

# 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**

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CEA Case No.: MRA-1268					
Induced Voltage calculation for PTCC proposal for 33 kV S/C Feeder-02 from 220/33 kV Pooling Substation of M/s RSRPL at Ghatnandur village, Osmanabad to 33 kV Wind Power Double pole yard tapping point 388 N2 of RSRPL (Length: 13.61 kms).					
S. No	Reference No.	Dated			
(i)	RSPPL/RTC1-W3/33kV/PTCC/CEA/24-25/E/137	17.05.2024			
(ii)	BSNL: IC/MBI/PTCC/MRA-2669/02	05.08.2024			
(iii)	Central Railway: N.153/PTCC/33kV/MAH-901	22.07.2024			
(iv)	Defense: B/46937/Sigs 7(b)/3961	09.08.2024			

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL vide above reference (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. SM (S&T), Central Railway vide reference (iii) and DG Signals, MoD vide reference (iv) have issued No Objection Certificate (NOC) for charging of the line.

EPR zone for the proposed substation is mentioned below:

Name of the	Half	Fault	Resistance of				
proposed	diagonal	Current	Earth Mat, R	d (mts)	d (mts)	d (mts)	d (mts)
Substation	distance	I (KA)	(ohms)	at 430	at 650 V	at 7kV	at 10kV
	, D/2			V	at 050 v	at /KV	at TOK V
	(mts)						
220/33 kV Pooling	94.4	24	0.3374	1683	1082	15	NA
Substation of M/s							
RSRPL at							
Ghatnandur							
village,							
Osmanabad							
33 kV Wind Power	7.43	6.2	0.537	50	31	NA	NA
Double pole yard							
tapping point							

As per the details submitted by BSNL, No 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.

### **Chief Engineer**

#### To,

1.	Divisional	QA & Inspection circle,	
Engineer (PTCC),		1st floor, D- wing, BSNL Admin Bldg.,	
	Western Zone	Junu Tara Road, Santacruz (West),	
		Mumbai-400054	
	M/s ReNew Surya	ReNew Hub, Commercial Block-1, Zone-6, Golf	
2.	Roshni Private	Course Road, DLF City, Phase-V, Gurugram	Copy for information
	Limited	Course Road, DLF City, Fliase-V, Gurugram	

# ANNEXURE-I

<b>Name o</b> Substati	f the Power line: 33 kV S/C Feeder-02 from 220/3 on of M/s RSRPL at Ghatnandur village, Osmanal ower Double pole yard tapping point 388 N2 of RSR	bad to 33 kV	Total Length	: 1 cm= 500 m : 13.61 km : 30000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
	BSNL: IC/MBI/PTCC/MRA  Izora Fata to Izora Road BTS	-2669/02 <b>Date</b>		han 430 V	