone Exchange of BSNL are falling in the EPR zone.

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 (PTCC)	O/o CGM, QA & Inspection 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 Green Infra Wind Energy Limited	5 th Floor, Tower C, Building No. 8, DLF Cybercity, Gurugram – 122 002	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1066 Name of the Power line: 220 kV S/C line on Double circuit and multi-circuit tower from proposed 220/33 kV 300 MW, Hire Mannapur, Koppal PSS of M/s Green Infra Wind Energy Ltd. to 400/220 kV Gadag (PG)			Map Scale : 1 cm= 500 m Total Length : 54.169 km S.R. Value : 25000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL: SR-PTCC/SKT 5889/2 Dated: 10.06.2024					
1	Kushtagi TE to K1			IV less than 430 V	
2	Kushtagi TE to K2			IV less than 430 V	
3	Kushtagi TE to K3			IV less than 430 V	
4	Kushtagi TE to K4			IV less than 430 V	
5	Kushtagi TE to K5			IV less than 430 V	

ANNEXURE-II

CEA Case No.: KNK-1066 Name of the Power line: 220 kV S/C line on Double circuit and multi-circuit tower from proposed 220/33 kV 300 MW, Hire Mannapur, Koppal PSS of M/s Green Infra Wind Energy Ltd. to 400/220 kV Gadag (PG)			Map Scale : 1 cm= 500 m Total Length : 54.169 km S.R. Value : 25000 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/KNK1066/2718 Dated: 14.05.2024					
1	LNBI - KUSTAGI	7.1	0.000911	18661	17

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

KNK-1066

B/46937/Sigs 7(b)/3862

27 Jun 2024

Green Infra Wind Energy Limited
 Regd Off: 5th Floor, Tower C, Building No. 8
 DLF Cybercity, Gurugram-122002, Haryana, India

**PTCC PROPOSAL FOR THE "PROPOSED CONSTRUCTION OF 220KV OH S/C
 LINE ON D/C TOWERS WITH AL-59 MOOSE CONDUCTOR FROM THE
 PROPOSED M/S. GREEN INFRA WIND ENERGY LTD, GURUGRAM'S 220/33KV
 300MW WIND ENERGY PROJECT PSS SITUATED AT HIRE MANNAPUR OF
 KOPPALA DISTRICT TO UNDER-CONSTRUCTION M/S POWER GRID
 CORPORATION OF INDIA LTD'S 400/220KV GADAG PS (ISTS SUB-STATION)
 SITUATED NER GULAGULI OF GADAG DISTRICT".**

1. Refer your letter dt 29 Mar 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 Lakhnopal)
 Lieutenant Colonel
 General Staff Officer Grade 1 (Communication)
 for Additional Director General (Telecommunication)

Enclosures : As above

Copy to :-

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

Central Electricity Authority

PCD Division

Diary No. 700

Date. 29.06.24

sh Anshy (DD)
 25/6