



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. : MRA-1253		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV (partially S/C and partially D/C) Feeder-10 on RSJ Pole with AL-59 Dog, Panther & ECO Panther conductor from proposed 350 MW 220/33 kV PSS of M/s SRI4PL at Shendi Village, Dharashiv to 33/0.69 kV Wind power unit substation at DY-16 (Length: 17 km)		
S. No	Reference No.	Dated
(i)	SRIPL-4/33kV/PTCC/F10	13.04.2024
(ii)	Everrenew E-mail:	23.08.2024
(iii)	BSNL: IC/MBI/PTCC/MRA-2649/03	13.07.2024
(iv)	Central Railway: N.153/PTCC/33kV/MAH-892	25.07.2024
(v)	Defense: B/46937/Sigs7(b)/3928	11.07.2024

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above references (iii) 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.

DG Signals, MoD vide above reference (v) 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
220/33 kV PSS of M/s SRI4PL at Shendi Village, Dharashiv	125.25	21.5	0.478	2868	1855	59	3
33/0.69 kV Wind power unit substation	12.095	24.5	0.22	140	88	NA	NA

As per the details submitted by BSNL vide reference (iii) 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 (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), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
2.	M/s Serentica Renewables India 4 Private Limited	DLF Cyber Park, 9 th floor, Tower-B, Udyog Vihar, Phase-III, Sector-20, Gurugram – 122 008	Copy for information

ANNEXURE-I

CEA Case No.: MRA-1253			Map Scale : 1 cm= 500 m		
Name of the Power line: 33 kV (partially S/C and partially D/C) Feeder-10 on RSJ Pole with AL-59 Dog, Panther & ECO Panther conductor from proposed 350 MW 220/33 kV PSS of M/s SRI4PL at Shendi Village, Dharashiv to 33/0.69 kV Wind power unit substation at DY-			Total Length : 17 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 Letter No IC/MBI/PTCC/MRA-2642/03 Date: 13.07.2024					
1	Izora fata. – Izora road BTS (E – F)		Out of parallelism		