



सत्यमेव जयते



ONE EARTH - ONE FAMILY - ONE FUTURE

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

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<b>CEA Case No. : TN-728</b>		
<b>Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C OH line for Feeder No. 4 on RSJ Pole with AL59 Panther conductor and AAAC Dog conductor from 220/33 kV JSW Tuticorin – B S/s at Savlaperi village to proposed 33 kV JSW Wind Power unit substation tapping point TUT-155 (Length: 15.0 km)</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	JSWREL/33kV-PTCC/330 MW/SC04	15.04.2023
(ii)	BSNL: SR-PTCC/STN 5063/05	25.08.2023
(iii)	Southern Railway: W.384/3/6/19(TN) (received via JSW E-mail dated 20.11.2023)	13.07.2023
(iv)	Defense: B/46937/Sigs 7(b)/3321	04.07.2023

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL and Southern Railway with respect to details furnished vide above reference (ii) and (iii) respectively have been computed. The voltage likely to be induced on paralleling communication circuits of BSNL and Southern Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors as applicable have been considered.

DG Signals, MoD, vide above reference (iv) (Annexure-III) have issued their No Objection certificate (NOC) for charging of the line.

EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance , D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
230/33 kV JSW Tuticorin B Wind Power PSS-B of M/s JSW Renew Energy Ltd at Savlaperi village	82.54	35	0.0344	149	70	NA	NA
33 kV Wind Power unit substation	14	13.374	0.499	203	130	NA	NA

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As per the details submitted by BSNL vide reference (ii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

Taking above into consideration, necessary action regarding issuance of PTCC approval for the subject cited transmission line may be taken under intimation to this office.

Encl.: As above

**Director**

**To,**

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	
2.	GM (S&T)	Southern Railway, Headquarter office, S&T Branch, Chennai	
3.	M/s JSW Renew Energy Limited	JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051	For information

I/31763/2023

ANNEXURE-I

<b>CEA Case No.:</b> TN-728		<b>Map Scale</b> : 1 cm= 500 m			
<b>Name of the Power line:</b> 33 kV S/C OH line for Feeder No. 4 on RSJ Pole with AL59 Panther conductor and AAAC Dog conductor from 220/33 kV JSW Tuticorin – B S/s at Savlaperi village to proposed 33 kV JSW Wind Power unit substation tapping point TUT-155		<b>Total Length</b> : 15.0 km			
		<b>S.R. Value</b> : 15000 Ohm-cm			
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>

BSNL: SR-PTCC/STN 5063/05 Dated: 25.08.2023

**NALATTINPUTHUR TELEPHONE EXCHANGE**

1	EXGE to DP.0007				
2	EXGE to DP.0013				
3	EXGE to P.21 to DP.2103				
4	EXGE to P.21 to DP.2109				
5	EXGE to P.21 to DP.2110				
6	EXGE to P.21 to DP.2112				
7	EXGE to P.21 to DP.2123				
8	EXGE to P.21 to DP.2124				
9	EXGE to P.21 to DP.2125				
10	EXGE to P.22 to DP.2204				
11	EXGE to P.22 to DP.2208				
12	EXGE to P.23 to DP.2313				
13	EXGE to P.23 to DP.2314				
14	EXGE to P.23 to DP.2317				
15	EXGE to P.24 to DP.2406				
16	EXGE to P.24 to DP.2407				
17	EXGE to P.24 to DP.2414				

Out of parallelism

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18	EXGE to P.24 to DP.2415
19	EXGE to P.24 to DP.2419
20	EXGE to P.24 to DP.2420
21	EXGE to P.24 to DP.2422
22	EXGE to P.24 to DP.2424
23	EXGE to P.24 to DP.2427
24	EXGE to P.24 to DP.2428

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ANNEXURE-II

<b>CEA Case No.:</b> TN-728  <b>Name of the Power line:</b> 33 kV S/C OH line for Feeder No. 4 on RSJ Pole with AL59 Panther conductor and AAAC Dog conductor from 220/33 kV JSW Tuticorin – B S/s at Savlaperi village to proposed 33 kV JSW Wind Power unit substation tapping point TUT-155			<b>Map Scale</b> : 1 cm= 500 m  <b>Total Length</b> : 15.0 km  <b>S.R. Value</b> : 15000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Southern Railway: W.384/3/6/19(TN) Dated: 13.07.2023					
1	Kovilpatti to Kadambur		Outside IV consideration zone		

TN-728

B/46937/Sigs 7(b)/3321/

04 Jul 2023

JSW Renew Energy Limited  
Regd. Office: JSW Centre, Bandra Kurla Complex  
Bandra (East), Mumbai-400051

**PTCC PROPOSAL FOR CONSTRUCTION OF PROPOSED 33KV DOUBLE  
CIRCUIT LINE FOR FEEDER NO-SC-04 FROM PROPOSED M/S JSW RENEW  
ENERGY LTD FOR TOTAL CONNECTIVITY 540MW AT PART OF PROJECT  
330MW TUTICORIN-I 230/33KV POOLING SUBSTATIONS WIND POWER  
PROJECT AT THOOTHUKUDI DISTRICT**

1. Refer your letter No JSWREL/33kV-PTCC/330MW/SC 04 dt 15 Apr 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.



(SP Choyal)  
Lt Col  
GSO 1 (Coord)  
for ADG T

**Enclosures** : As above

**Copy to :-**

The Divisional Engineer (PTCC)  
'D' Wing, 3<sup>rd</sup> 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  
O/o PGM (North), QA & Inspection Circle,  
D-Tax Building, Eastern Court, Janpath  
New Delhi-110001

Central Electricity Authority

PCD Division

Diary No. 6055

Date: 27/7

Sh. Akshay, DD  
27/7

PPU. 3154  
3107  
Sh. Pralok