



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 Division

CEA Case No. : KNK-1107		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV XLPE AL, Ar UG cable (3Cx300 sq. mm & 3Cx500 sq mm) from proposed 220/33 kV 153.6 MW Hybrid Power Project PSS of M/s KSPPL at Alwandi village, Koppal to proposed solar Feeder No. 6 comprising of 02 No. of 0.66-0.66/33 kV IDT substation (Block 11 & 12) of M/s KSPPL at Alwandi village, Koppal (Length: 2.597 km)		
S. No	Reference No.	Dated
(i)	KSPPL/KOPPAL/CEA/PTCC/SOLAR/06	04.04.2024
(ii)	BSNL: SR-PTCC/SKT59870/2	02.07.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1107/2774	22.08.2024
(iv)	Defense: B/46937/Sigs 7(b)/3861	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 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
220/33 kV 153.6 MW Hybrid Power Project PSS of M/s KSPPL at Alwandi village, Koppal	88	44.7	0.0428	304	171	NA	NA

0.66-0.66/33 kV IDT substation (Block 11 & 12)	11.4	25	0.0299	8	2	NA	NA
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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 (PTCC), Southern Zone	O/o CGM, QA&I circle, 2 nd floor, Sanchar Complex, WMS Compound, Jayanagar, 5 th block, 9 th main, 47 th cross, Bengaluru- 560 041	
2.	M/s Kleio Solar Power Private Limited	9 th Floor, My Home Twitza, Plot No. 30/A, TSIIC Hyderabad Knowledge City, Raidurg, Hyderabad – 500 081	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1107					
Name of the Power line: 33 kV XLPE AL, Ar UG cable (3Cx300 sq. mm & 3Cx500 sq mm) from proposed 220/33 kV 153.6 MW Hybrid Power Project PSS of M/s KSPPL at Alwandi village, Koppal to proposed solar Feeder No. 6 comprising of 02 No. of 0.66-0.66/33 kV IDT substation (Block 11 & 12) of M/s KSPPL at Alwandi village, Koppal			Map Scale : 1 cm= 500 m		
			Total Length : 2.597 kms		
			S.R. Value : 7500 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/SKT5987/2 Date: 02.07.2024					
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

KNK-1107

B/46937/Sigs 7(b)/3861

Jun 2024

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 XLPE, AL, AR CABLES (3CX 300SQ MM & 3CX500 SQ MM) THROUGH UNDERGROUND FROM PROPOSED 33/220KV 153.6MW HYBRID POWER PROJECT POLLING SUBSTATION OF M/S KLEIO SOLAR POWER PVT LTD AT ALWANDI VILLAGE IN KOPPAL TALUK & DISTRICT TO PROPOSED SOLAR FD#6 INVERTER DUTY TRANSFORMERS COMPRISING OF 02 NOS OF 0.66-0.66/33KV INVERTER DUTY TRANSFORMERS (BLOCK-11&12) SUBSTATION OF M/S KLEIO SOLAR POWER PVT LTD AT ALWANDI VILLAGE IN KOPPAL TALUK & DISTRICT, KARNATKA

1. Refer your letter No KSPPL/KOPPAL/CEA/PTCC/SOLAR/06 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 Bldg
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/c PGM (North), QA & Inspection Circle,
D-1,ax Building, Eastern Court, Janpath
New Delhi-110001

- for information

Central Electricity Authority

PCD Division

Diary No. 67/2024

Date: 24/6/2024