



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**  
 \*\*\*\*\*

<b>CEA Case No.: KNK-981</b>		
<b>Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 400 kV Mylasandra-Kolar S/C Transmission Line at 400/220 kV Dommasandra S/s in Anekal Taluk. [Length- 0.82 km]- Regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	KPTCL: CEE/SLDC/PTCC/F-3284/8631-39	23.09.2021
(ii)	KPTCL: e-Mail	11.11.2024
(iii)	BSNL:SR-PTCC/SKT3693/2	03.07.2024
(iv)	South Western Railway: SG/SWR/PTCC/F-3284/2270	07.07.2022
(v)	Defense: B/46937/Sigs7(b)/2672	28.01.2022

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

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
400/220kV Dommasandra S/s	107	44418	0.106	1065	668	N.A	N.A

As per the details submitted by BSNL vide reference (iii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

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-981 <b>Name of the Power line:</b> LILO of 400 kV Mylasandra-Kolar S/C Transmission Line at 400/220 kV Dommasandra S/s		<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 0.82 km <b>S.R. Value</b> : 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.

<b>BSNL Letter No:</b> SR-PTCC/SKT3693/2		<b>Dated</b> 03.07.2024			
1.	DMS-D1 Exchange to DPS	IV Less than 430 V			
2.	DMS-D2 Exchange to Gopasandra				
3.	DMS-D3 Exchange to Heggondanahalli				
4	SJP-S1 Exchange to Sompura				
5	SJP-S2 Exchange to Billapura				
6	NRG-1 Exchange to Ramasagara				
7	NRG-1 Exchange to Muthanallur Vilaage				
8	NRG-1 Exchange to Gopasandra				

**ANNEXURE-II**

<b>CEA Case No.:</b> KNK-981 <b>Name of the Power line:</b> LILO of 400 kV Mylasandra-Kolar S/C Transmission Line at 400/220 kV Dommasandra S/s			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 0.82 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-3284/2270		<b>Dated</b> 07.07.2022
1.	Baiyyappanahalli to Karmelaram Section	-Out of Parallelism-
2.	Karmelaram to Heelalige Section	-Out of Parallelism-
3.	Heelalige to Anekal Section	-Out of Parallelism-

Telo : 23019746

Directorate General of Signals <sup>KNK-982</sup>  
 Signals - 7  
 General Staff Branch  
 Integrated HQ of MoD, (Army)  
 DHQ PO, New Delhi - 110011

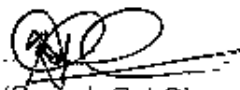
B/4693//Sigs 7(b)/2672

28 Jan 2022

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 400KV LILO LINE ON MC TOWERS FROM EXISTING 400KV MYLASANDRA-KOLAR SC TWIN MOOSE LINE TO THE PROPOSED 400/220KV RS AT DOMMASANDRA (LILO B/W T.NO 563 & 562) IN ANEKAL TALUK AND BENGALURU URBAN DISTRICT**

1. Refer your letter No CEE/SLDC/ PTCC/F-3284/-8631-39 dt 23 Nov 2021 (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.

  
 (Suresh Pal Choyal)  
 Lt Col  
 GSO 1 (Coord)  
 for SO-in-C

**Enclosures** : (As above)

**Copy to :-**

The Director (PTCC), CEA  
 Power Communication Development Division  
 NRPC Complex, 18-A Shaheed Jeeb Singh Marg  
 Katwaria Sarai, New Delhi - 110016

The DET(PTCC), Northern Zone  
 O/o PGM (North), QA & Inspection Circle,  
 D-Tax Building, Eastern Court, Janpath  
 New Delhi-110001

for information

