



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**

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<b>CEA Case No.: KNK-1073</b>		
<b>Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV S/C Allipura – Ragalapadu (AP) Transmission Line at 220 kV Somasamudra S/s at Ballari. (Length-6.162 km)- Regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	KPTCL: CEE/SLDC/PTCC/F-3694/8160-68	18.01.2024
(ii)	BSNL:SR-PTCC/SKT5999/2	04.07.2024
(iii)	South Western Railway: SG/SWR/PTCC/F-3694/2668	21.03.2024
(iv)	Defense: B/46937/Sigs7(b)/3695	01.01.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of South Western Railway with respect to details furnished vide above reference (iii) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET-PTCC, BSNL SZ and DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (ii) & (iv) respectively.

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
220kV Somasamudra S/s	155	40	0.12	1575	990	N.A	N.A

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.

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

Encl.: As above

**Chief Engineer**

**To,**

1.	Divisional Engineer Telecom (PTCC), Southern Zone	BSNL, Inspection Circle, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th Main, 47th Cross ,Bangalore-560041	
2.	PCSTE/SWR	Principal Chief Signal & Telecom Engineer, Rail Soudha, Gadag Road, Hubballi-580020	
3.	Member(Power), KPTCL	Chief Engineer Electricity, SLDC #28, Race Course Road, Bengaluru-560009	Copy for information

**ANNEXURE-I**

<b>CEA Case No.:</b> KNK-1073 <b>Name of the Power line:</b> LILO of 220 kV S/C Allipura – Ragalapadu (AP) Transmission Line at 220 kV Somasamudra S/s at Ballari.			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 19.662 km <b>S.R. Value</b> : 25000 Ohm-cm		
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>

<b>South Western Railway Letter No:</b> SG/SWR/PTCC/F-3694/2668		<b>Dated</b> 21.03.2024
1.	KDN to BYC Section	-Out of Parallelism-

E-mail: webstar@nic.in

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

B/46937/Sigs 7(b)/3695

01 Apr 2024

Office of the Chief Engineer Electricity,  
 Karnataka Power Transmission Corporation Limited  
 State Load Despatch Centre,  
 # 28, R.C. Cross Road,  
 Bengaluru – 560 009

**PTCC PROPOSAL FOR CONSTRUCTION OF 220KV DC LINE ON MC TOWERS  
 BY LILOING OF EXISTING 220KV SC ALLIPURA-RAGALAPADU (AP) LINE TO  
 THE PROPOSED 220/110/11KV RS AT SOMASAMUDRA (U/P) IN BALLARI  
 TALUK AND DISTRICT**

1. Refer your letter No CEE/SLDC/PTCC/F-3694/-8160-68 dt 18 Jan 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 Director (PTCC), CEA  
 Power Communication Development Division  
 NRPC Complex, 18-A Shaheed Jeet Singh Marg  
 Katwaria Sarai, New Delhi – 110016

- for information

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