

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 Division ******

CEA Case No. : KNK-1111
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV S/C line on D/C RSJ Pole from
proposed 220/33 kV 153.6 MW Hybrid Power Project PSS of M/s KSPPL at Alwandi village,
Koppal to proposed Vestas Feeder No. 4 WTGs comprising of 05 Nos. of 33 kV Unit substation
of M/s KSPPL at Alwandi village, Koppal (Length: 4.56 km)

S. No	Reference No.	Dated
(i)	KSPPL/KOPPAL/CEA/PTCC/WIND/04	04.04.2024
(ii)	BSNL: SR-PTCC/SKT6012/2	05.07.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1111/2778	22.08.2024
(iv)	Defense: B/46937/Sigs 7(b)/3854	12.06.2024

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 references (ii) has been computed. The voltage likely to be induced on paralleling communication cables of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered.

PCSTE, SWR vide reference (iii) and DG Signals, MoD vide reference (iv) has given their NOC for charging the line.

EPR Zones for proposed substations are mentioned below.

Name of the	Half	Fault	Resistance	d (mts)	d (mts)	d (mts)	d (mts) at
proposed SS	Diagonal	Current,	of earthmat,	at 430	at 650	at 7 kV	10 kV
	Distance,	I (kA)	R (Ohms)	V	V		
	D/2 (mts)						
220/33 kV 153.6	88	44.7	0.0428	304	171	NA	NA
MW Hybrid							
Power Project							
PSS of M/s							
KSPPL at							
Alwandi village,							
Koppal							
33 kV Wind	31.835	25	0.176	294	184	NA	NA
Power Unit							
substation of M/s							
KSPPL at							

सेवा भवन, रामाकृष्ण पुरम, सेक्टर -1, नई दिल्ली -110 066 टेलीफ़ोन: 011-26736706 ईमेल: cepcd.cea@gov.in वेबसाइट: <u>www.cea.nic.in</u> Sewa Bhawan, R.K.Puram, Sector-1, New Delhi-110 066 Telephone: 011-26736706 Email: cepcd.cea@gov.in Website: <u>www.cea.nic.in</u>

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Alwandi	village,				
Koppal					

As per the details submitted by BSNL, No Telephone exchange is falling within the EPR zone of proposed substation

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer	O/o CGM, QA&I circle,		
	(PTCC), Southern Zone	2 nd floor, Sanchar Complex, WMS Compound,		
		Jayanagar, 5 th block, 9 th main, 47 th cross,		
		Bengaluru- 560 041		
	M/s Kleio Solar	9 th Floor, My Home Twitza, Plot No. 30/A,	Comu	for
2.	Power Private	TSIIC Hyderabad Knowledge City, Raidurg,	information	101
	Limited	Hyderabad – 500 081	Information	

ANNEXURE-I

CEA Cas Name of 220/33 kV village, K Nos. of 33	the No.: KNK-1111 the Power line: 33 kV S/C line on D/C RSJ Pole fr 7 153.6 MW Hybrid Power Project PSS of M/s KSPF toppal to proposed Vestas Feeder No. 4 WTGs com 3 kV Unit substation of M/s KSPPL at Alwandi villa	Map Scale Total Length S.R. Value :	: 1 cm= 500 m : 4.56 kms 7500 Ohm-cm	I		
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.	
BSNL Letter No SR-PTCC/SKT6012/2 Date: 05.07.2024						
1	Alwandi TE to Bus Stand road	IV less than 430 V				

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

Jun 2024

2

B/46937/Sigs 7(b)/3854

Kleio Solar Power Private Ltd 9th Floor, My Home Twitza, Plot No. 30/A TSIIC Hyderabad Knowledge City, Raidurg Hyderabad, Telangana-500081

PTCC PROPOSAL FOR CONSTRUCTION OF 33KV TRANSMISSION LINE (AL59-PANTHAR) STRUNG ON RSJ POLES FROM PROPOSED 33/220KV POOLING SUBSTATION OF 153.6MW HYBRID POWER PROJECT OF M/S KLEIO SOLAR POWER PVT LTD AT ALWANDI VILLAGE IN KOPPAL TALUK & KOFPAL DISTRICT TO PROPOSED VESTAS FD#4 V/TGS COMPRISING OF 05 NOS OF 33KV UNIT SUBSTATION OF M/S KLEIO SC LAR POWER PVT LTI) AT ALWANDI VILLAGE IN KOPPAL TALUK & KOPPAL DISTRICT, KARNATKA

1. Refer your letter No KSPPL/KOPPAL/CEA/PTCC/WIND/04 dt 04 Apr 2024 (copy att).

2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.

3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(Puneet Lakhanpal) Lieutenant Colonel General Staff Officer Grade 1 (Communication) for Additional Director General (Telecommunication)

Enclosures : As above Copy to :-

The Divisional Engineer (PTCC) 'D' Wing, 3rd Floor, Admn Bdg Telecom Complex, Juhu Tara Road, Santracruz West, Mumbai – 400054

Chief Engineer, PSCD Division Central Electricity Authority Room No 702 (North Wing) Sewa Bhawan, R.K. Puram, Sector-1 New Delhi-110066

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

2

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