



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-1126		
Induced Voltage (IV) Calculation for PTCC proposal of 220 kV S/C line on M/C tower from 400/220 kV Koppal PS, Talakal village to 220 kV Common PSS, Talakal Village, Koppal (Length: 0.794 km)		
S. No	Reference No.	Dated
(i)	KSPPL/KOPPAL/CEA/PTCC/09052024	09.05.2024
(ii)	BSNL: SR-PTCC/SKT5988/2	04.07.2024
(iii)	South Western Railway: SG/SWR/PTCC/KNK1126/2780	23.07.2024
(iv)	Defense: B/46937/Sigs7(b)/3953	01.08.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL and South Western Railway with respect to details furnished vide above references (ii) and (iii) respectively have been computed. The voltage likely to be induced on paralleling communication cables of BSNL and South Western 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) (enclosed as Annexure-III) have issued their No Objection Certificate (NOC) for charging of 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 kV common Pooling switching station at Talakal village, Koppal	76.6	32.85	0.3918	2216	1440	64	22

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 (RAC) shall be taken under intimation to this office.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC)	O/o CGM, QA & Inspection circle, 2 nd Floor, Sanchar complex, WMS compound, Jayanagar, 5 th block, 9 th main, 47 th cross, Bengaluru- 560 041	
2.	GM (S&T), South Western Railway	South Western Railway Headquarter, Rail Soudha, Hubballi – 580 023	
3.	M/s Kleio Solar Power Private Limited	9 th Floor, My Home Twitza, Plot No. 30/A, TSIC Hyderabad Knowledge City, Raidurg, Hyderabad	Copy for information

ANNEXURE-I

CEA Case No.: KNK-1126			Map Scale : 1 cm= 500 m		
Name of the Power line: 220 kV S/C line on M/C tower from 400/220 kV Koppal PS, Talakal village to 220 kV Common PSS, Talakal Village, Koppal			Total Length : 0.794 km		
			S.R. Value : 25000 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/SKT5988/2 Date: 04.07.2024					
1	Bannikoppa TE to PGB Bank (B1-B2)	Out of parallelism			
2	Tadakal to SBI cable route (C1-C2)				

ANNEXURE-II

CEA Case No.: KNK-1126		Map Scale : 1 cm= 500 m			
Name of the Power line: 220 kV S/C line on M/C tower from 400/220 kV Koppal PS, Talakal village to 220 kV Common PSS, Talakal Village, Koppal		Total Length : 0.794 km			
		S.R. Value : 25000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
South Western Railway: SG/SWR/PTCC/KNK1126/2780 Date: 23.07.2024					
1	SOQ to BNA	Out of parallelism			
2	BNA to TLKL				
3	TLKL to BNP				
4	TLKL-SGNL				
5	BNP to KBL				

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


B/46937/Sigs 7(b)/3953

01 Aug 2024

Kleio Solar Power Private Ltd
9th Floor, My Home Twitza, Plot No. 30/A
TSIIC Hyderabad Knowledge City, Raidurg
Hyderabad, Telangana-50008

**PTCC ROUTE APPROVAL OF PTCC PROPOSAL FOR CONSTRUCTION OF
PROPOSED 220KV S/C LINE ON M/C TOWERS WITH AL-59 MOOSE
CONDUCTOR FROM PROPOSED 220KV COMMON POLLING SWITCHING
STATION AT TALAKAL VILLAGE IN KUKANOOR TALUK, KOPPAL DISTRICT
TO EXISTING 400/220KV KOPPAL PS (ISTS) AT TALAKAL VILLAGE IN
KUKANOOR TALUK, KOPPAL DISTRICT, KARNATKA**

1. Ref your letter No. KSPPL/KOPPAL/CEA/PTCC/17052024 dt 17 May 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

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