



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

Case No. : AND-691 :
PTCC proposal of 220 kV DC line from 400/220 kV SS Kamavarapukota to 220/132 kV SS Bhimadole : 18.451 km

Reference:		
Sl. No.	Reference No	Dated
(i)	APTRANSCO: CPT 220/SE/PM/ PTCC/220KV line from K.Kota to BMDL/D.No.108/2019	29.01.2019
(ii)	BSNL: SR-PTCC/SAP/2317/04	05.09.2019
(iii)	South Central Railway: SG.85/4/3/PTCC/SCRAP202016RTD (details received via mail on 21.01.2021)	27.08.2020
(iv)	Defense: B/46937/Sigs 7(b)/1436	30.04.2019

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of South Central Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors, as applicable, have been considered. Vide above reference (iv), The Defence Authority have issued No Objection Certificate (NOC) (a copy enclosed as Annexure-III).

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken.

Encl.: As above.

Signature Not Verified

Digitally signed by RAGHVENDRA PRATAP SINGH
Date: 2021.07.23 14:06:25 IST

Director

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	Annexure-I & Annexure-III
2.	SSTE/TELE/HQ	South Central Railway, Head Quarters Office, Signal & Telecomm Branch, Rail Nilayam, Secunderabad-500025.	Annexure-II
3.	Chief Engineer, Construction	Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Vijayawada-520004	Copy for information

MIC

(Annexure - I)


Case No. SRPTCC/SAP/2317		SSA : Eluru				
Scale: 1 : 50000						
Name of Power line: 220 KV DC Line from 400/220 KV Kamavarapukota SS to 220/132/33 KV Bhimadole SS - LF comments .						
Length: 18.451 KMs				Type of Cable: PIJF		
Average SR value : 100,000 Ω -km						
No	Name of telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts	Safe Separation Distance
1	Dwarakathirumala Exchange	}				
1	Exchange to Inner Zone					
2	Exchange to P 21 - DP 2110					
3	Exchange to P 22 - DP 2202					
4	Exchange to P 23 - DP 2301					
5	Exchange to P 24 - DP 2403 22408					
6	Exchange to DP 0021					
7	" DP 0049					
2	Pavulurivarigudem Exchange	}	IV less than 430V			
1	Exchange to Inner Zone					
2	Exchange to Kattarajupalem					
3	Exchange to Marampalle					
4	Exchange to Mulakunta					
5	Exchange to Malasanikunta					
6	Exchange to Gallagudem - DP					
3	Bhimadolu Exchange	}				
1	Exchange to Inner zone					
2	Exchange to P 21 DP 2103					
3	Exchange to P 22 DP 2201					
4	Exchange to P 23 DP 2301					
5	Exchange to P 24 DP 2402					
6	Exchange to P 25 DP 2501					
7	Exchange to P 28 DP 2801					
4	Challachintalapudi Exchange	}				
1	Exchange to Inner Zone					
2	Exchange to p 21 DP 2101					
	Exchange to 21 DP 2104					
3	Exchange to P 22 DP 2201					
	Exchange to P 22 DP 2214					
	Exchange to P 22 DP 2215					
4	Exchange to P 23 DP 2302					
5	Pulla Exchange	}	Out of Parallelism			
1	Exchange to P 21					
2	Exchange to P 22 DP 2201					
3	Exchange to P 23 DP 2312					
4	Exchange to P 24 DP 2401					
5	Exchange to P 25 DP 2503					

(1/2)

6	Gunnampalli Exchange				
1	Exchange to Inner Zone				
2	Exchange to P 21 DP 2112				
3	Exchange to P 22 DP 2210				
4	Exchange to P 23 DP 2314				
5	Exchange to P 24 DP 2401				
6	Exchange to P 25 DP 2505				
7	Exchange to P 26 DP 2603				
7	Tadikalapudi Exchange				
1	Exchange to P 24				
2	Exchange to P 24 to Sagipadu				
3	Exchange to P 24 to Veerampalem				
4	Exchange to P 21				
5	Exchange to P 21 to Venkatagiri Ratnapuram				
6	Exchange to Society DP				
7	Exchange to Pillar 22				
8	Exchange to P 22 to Tallagokavaram				
9	Exchange to President DP				
10	Exchange to P 23				
11	Exchange to Veerisettygudem				
12	Exchange to CGGB				
8	Adamlli Exchange				
1	Exchange to Chinnamnaropalem				
2	Exchange to Ramalayam DP				
3	Exchange to Colony DP				
9	Kamavarapukota Exchange				
1	Exchange to P 22				
2	Exchange to P 22 to Anakalampadu Village				
3	Exchange to Jalapavarigudem Village				
4	Exchange to P 32				
5	Exchange to P 32 to uppalapadu Village				
6	Exchange to Nallagopuvarigudem Village				

IV less than 130 V

Out of Parallelism


 TANUJ
 सहायक निदेशक-II/Asstt. Director-II
 केंद्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-65

ANNEXURE - II

Case No.: AND-691

Name of the Power Line: 220 kV DC line from 400/220 kV SS Kamavarapukota to 220/132 kV SS Bhimadole.

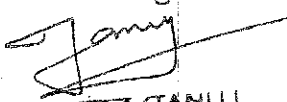
Map Scale : 1 cm = 500 m
Route Length : 18.451 km
Soil Resistivity : 100,000 ohm-cm

S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)
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South Central Railway Ref. No: SG.85/4/3/PTCC/SCRAP202016 RTD dated 27.08.2020

Affected Blocks & Telecom Circuits Details

		Outside IV consideration zone			00
1	Eluru- Denduluru				00
2	Denduluru-Bhimadolu	1.5	0.0054	9136	50
3	Bhimadolu-Pulla	Out of parallelism			00
4	Pulla-Chebrol	Out of parallelism			00


 तनुज / TANUJ
 सहायक निदेशक-II / Asstt. Director-II
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi-66

Tele : 23019746

(Annexure-III)

AND-691

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


B/46937/Sigs 7(b)/1436/

30 Apr 2019

Chief Engineer, Construction
Transmission Corporation of Andhra Pradesh Ltd
AP TRANSCO, Vidyut Soudha
Vijayawada - 520 004

**SPECIFICATION NO. APT-e-02/2018 SUPPLY, ERECTION, TESTING AND COMMISSIONING
OF 220KV DC LINE FROM 400/220KV KAMAVARAPUKOTA SUBSTATION TO 220/132/33KV
BHIMADOLE SUBSTATION-PTCC PROPOSALS-FORWARDED-REGARDING**

1. Ref your letter No Lr. No. CPT 220/SE/PM/ /PTCC/220KV Line from K.Kota to BMDL/D.No. 108/2019 dt 29 Jan 2019 (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.


(AV Umdekar)
Lt Col
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.