



सत्यमेव जयते



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

CEA Case No.: TN-792		
Induced Voltage (IV) calculation in respect of PTCC proposal of 33 KV OH lines for Single pole structures (DC & SC) from JSW Dharapuram 230/33 KV S/S at Perimiyum village, Dharapuram taluk, Tiruppur District to WTG unit S/S (USS) DHP-514 (110.35 km)- regd.		
S. No	Reference No.	Dated
(i)	JSWRED3L: JSWRED3L/PTCC/DHP-LV1/001	20.01.2026
(ii)	BSNL: SR-PTCC/MTN 0005/07	23.03.2026

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

EPR Zones for proposed substations are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
230/33 kV Wind PSS of JSWRED3L	85.9	14.58	0.325	861	540	NA	NA
0.69/33 kV Unit SS	16.5	10.25	0.825	309	199	3	NA

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 shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

Encl.: As above

Chief Engineer,

To,

1.	DET (PTCC), Southern Zone (Chennai)	BSNL, Inspection Circle, 1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	
2.	M/s JSW Renewable Energy Dolvi Three Ltd.	JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400051	Copy for information

ANNEXURE-I

CEA Case No.: TN-792			Map Scale: 1 cm= 500 m		
Name of the Power line: 33 KV OH lines for Single pole structures (DC & SC) from JSW Dharapuram 230/33 KV S/S at Perimiyum village, Dharapuram taluk, Tiruppur District to WTG unit S/S (USS) DHP-514			Total Length: 110.35 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 Letter No: SR-PTCC/MTN 0005/07 Dated 23.03.2026

1. Thennilai TE					
I.	Thennilai TE – Line I (As shown in Annexure II)	2.3	0.078	6602	515
II.	Thennilai TE – Line II (As shown in Annexure II)	2.8	0.034	6874	233
III.	Thennilai TE – All other telecom lines	IV less than 430 V			
2. Vairamadai TE					
I.	Vairamadai TE – All Telecom lines	IV less than 430 V			
3. KG Valan TE					
I.	KG Valan TE – Line I (as shown in Annexure III)	4.5	0.153	9461	1448
II.	KG Valan TE – All other telecom lines	IV less than 430 V			
4. Paramathy TE					
I.	Paramathy TE – All Telecom lines	IV less than 430 V			
5. Noyyal TE					
I.	Noyyal TE	Out of Parallelism			
BTS/Tower					
1.	K Paramathy Support	IV computations are not required (outside EPR zone)			
2.	Thennilai NB				
3.	Thennilai USO				
4.	KG Valasu				
5.	Vairamadai				
6.	Kodanthur USO				
7.	Kovilpalayam				
8.	Paramathy HW				
9.	Athipalayam IP				
10.	Noyyal				
11.	Noyyal Support EW IP				

