

भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत संचार विकास प्रभाग

Power Communication Development Division

CEA Case No.: KNK-1040					
Induced Voltage (IV) Calculation for PTCC proposal for 33 kV S/C OH line for Feeder No. 4 on RSJ Pole with AL59 Dog conductor and AL59 TW (Eco) Panther conductor from 220/33 kV Vena Energy Vidyuth Private Limited S/s at Jumalapura Village, Kushtagi to proposed					
33 kV unit substation (Length: 9.06 km)					
S. No	Reference No.	Dated			
(i)	VENA/33kVPTCC/FED04	30.05.2023			
(ii)	BSNL: SR-PTCC/SKT5093/02	19.12.2023			
(iii)	South Western Railway: SG/SWR/PTCC/KNK1040/2612	06.11.2023			
(iv)	Defense: B/46937/Sigs 7(b)/3431	01.09.2023			

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above references (ii) have been computed. The voltage likely to be induced on paralleling communication cables of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. South Western Railway and DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iii) and (iv) (enclosed as Annexure-II) respectively.

EPR Zones for proposed substations are mentioned below.

Name of the	Half	Fault	Resistance	d (mts)	d (mts)	d (mts)	d
proposed SS	Diagonal	Current,	of earthmat,	at 430 V	at 650 V	at 7 kV	(mts)
	Distance,	I (kA)	R (Ohms)				at 10
	D/2 (mts)						kV
220/33 kV Vena	113.1	28	0.2032	1383	877	NA	NA
Energy Vidyuth							
Private Limited S/s							
at Jumalapura							
Village, Kushtagi							
33/0.69 kV Unit	12.7	20	0.6184	353	229	10	3
substation for							
Feeder No. 4							

As per the details submitted by BSNL vide reference (ii) above, no telephone exchange is falling in the EPR zone of the proposed substations.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Director

To,

1.	Divisional Engineer	O/o CGM, QA & Inspection circle, 2 nd	
	(PTCC)	Floor, Sanchar complex, WMS compound,	
		Jayanagar, 5 th block, 9 th main, 47 th cross,	
		Bengaluru- 560 041	
2.	M/s Vena Energy Vidyuth Private Limited	2/1, First Floor, Embassy Icon Annexe Infantry Road, Bengaluru	Copy for information

ANNEXURE-I

CEA Ca	ase No.: KNK-1040					
Name of the Power line: 33 kV S/C OH line for Feeder No. 4 on RSJ Pole		Map Scale : 1 cm= 500 m				
with AL59 Dog conductor and AL59 TW (Eco) Panther conductor from 220/33 kV Vena Energy Vidyuth Private Limited S/s at Jumalapura		Total Length: 9.06 km				
	Village, Kushtagi to proposed 33 kV unit substation		S.R. Value : 20000 Ohm-cm			
		Length of		Effective		
		Parallelis	Mutual	Fault	I.V	
		m	Coupling	current	in	
S.No.	Telecom. Details	in Km.	in Ohms.	in Amps.	Volts.	
	BSNL Letter No: SR-PTCC	 SKT5093/02	 Date: 19.12.202	23		
I	Tavaragera Telephone Exchange					
1	Exchange to Menadhal road (T-T1)					
2	Exchange to Kushtagi road (T-T2)	Out of parallelism				
3	Exchange to KEB office (T-TA)					
4	KEB office to Temple road (TA-T3)					
5	Exchange to Police Station (T-T4)					
6	KEB office to Killharhati road (TA-T5)					
7	KEB office to Sindhanoor road (TA-T6)					
II	Hiremanpura Telephone Exchange					
1	Exchange to Navalhalli road (H-H1)					
2	Exchange to Gumagera road (H-H2)		Out of p	arallelism		
3	Exchange to MG road (H-H2)					

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ANNEXURE-II

Tele: 23019746

Directorate General of Signals

Signals - 7

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

B/46937/Sigs 7(b)/3431

Vena Energy Vidyuth Private Limited 2/1, 1st Floor, Embassy Icon Annexe, Infantry Road, Bangalore-560001 Karnataka, India

O Sep 2023

PTCC PROPOSAL FOR LAYING OF 33KV OVERHEAD LINE FOR FEEDER NO. 4 FOR WIND POWER PROJECT UNDER SECI BID IN KOPPAL DISTRICT, KARNATAKA (LENGTH: 9.06 KM)

- Refer your letter No Nil dt 19 Jun 2023 (copy att).
- 2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
- 3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(SK Sharma)

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

- for information

The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi – 110016

The DET(PTCC), Northern Zone Bharat Sanchar Nigam Limited Q/o PGM (North), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath

New Delhi-110001

Sh. ladel