

## 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-1149 Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C line on RSJ Poles from proposed Feeder-5 connecting 07 Nos. of WTGs with 33 kV Unit Substation to 220/33 kV, 2x160 MVA Pooling Substation of M/s ZREPL at Harakabhavi village, Kudligi, Ballari (Length: 10.89 kms). Reference No. **Dated** S. No ZREPL/BALLARI/CEA/PTCC/WIND/05 22.07.2024 (i) BSNL: SR-PTCC/SKT6186/6 (ii) 26.10.2024 South Western Railway: SG/SWR/PTCC/KNK1149/2805 07.10.2024 (iii) (iv) Defense: B/46937/Sigs 7(b)/4137 30.10.2024

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) has 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.

GM, S&T, SWR vide reference (iii) and DG Signals, MoD vide reference (iv) have 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
220kV M/s Zentaris PSS	133	28.5	0.26	2159	1383	8	NA
33 kV Unit Substation	11.08	17.96	0.95	429	280	16	8

As per the details submitted by BSNL, No active Telephone exchange is falling within the EPR zone of proposed substation

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111<sup>th</sup> and 112<sup>th</sup> 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 <sup>nd</sup> floor, Sanchar Complex, WMS Compound,		
		Jayanagar, 5th block, 9th main, 47th cross,		
		Bengaluru- 560 041		
	M/s Zenataris	Plot No. N46, Hous No. 4-9-10, HMT Nagar,	Copy	for
2.	Renewable Energy	Hyderabad - 500076	information	101
	Private Limited	Tryderabad - 500070	IIIIOIIIIatioii	

## **ANNEXURE-I**

CEA Ca	se No.: KNK-1149						
Name of the Power line: 33 kV S/C line on RSJ Poles from proposed Feeder-5 connecting 07 Nos. of WTGs with 33 kV Unit Substation to 220/33 kV, 2x160 MVA Pooling Substation of M/s ZREPL at Harakabhavi village, Kudligi, Ballari			Total Length: 10.89 km				
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.		
	BSNL: SR-PTCC/SKT6	186/6 <b>Date</b> : 26	5.10.2024				
I	Harakabhavi Telephone Exchange						
1	TE to Santanahalli (A-A1)						
2	TE to Bellekatta (A-A2)	Dead cables. IV calculations not done.					
II	Banvikallu Telephone Exchange						
1	TE to Suladahalli (B-B1)	Suladahalli (B-B1)					
2	TE to Kenchobanahalli (B-B2)	o Kenchobanahalli (B-B2)  Dead cables. IV calculations not done.					
III	Chikkagogihalli Telephone Exchange						
1	TE to MB Ayyanahalli (C-C1)  Dead cables. IV calculations not done.			one.			
IV	Nimbalgere Telephone Exchange	Nimbalgere Telephone Exchange					
1	TE to Mangapura (D-D1)						
2	TE to Gangatti (D-D2)	Dead cables. IV calculations not done.					

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

B/46937/Sigs 7(b)/4137

Oct 2024

Zenataris Renewable Energy Private Limited Regd Off: Plot No N46, House No 4-9-10, HMT Nagar Hyderabad-500076, Telangana

PTCC PROPOSAL FOR CONSTRUCTION OF 33KV SC LINE (AL59-DOG & PANTHER) STRUNG ON RSJ POLES FROM PROPOSED FEEDER-5 CONNECTING 07 NOS OF WTGS WITH 33KV UNIT SUBSTATION OF M/S ZENATARIS RENEWABLE ENERGY PVT LTD TO PROPOSED 33/220KV 2X160MVA POOLING SUBSTATION OF M/S ZENATARIS RENEWABLE ENERGY PVT LTD AT HARAKABHAVI VILLAGE IN KUDLIGI TALUK, VIJAYANAGARA (BALLARI) DISTRICT, KARNATKA

- Refer your letter No ZREPL/BALLARI /MOD/PTCC/WIND/05 dt 20 Aug 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 O/o PGM (North), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath New Delhi-110001

for information