



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

CEA Case No. : KNK-952		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV D/C Somanahalli – T.K. Halli line at 220/66 kV Harohalli KIADB Ph-3 SS (0.146 km)- regd.		
S. No	Reference No.	Dated
(i)	KPTCL: CEE/SLDC/PTCC/F-3128/10785-92	07.01.2021
(ii)	KPTCL: Email	29.10.2025
(iii)	BSNL: SR-PTCC/SKT2902/5	13.09.2024
(iv)	South Western Railway: SG/SWR/PTCC/F-3128/2116	31.05.2021
(v)	Defense: B/46937/Sigs 7(b)/2296	25.02.2021

The PTCC proposal submitted vide above references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL 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 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 (iv) above.

ADG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (v) above (attached as Annexure –II).

EPR Zones for proposed substation 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
220/66kV Harohalli KIADB Ph-3 SS	111	30	0.38	2832	1836	70	16

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 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), Southern Zone	BSNL, Inspection Circle, 2 nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5 th Block, 9 th Main, 47 th 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-952 Name of the Power line: LILO of 220 kV D/C Somanahalli – T.K. Halli line at 220/66 kV Harohalli KIADB Ph-3 SS			Map Scale : 1 cm= 500 m Total Length : 0.146 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/SKT2902/5 Dated 13.09.2024

HAROHALLI TELEPHONE EXCHANGE

H-H1	HAROHALLI TE to POTTERY CRAFT PILLAR	Out of Parallelism
H-H2	HAROHALLI TE to HOSAGABBADI	
H-H4	HAROHALLI TE to BWWSSB	
H-H5	HAROHALLI TE to JAKKASANDRA	
H-H6	HAROHALLI TE to JAIN UNIVERSITY	
H-H7	HAROHALLI TE to KOLLIGANAHALLI	IV less than 430 V
H-H8	HAROHALLI TE to MEGALABEEDI PILLAR	Out of Parallelism
H-H9	HAROHALLI TE to DYASANDRA	
H-H10	HAROHALLI TE to KADU JAKKASANDRA	
H-H12	HAROHALLI TE to CHIKKASADENAHALLI GATE	

PADUVANAGREE TELEPHONE EXCHANGE

<u>P-P1</u>	PADUVANAGERE TE to PADUVANAGERE CROSS	Out of Parallelism
<u>P-P2</u>	PADUVANAGERE TE to HANUMANTHA NAGARA	
<u>P-P3</u>	PADUVANAGERE TE to MALLIGEMETLU	

Tele : 23019746

KNK-922 Annexure II

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

B/46937/Sigs 7(b)/2296

25 Feb 2021

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

**PROPOSED 220KV LILO LINE FROM EXISTING 220KV SOMANAHALLI-T.K.
HALLI DC LINE [CKT-2] TO THE PROPOSED 220/66KV HAROHALLI KIADB PH-
3 SUB STATION AT KIADB INDUSTRIAL AREA AT YADAVANAHALLI VILLAGE
KANAKAPURA TALUK RAMANAGARA DISTRICT ON SELF-EXECUTION BASIS
BY M/S KIADB**

1. Refer your letter No CEE/SLDC/ PTCC/F-3128/10785-92 dt 07 Jan 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat)
Maj
GSO 1 (Comn)
for SO-in-C

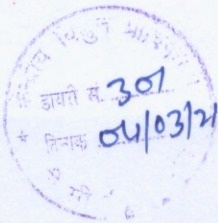
Enclosures : (As above)

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

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



22.03.21
श्री 2351