

भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority पावर कम्युनिकेशन डवलप्मेंट प्रभाग Power Communication Development Division

No. CEA/PCD/PTCC/AND-683/312-14

Date: 18/03/2019

The Divisional Engineer Telecom (PTCC), QA & Inspection (T&D) circle, BSNL, 1st floor, Raj Bhavan Exchange, No.26, Sardar Patel Road, Guindy, Chennai-600032

<u>Subject:</u> PTCC Route Approval for 400kV D/C Vemagiri – Kamavarapukota T/L Reference:

BSNL letter no. SR-PTCC/SAP-2104/6 dated 7/12/18

ii) South Central Railway letter no. SG.85/4/3/PTCC/SCRAP201829 RTD dated 28/8/18

iii) Defense letter no. B/46937/Sig 7(b)/1138 dated 19/7/18

Sir,

The low frequency induction on BSNL and South Central Railway telecommunication circuits as per details furnished vide above cited references (i) and (ii) respectively has been examined. The average soil resistivity value has been taken as 2500 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL and South Central Railway telecommunication circuits under SLG (Single Line to Ground) fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered. Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC), a copy is enclosed at Annex-III.

Taking above into consideration, kindly issue PTCC Route Approval.

Encl: As above

Yours faithfully,

(Naresh Bhandari) Chief Engineer

Copy to:

(i) SSTE, Head Quarter Office, S&T Branch, Rail Nilayam, Secunderabad – 500 025 (with Annexure II only)

(ii) Chief Engineer (Construction), APTRANSCO, Vidyut Soudha, Vijajawada-520 004

CEA Can. No. AND-683. Case No.SRPTCC/SAP/2104 SSA: East Godawari/West Godawari Scale: 1:50000 Name of Power line: :- 400 KV Twin Moose DC Line from existing 400/220 KV Vemagiri SS to Proposed 400/220 KV Kamavarapukota SS -LF comments . Length: 92.471 KMs Type of Cable: PIJF Average SR value : 25,00 ohm-cm. No Name of telecom line LOP in KMs MC in FC in Amps IV in Volts Safe Ohms Separation Duvva Exchange Distance Exchange to S.R.Palem P 21 Exchange to Muddapuram P 25 Owtside Consideration Zore -3 Exchange to Pasalapudi P 29 Peravali Exchange Exchange to Ajajaram P 23 2 Exchange to Teeparru P 21 Owaside Consideration 3 Exchange to Kakaraparru P 22 Undrajavaram Exchange Exchange to Tanuku Road P24 2 Exchange to Local P 23 Exchange to Local 2 P25 Exchange to Mortha P 26 Consideration Lone Exchange to Damennu P 22 6 Exchange to Velagaduru P 21 Exchange to Tadiparru P 27 Velivennu Exchange 4 Exchange to Khaldari P 25 43NV Exchange to Khaldari2 P 26 Consideration Zoal . Exchange to Velivennu Centre P 21 Exchange to Velivennu Market P 22 Exchange to Velivennu Local 1 P 23 6 Exchange to Velivennu Local 2 P 24 Outside Consideration zone Kanuru Exchange Exchange to Local 1 P 21 Exchange to Munipalli P 24 less dan 430 Exchange to Local 2 P 25 4 Exchange to InnnerZone Exchange to Pendyala P -23 6 Exchange to Local 2 P 22 Exchange to Kanuru Agraharam P 25 8 Exchange to Usulumarru P 26 Exchange to Naidpalli P 27

नरेश शंडारी/NARESH BHANDARI
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विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
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10					1			
18	Ananthapalli Exchange							
1	Exchange to Chodavaram 23 B							
2	Exchange to Telikicharla 23 A	1 -	- On	tside	IV C	and	devetion	Zone -
3	Exchange to Nabhipeta	1				-1131		Serve
19	Venkata Ramanan Goday Exchange							
1	Exchange to Ramanna Gudem	1						
2	Exchange to Local (InnerZone)) -	- OW	tside -	W	Cons	devation	Zone.
20.	Pattempalem Exchange					-		
1	Exchange to Veerampalem P 23	1			-			
2	Exchange to Bangaru Guday P24	17	Dw.	side -	TIV &	cone	dovetro	n zone
3	Exchange to Kommuguday P 21	1		Tive	10	2	00010010	Crore
4	Exchange to Neeladripuram P 22	1	-10	len	then	m 6	+30V -	
21	Bhimadola Exchange							
1	Exchange to M N palli X road to M.N .Palli Village	1)						
2	Exchange to M N palli X road to M.N .Palli Village	1	a la	W 6-1	-	Labor	and the same of	10 to
3	Exchange to M.N.Palli Road to Gopalapuram	1 -	- 0	Hside	IV	CDV	sid and	for zone
4	Exchange to M.N.Palli Road to Gopalapuram Village)		1000			3100	
22	Gunnampalli Exchange	1		0 -			The second	
1	Exchange to Kappalakunta	1					S INVIDEN	
2	Exchange to Mahadevapuaram	1						
3	Exchange to Buttayagudem	1> -	-0.	tride	IV	Con	sidevata	in Zow
1	Exchange to Gunnampalli Village		00	N181000	10	Corq	3 10011-101	W. C.
3	Pavulurivarigudem Exchange							
	Exchange to Pavulurivarigudem	1						
	Exchange to Gollagudem	1		11			and the same	
	Exchange to Boppanavarigudem	17	-1V	les	the	-	430V -	
	Exchange to Tirumalampalem)	10	nan	0.0		7.500 -	
	Exchange to Marampalli Raj upalen.	2.	0	0.031	130	55	405	
	Exchange to Jajulakunta May ampalle	2.	-	0.044	1301		574	
7.	Exchange to Jajulakunta.	-	IV	des	the	~	4301-	
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भारत सरकार/Govt. of India
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24	Dwarkatirumala Exchange	
1	Exchange to Venkatakrishnapuram	
2	Echange to Tadicharla	- 1V less than 430V
3	Exchange to Gundugolanukunta	
4	Exchange to Dorasanipadu	
5	Exchange to Venkteswara temple	y - Ont side IV Consideration non
5	Exchange to Rallakunta	CSC 1524 CI SHI QUARTE CONTROL OF THE CONTROL OF TH
7	Exchange to Timmapuram	- 1V less than 4201
25	Kamavarapukota Exchange	- 10 1es Jhn 430V
	Exchange to Ramanapalem P 31) (1 (24 d 24 b 1
	Exchange to East Yadavalli P 31	
	Exchange to Uppalapadu P 31	
	Exchange to Ankalamapadu P 22	- Outside 10 consideration zone
	Exchange to Jalaparugudam P 22	
6	Tadikalapudi Exchange	
	Exchange to Veersetigudam P 23	
	Exchange to Tallagokavara P 22	
	Exchange to Sagipadu P 24	
	Exchange to Veerampalem P 24	- Outside 10 consideration zone
1	Exchange to Ratnagirinagar P 21	
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1		
		नरेश भंडारी /NARESH BHANDARI मुख्य अभियन्ता / Chief Engineer
		केन्द्रीय विद्युत प्राधिकाण्य/वृ.ह. 🌣
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ANNEXURE - II

Case No.: AND-683 Name of Power line: 400kV D/C Vemagiri – Kamavarapukota T/L		Map Scale : 1cm=500mts Total Length : 92.471 Km S.R. Value : 2500 Ohm-cm			
S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

1	Bhimadolu(BMD)-Pulla(PUA)	Outside IV consideration zone		on zone	0
2	Pulla(PUA)-Chebrol(CEL)	Outside IV consideration zone			0
3	Chebrol(CEL)-Badampudi(BPY)		Outside IV consideration zone		-
4	Badempudi(BPY)-Tadepalligudem(TDD)	Outside IV consideration zone Outside IV consideration zone			0
5	Tadepalligudem(TDD)-Navabpalem(NBM)	Outside IV consideration zone			0
6	Navabpalem (NBM)-Nidadavolu(NDD)		Out of parallelism		0
7	Nidadavolu(NDD)-Chagallu(CU)		de IV consideration		0
8	Chagallu(CU)-Kovvur(KVR)		de IV consideration		0
)	Kovvur(KVR)-Godavari(GVN)		de IV consideration		0
0	Godavari(GVN)-Rajamundry(RJY)		de IV consideration		0
1	Rajamundry(RJY)-Kadiyam(KYM)		de IV consideration		0
2	Kadiyam(KYM)-Dwarapudi(DWP)	1.0	0.00128	14188	18
3	Dwarapudi(DWP)-Anaparti(APT)	Outsio	de IV consideration		0
4	Nidadavolu(NDD)-Kadhari(KLDI)	1.0	0.00142	8905	11
		बुद्ध अभियन्ता कन्दीय विद्युतः विद्युतः भंजालय/। भारतः सरकारः	RESH BHANDARI /Chief Engineer श्रीश्वरण/C.E.,A. vinistry of Power Govt. of India vew Delhi-66		

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)/1138 /

The Chief Engineer, 400 KV, Construction AP TRANSCO, Vidyut Soudha, Gunadala, Vijayawada 19Jul 2018

ERECTION OF 400 KV TWIN MOOSE DC LINE FROM EXISTING 400/220 KV VEMAGIRI SUB – STATION TO PROPOSED 400/220 KV KAMAVARAPU KOTA – STATION (ZONE-5) ON TURNEKY BAISIS

- Reference your letter Lr.No.CE/400kv/SE-PM/D3-A1/F:Vem-K.Kota line/D.No.09
 dt 04 Apr 2018.
- 2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
- Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat)

GSO 1 (Comn) for SO-in-C

Copy to :-

Central Electricity Authority
Power Communication Development Division
NRPC Complex,18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi – 110016

- For information.