सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division
****

CEA Case No. : AND-727		
Induced Voltage (IV) calculation in respect of PTCC proposal for erection of 220KV DC line from existing Pattiseema SS to 400/220/11KV Guddigudem SS (22.432 km) - regd.		
S. No	**Reference No.**	**Dated**
(i)	TCAPL: CE/Projects/SE(220&132kV)/EE-3/DEE 3/F.Polavaram/DSN/D.No.131/2023	04.05.2023
(ii)	BSNL: SR-PTCC/SAP4940/5	30.10.2023
(iii)	South Central Railway: SG.85/4/3/PTCC/SCR/AP/2023-24/6 RC	22.05.2023
(iv)	Defense: B/46937/Sigs 7(b)/3374	06.09.2023

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of BSNL with respect to details furnished vide above reference (ii) 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.
GM (S&T), South Central Railway and DG Signals, MoD (enclosed as Annexure II) have issued No Objection Certificate (NOC) vide reference (iii) and (iv) respectively.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.
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.	Chief Engineer Projects	APTransco, Vidyut Soudha, Gunadala,Vijayawada-520004,Andhra Pradesh	

ANNEXURE-I

CEA Case No.: AND-727 Name of the Power line**:** Induced Voltage (IV) calculation in respect of PTCC proposal for erection of 220KV DC line from 220KV Pattiseema SS to 400/220/11KV Guddigudem SS (22.432 km) - regd.	**Map Scale :** 1 cm= 500 m **Total Length :** 22.432 km **S.R. Value :** 50000 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/SAP4940/5 Date: 30.10.2023					
GOPALAPURAM Telephone Exchange					
1	Gopalapuram Exg to C1	IV less than 430V			
2	Gopalapuram Exg to C2	4.4	0.0167	28001	467
3	Gopalapuram Exg to C4	IV less than 430V			
4	Gopalapuram Exg to C6	IV less than 430V			
Vegeswarapuram Telephone Exchange					
	Vegeswarapuram Exg to C1-C2	IV less than 430V			
	Vegeswarapuram Exg to C3-C4	IV less than 430V			
	Vegeswarapuram Exg to C5-C6	IV less than 430V			
	Vegeswarapuram Exg to C7-C8	IV less than 430V			
	Vegeswarapuram Exg to C9-C10	IV less than 430V			
Polavaram Telephone Exchange					
	Polavaram Exg to C1-C2	Out of parallelism			
	Polavaram Exg to C3-C4	Out of parallelism			
	Polavaram Exg to C5-C6	Out of parallelism			