



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-985		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV Basavana Bagewadi - Vijayapura DC line at 400/220 kV Hadagali SS in Vijayapura (22.344 km)- regd.		
S. No	Reference No.	Dated
(i)	KPTCL: CEE/SLDC/PTCC/F-3308/9912-20	27.12.2021
(ii)	KPTCL: CEE/SLDC/PTCC/CEA/F-3308/6937-39	20.01.2025
(iii)	KPTCL: Email_EMD Parameters	01.12.2025
(iv)	BSNL: SR-PTCC/SKT-3794/4	05.04.2022
(v)	South Western Railway: SG/SWR/PTCC/F-3308/2293	20.01.2022
(vi)	Defense: B/46937/Sigs 7(b)/2729	17.02.2022

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

DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (vi) (attached 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 (k A)	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
400/220 kV Hadagali SS	202.96	47.25	0.2	4257	2748	71	NA

As per the details submitted by BSNL vide reference (iv) 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) SLPTCC	Chief Engineer Electricity, SLDC #28, Race Course Cross Road, Bengaluru - 560009	Copy for Information

ANNEXURE-I

CEA Case No.: KNK-985 Name of the Power line LILO of 220 kV Basavana Bagewadi - Vijayapura DC line at 400/220 kV Hadagali SS in Vijayapura			Map Scale : 1 cm= 500 m Total Length : 22.344 km S.R. Value : 20000 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/SKT-3794/4 Dated 05.04.2022		
1.	Exge to Bijapur Road	IV less than 430 V
2.	Exge to Main Road Pillar	

KNK-985

Tele : 23019746

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


B/46937/Sigs 7(b)/2729

17 Feb 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 PROPOSED 220KV MC LINE TO
 LILO OF EXISTING 220KV BASAVANA BAGEWADI-VIJAYAPURA DC LINE
 NEAR NANDHYAL 220KV SWITCHING STATION TO THE PROPOSED
 400/220KV HADAGALI SUB STATION IN VIJAYAPURA DISTRICT**

1. Refer your letter No CEE/SLDC/PTCC/F-3308/9912-20 dt 27 Dec 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your above mentioned letter.
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 Jeet 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

निदेशित
 2/2/22

21

