



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-1151		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C line on RSJ Poles from proposed Feeder-7 connecting 03 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: 5.767 kms).		
S. No	Reference No.	Dated
(i)	ZREPL/BALLARI/CEA/PTCC/WIND/07	22.07.2024
(ii)	BSNL: SR-PTCC/SKT6188/6	05.11.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1151/2807	07.10.2024
(iv)	Defense: B/46937/Sigs 7(b)/4139	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 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 Zenataris Renewable Energy Private Limited	Plot No. N46, Hous No. 4-9-10, HMT Nagar, Hyderabad - 500076	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1151			Map Scale : 1 cm= 500 m		
Name of the Power line: 33 kV S/C line on RSJ Poles from proposed Feeder-7 connecting 03 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 : 5.767 km		
			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.
BSNL: SR-PTCC/SKT6188/6 Date: 05.11.2024					
I	Banvikallu Telephone Exchange				
1	TE to Suladahalli (A-A1)	Dead cables. IV calculations not done.			
2	TE to Kenchobanahalli (A-A2)				
II	Nimbalagere Telephone Exchange				
1	TE to Mangapura (B-B1)	Dead cables. IV calculations not done.			
2	TE to Ganagatti (B-B2)				

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

B/46937/Sigs 7(b)/4139

20 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-7 CONNECTING 03 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

1. Refer your letter No ZREPL/BALLARI /MOD/PTCC/WIND/07 dt 20 Aug 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