



## 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. : AND-728				
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV VTS-Tallapalli-I Circuit at 220/132/33 kV SS Rentachintala (1.342 km) - regd.				
S. No	S. No Reference No. Dated			
(i)	TCAPL: CE/Projects/SE220&132kV/EE-2/DEE	18.05.2023		
	2/F.27PTCC/D.No.135/23			
(ii)	BSNL: SR-PTCC/SAP5325/6	21.10.2023		
(iii)	South Central Railway:SG.85/4/3/PTCC/SCR/2023-24/AP-9 RTD	21.07.2023		
(iv)	Defense: B/46937/Sigs 7(b)/3379	06.09.2023		

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of BSNL and South Central Railway with respect to details furnished vide above reference (ii) and (iii) respectively has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL and Southern Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively.

DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iv) (enclosed as Annexure III)

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	BSNL, Inspection Circle, 2 <sup>nd</sup> Floor, Sanchar Complex, WMS	
	Engineer (PTCC),	r (PTCC), Compound, Jayanagar 5 <sup>th</sup> Block, 9 <sup>th</sup> Main, 47 <sup>th</sup> Cross, Bangalore-560041	
	Southern Zone		
2.	Chief Engineer	APTransco, Vidyut Soudha, Gunadala, Vijayawada-520004, Andhra	
	Projects	Pradesh	
3.	General	Office of PCSTE, 7 <sup>th</sup> Floor, Rail Nilayam,	
	Manager/Tele	Secunderabad,500025	

## **ANNEXURE-I**

Map Scale : 1 cm= 500 m

Total Length : 1.342 km

CEA Case No.: AND-728

S.R. Value: 25000 Ohm-cm

Name of the Power line: LILO of 220 kV VTS-Tallapalli-I Circuit at

220/132/33 kV SS Rentachintala- regd

		Length of		Effective	
		Parallelis m	Mutual Coupling	Fault current	I.V in
S.No.	Telecom. Details	in Km.	in Ohms.	in Amps.	Volts.

BSNL Letter No. SR-PTCC/SAP5325/6 Date: 21.10.2023				
1	Rentachintala Exge to autostand 21 pillar	Out of parallelism		
2	Rentachintala Exge to opp Police Station 22 pillar	Out of parallelism		
3	Rentachintala Exge to sc school opp 23 pillar	Out of parallelism		
4	Rentachintala Exge to P21 Bodrai centre RCT	Out of parallelism		
5	Rentachintala Exge to P21 CGG Bank RCT	Out of parallelism		
6	Rentachintala Exge to P22 SBI Bank RCT	Out of parallelism		
7	Rentachintala Exge to P22 Andhra Bank RCT	Out of parallelism		

## **ANNEXURE-II**

Name o	ase No.: AND-728 f the Power line: LILO of 220 kV VTS-Tallapall /33 kV SS Rentachintala- regd	i-I Circuit at	Total Length	: 1 cm= 500 m : 1.342 km 25000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
	South Central Railway Letter No. SG.85/4/3/PT	CC/SCR/2023	-24/AP-9 RTD	Date: 21.07.20	)23
1	Nadikudi Jn(NDKD)-Gurujala-Rentachintala- Macherla(MCLA)		Out of p	arallelism	

1/33441/2024

Tele: 230 19746 Tele: 230 19746

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

B/46937/Sigs 7(b)/3379

06 Sep 2023

Chief Engineer, Projects **APTransco** Transmission Corporation of Andhra Pradesh Limited Vidyut Soudha, Gunadala Vijayawada – 520004, Andhra Pradesh

APTRANSCO-PROJECTS-SUPPLY, ERECTION, TESTING & COMMISSIONING OF 220KV DC LINE BY MAKING LILO OF 220KV VTS-TALLAPALLI-I CIRCUIT TO 220/132/33KV SS RENTACHINTALA AND 2NOS. 220KV BAYS AT 220KV SS RENTACHINTALA IN GUNTUR DISTRICT ON TURNKEY BASIS-PTCC **PROPOSAL** 

- Refer your letter No Lr. No. CE/ProjectS/SE220&132kV/EE-2/DEE-2/F.27 PTCC/D.No.135/23 dt 18 May 2023 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided as per 2. Map sheets received vide your letter mentioned above.
- Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(SP Choyal)

Lieutenant Colonel

General Staff Officer Grade 1 (Communication) for Additional Director General (Telecommunication)

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 Bharat Sanchar Nigam Limited

O/o PGM (North), QA & Inspection Circle,

D-Tax Building, Eastern Court, Janpath

New Delhi-110001

Please enamine & P Sh. Porateck

for information

Central Electricity Authority