



सत्यमेव जयते



वैश्वेय कृतमन्त्रम्

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

CEA Case No. : TN-730		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C OH line for Feeder No. 6 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-038 (Length: 14.08 km)		
S. No	Reference No.	Dated
(i)	JSWREL/33kV-PTCC/330 MW/SC06	15.04.2023
(ii)	BSNL: SR-PTCC/STN 5065/05	25.08.2023
(iii)	Southern Railway: W.384/3/6/21(TN) (received via JSW E-mail dated 20.11.2023)	13.07.2023
(iv)	Defense: B/46937/Sigs 7(b)/3319	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	0.524	214	137	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/31764/2023

ANNEXURE-I

CEA Case No.: TN-730 Name of the Power line: 33 kV S/C OH line for Feeder No. 6 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-038			Map Scale : 1 cm= 500 m Total Length : 14.08 km S.R. Value : 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 5065/05 Dated: 25.08.2023					
NALATTINPUZHUR TELEPHONE EXCHANGE					
1	EXGE to DP.0007	Out of parallelism			
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				
KADAMBUR TELEPHONE EXCHANGE					
1	EXGE to P.40 to DP.4004	IV less than 430 V			
2	EXGE to P.41 to DP.4118				

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ANNEXURE-II

CEA Case No.: TN-730 Name of the Power line: 33 kV S/C OH line for Feeder No. 6 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-038			Map Scale : 1 cm= 500 m Total Length : 14.08 km S.R. Value : 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	4.95	0.01528	9686	148
2	Kadambu to Vanchimaniyachchi	Out of parallelism			


B/46937/Sigs 7(b)/3319/

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-06 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-06 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, 3rd 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