



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-999		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV DC Narendra – Mahalingpura at 220/110 kV Bannur RS (2.363 km)- regd.		
S. No	Reference No.	Dated
(i)	KPTCL: CEE/SLDC/PTCC/F-3365/13669-77	29.03.2022
(ii)	KPTCL: CEE/SLDC/PTCC/F-3365/10187-92	18.03.2023
(iii)	KPTCL : Email	12.08.2025
(iv)	BSNL:SR-PTCC/F-3365/2	01.08.2025
(v)	South Western Railway: SG/SWR/PTCC/F-3365/2346	29.06.2022
(vi)	Defense: B/46937/Sigs7(b)/2832	07.06.2022

The PTCC proposal submitted vide above references (i), (ii) and (iii) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above reference (iv) 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. SWR has issued NOC vide reference (v) above.

ADG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (vi). (Enclosed as Annexure II).

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
220/110 kV Bannur RS	148.9	30	0.12	1097	676	NA	NA

As per the details submitted by BSNL vide reference (iv) above, no Telephone Exchange is 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 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 Telecom (PTCC), Southern Zone	BSNL, Inspection Circle, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th Main, 47th Cross ,Bangalore-560041	
2.	Member(Power), KPTCL	Chief Engineer Electricity, SLDC #28, Race Course Road, Bengaluru-560009	Copy for information

ANNEXURE-I

CEA Case No.: KNK-999 Name of the Power line: LILO of 220 kV DC Narendra – Mahalingpura at 220/110 kV Bannur RS		Map Scale : 1 cm= 500 m Total Length : 2.363 km S.R. Value : 20,000 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/F-3365/2		Dated 01.08.2025			
A1	K Chandargi TE to K Chandargi BTS	Out of Parallelism			
A2	Godchi Temple to Corporation Bank				
A3	Salahalli TE to Belgaum Highway Cross				

Tele : 23019746

Annexure II

Directorate ^{KNK-999} General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi - 110011


07 Jun 2022

B/46937/Sigs 7(b)/2832/

Office of the Chief Engineer Electricity,
Karnataka Power Transmission Corporation Limited
State Load Despatch Centre,
28 Race Course Cross Road,
Bengaluru - 560 009

PTCC PROPOSAL FOR CONSTRUCTION OF 220KV DC LILO LINE ON MC TOWERS FROM EXISTING 220KV NARENDRA-MAHALINGPURA DC LINE TO THE PROPOSED 220/110KV RS AT SALAHALLI IN RAMADURGA TALUK BELAGAVI DISTRICT

1. Refer your letter No CEE/SLDC/PTCC/F3365/-13669-77 dt 29 Mar 2022 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(SP 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 Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016

- for information

D/R/Pradeep

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

12/16/c

