



सत्यमेव जयते



वैश्वेय कृतवन्तम्

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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CEA Case No. : TN-724		
<b>Induced Voltage (IV) Calculation for PTCC proposal of 33 kV DC OH line for Feeder No. 3 &amp; 4 on RSJ Pole with HTLS Gap – ACSR and AL59 Panther conductor from 220/33 kV JSW Tuticorin – B S/s at Arungulam village to proposed 33 kV Wind Power unit substation tapping point TUT-1010 (Length: 18.2 km)</b>		
S. No	Reference No.	Dated
(i)	JSWREL/33kV-PTCC/DC-2	04.03.2023
(ii)	BSNL: SR-PTCC/STN 5038/05	21.07.2023
(iii)	Southern Railway: W.384/3/6/31(TN)	13.07.2023
(iv)	Defense: B/46937/Sigs 7(b)/3278	11.08.2023

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 reference (ii) has been computed. The voltage likely to be induced on paralleling communication circuits 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), Southern Railway vide above reference (iii) and DG Signals, MoD, vide above reference (iv) (Annexure-II) 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 Arungulam village, Vilathikulam	92.84	42	0.0985	800	498	NA	NA
33 kV Wind Power unit substation	14.03	21.92	0.334	225	144	1	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.	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-724  <b>Name of the Power line:</b> 33 kV DC OH line for Feeder No. 3 & 4 on RSJ Pole with HTLS Gap – ACSR and AL59 Panther conductor from 220/33 kV JSW Tuticorin – B S/s at Arungulam village to proposed 33 kV Wind Power unit substation tapping point TUT-1010		<b>Map Scale</b> : 1 cm= 500 m  <b>Total Length</b> : 18.2 km  <b>S.R. Value</b> : 20000 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 5038/05 Dated: 21.07.2023

**VILATHIKULAM TELEPHONE EXCHANGE**

1	EXGE to DP.0001	IV less than 430 V
2	EXGC to DP.002A	
3	EXGE to DP.002B	
4	EXGE to DP.0014	
5	EXGE to DP.0015	
6	EXGE to DP,0016	
7	EXGE to P..21 to DP.2102	
8	EXGE to p.21 to DP.2104	
9	EXGE to P.22 to DP.2210	
10	EXGE to P.22 to DP.2211	
11	EXGE to P.22 to DP.2212	
12	EXGE to P.23 to DP.2307	
13	EXGE to P.23 to DP.2308	
14	EXGE to P.23 to DP.2309	
15	EXGE to P.23 to DP.2310	
16	EXGE to P.23 to DP.2311	
17	EXGE to P.23 to DP.2312	

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18	EXGE to P.24 to DP.2401	IV less than 430 V
19	EXGE to P.24 to DP.2404	
20	EXGE to P.25 to DP.2501	
21	EXGE to P.25 to DP.2507	
22	EXGE to P.26 to DP.2603	
23	EXGE to P.26 to DP.2604	
24	EXGE to P.26 to DP.2605	
25	EXGE to P.26 to DP.2606	
26	EXGE to P.26 to DP.2609	
27	EXGE to P.26 to DP.26010	
28	EXGE P.26 to DP.2611	
29	EXGE to P.26 to DP.2612	
30	EXGE to P.26 to DP.2622A	
31	EXGE to P.26 to DP.2622B	
32	EXGE to P.26 to DP.2623	
33	EXGE to P.26 to DP.2628	
34	EXGE to P.26 to DP.2629	
35	EXGE to P.26 to DP.2631A	
36	EXGE to P.26 to DP.2631B	
37	EXGE to P.26 to DP.2632A	
38	EXGE to P.26 to DP.2635A	
39	EXGE to P.26 to DP.2635B	
40	EXGE to P.26 to DP.2636A	
41	EXGE to P.26 to DP.2637	
42	EXGE to P.26 to DP.2638	
<b>KULATHUR TELEPHONE EXCHANGE</b>		
1	Exge to DP.0002	
2	Exge to DP.0003	

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3	Exge to DP.0005	IV less than 430 V
4	Exge to DP.0008	
5	Exge to DP.0010	
6	Exge to DP.0011	
7	Exge to DP.0016	
8	Exge to DP.0022	
9	Ex c to DP.0030	IV less than 430 V
10	EXGE to p.23 to DP.2307A	
11	EXGE to P.23 to DP.2309A	
12	EXGE to P.24 to DP.2404	Out of parallelism
13	EXGE to p.24 to DP.2406	
14	EXGE to p.24 to DP.2410	
15	EXGE to p.24 to DP.2411	
16	EXGE to P.24 to Dp.2412	

Signals 7

General Staff Branch

Integrated HQ of MoD, (Army)

DHQ PO, New Delhi – 110011

TN-724

B/46937/Sigs 7(b)/3278/

11 Aug 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:3&4 FROM PROPOSED M/S JSW RENEW  
ENERGY LTD FOR TOTAL CONNECTIVITY 540MW AT PART OF PROJECT  
210MW TUTICORIN II 230/33KV POOLING SUBSTATIONS WIND POWER  
PROJECT AT THOOTHUKUDI DISTRICT**

1. Refer your letter No JSWREL/33kV-PTCC/DC-2 dt 04 Mar 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)

Lieutenant Colonel

General Staff Officer Grade 1 (Communication)

for Additional Director General (Telecommunication)

**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 DivisionDiary No. 72/  
Date: 29/8/23

22/1/PCD)  
29/8

PPU-3474  
01/09

Sh. Akshay, DD

Sh. Prateek