



सत्यमेव जयते

**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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CEA Case No. : TN-734		
<b>Induced Voltage (IV) Calculation for PTCC proposal of 33 kV D/C OH line for Feeder No. 6 &amp; 7 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-460 (Length: 26.30 km)</b>		
S. No	Reference No.	Dated
(i)	JSWREL/33kV-PTCC/330 MW/DC-03	15.04.2023
(ii)	BSNL: SR-PTCC/STN 5050/04	25.08.2023
(iii)	Southern Railway: W.384/3/6/25(TN)	12.07.2023
(iv)	Defense: B/46937/Sigs 7(b)/3316	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	0.583	240	154	2	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

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ANNEXURE-I

<b>CEA Case No.:</b> TN-734		<b>Map Scale</b> : 1 cm= 500 m			
<b>Name of the Power line:</b> 33 kV D/C OH line for Feeder No. 6 & 7 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-460 (Length: 26.30 km)		<b>Total Length</b> : 26.3 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.

BSNL: SR-PTCC/STN 5050/04 Dated: 25.08.2023

**KAYATHAR TELEPHONE EXCHANGE**

1	EXGE to DP.0003	Out of parallelism
2	EXGE to DP.0006	
3	EXGE to DP.0012	
4	EXGE to DP.0023	
5	EXGE to P.22 to DP.2208	
6	EXGE to P.22 to DP.2219	
7	EXGE to P.22 to DP.2233	
8	EXGE to P.22 to DP.2247	
9	EXGE to P.25 to DP.2503	
10	EXGE to P.25 to DP.2522	
11	EXGE to P.25 to DP.2539	
12	EXGE to P.25 to DP.2549	
13	EXGE to P.25 to DP.2533	

**NALATTINPUATHUR TELEPHONE EXCHANGE**

1	EXGE to DP.0007	Out of parallelism
2	EXGE to DP.0013	
3	EXGE to P.21 to DP.2103	

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4	EXGE to P.21 to DP.2109	
5	EXGE to P.21 to DP.2110	
6	EXGE to P.21 to DP.2112	
<b>KADAMBUR TELEPHONE EXCHANGE</b>		
1	EXGE to P.40 to DP.4004	Out of parallelism
2	EXGE to P.41 to DP.4118	

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ANNEXURE-II

<b>CEA Case No.:</b> TN-734  <b>Name of the Power line:</b> 33 kV D/C OH line for Feeder No. 6 & 7 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-460 (Length: 26.30 km)			<b>Map Scale</b> : 1 cm= 500 m  <b>Total Length</b> : 26.3 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.384/3/6/25(TN) dated 12.07.2023					
1	Kovilpatti to Kadambur	4.3	0.0167	9880	165
2	Kadambur to Vanchi Maniyachchi	Out of parallelism			

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

TN-734

B/46937/Sigs 7(b)/3316/

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-DC: 06&07 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/DC-03 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

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

- for information

Central Electricity Authority  
PCD Division

Diary No... 66  
Date: 27/7

Sh. AK Shrivastava, DD  
27/7

PPU. 31/07  
31/07  
Sh. Prateek