



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.: TNG-151		
Induced Voltage (IV) calculation in respect of PTCC proposal of 765kV DC line from 765/400 kV Bidar PS to 765/400 kV Maheshwaram SS (238.48 km) - regd.		
S. No	Reference No.	Dated
(i)	PGCIL: SR-I/PBTL/F-18/PTCC/01	01.02.2025
(ii)	PGCIL: Email EMD parameters	07.02.2026
(iii)	BSNL: SR-PTCC/PowerGrid/SKT07042025G792/2025-26/3	17.11.2025
(iv)	South Central Railway: SG.85/4/3/PTCC/SCR/2025-26/SCRTS 02 RTD	20.06.2025
(v)	Defense: B/46937/Sigs 7(b)/4405	21.05.2025

The PTCC proposal submitted vide above references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of South Central Railway 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 South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET(PTCC), BSNL(Bangalore) has given NOC vide reference (iii) above.

DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (v) (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
765/400 kV Bidar PS	384	44.1	0.067	2255	1362	NA	NA

As per the details submitted by BSNL vide above reference (iii), no telecom exchanges are lying 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, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th Main, 47th Cross ,Bangalore- 560041
2.	General Manager (S&T)	South Central Railway, O/o PCSTE, 7 th floor, Rail Nilayam, Secunderabad - 500025
3.	M/s PGCIL	B-9, Qutub Institutional Area, Katwaria Sarai, New – Delhi - 110016

ANNEXURE-I

CEA Case No.: TNG-151		Map Scale : 1 cm= 500 m			
Name of the Power line: 765kV DC line from 765/400 kV Bidar PS to 765/400 kV Maheshwaram SS		Total Length: 238.48 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.
South Central Railway Letter No.- SG.85/4/3/PTCC/SCR/2025-26/SCRTS 02 RTD Date: 02.06.2025					
1.	Marpalli (MRF) – Sadasivapet Road (SSPD)	9.37	0.00095	21919	21
2.	Sadasivapet Road (SSPD) – Vikrabad(VKB)	1	0.000096	21734	2
3.	Vikrabad(VKB) – Chitgidda(CTF)	0.84	0.0001	21472	2
4.	Chitgidda(CTF) – Gullaguda(GGD)	0.75	0.00073	21594	16
5.	Gullaguda(GGD) -Shankarapally(SKP)	0.5	0.000069	20285	1
6.	Timmapur(TMX)-Shadnagar(SHNR)	Outside IV consideration zone			
7.	Shadnagar(SHNR)-Balnagar(BABR)	6.9	0.0011	29822	33
8.	Balnagar(BABR)-Gollapali(GLY)	6.98	0.0051	33482	171
9.	Gollapali(GLY)-Jadcherla(JCL)	Outside IV consideration zone			

Directorate General of Signals
(Signals 7)
General Staff Branch **TNG-151**
Integrated HQ of MoD (Army)
Room No 648A
DHQ PO, New Delhi - 110011

B/46937/Sigs-7(b)/4405

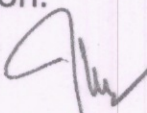
21 May 2025

Dy. General Manager (TLC)
Powergrid Bidar Transmission Ltd
Shadnagar (CAO), Plot No. 779
Sai Balaji Township, Solipur Village
Shadnagar, Rangareddy Distt
Telangana-509 216
Mob No: 83329 95437

**CONSTRUCTION OF 765 KV D/C BIDAR PS-MAHESHWARAM
TRANSMISSION LINE-PROPOSAL FOR PTCC APPROVAL-REG.**

1. Ref your letter No SR-I/PBTL/F-18/PTCC/01 dt 01 Feb 2025.
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.



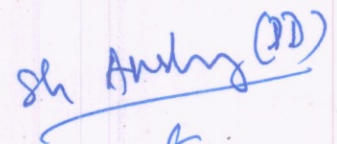
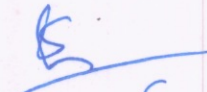

(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-1 (Communication)
for Additional Director General (Telecommunication)

Encl: As above

Copy to: -

HQ Southern Comd (Sigs)
Chief Engineer, PSCD Division
Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, RK Puram, Sector-1
New Delhi-110 066

- for info pl.



28/05

Central Electricity Authority
PSCD Division

Diary No.
Date