

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/TNG-51/ 322 - 324

Date: 19/03/2019

Divisional Engineer Telecom (PTCC), QA & Inspection (T&D) circle, BSNL, 1<sup>st</sup> Floor, Raj Bhawan Tel. Exchange, No.26, Sardar Patel Road, Guindy, Chennai-32

Subject: PTCC Route Approval for 400kV D/C Tukkapur - Narsapur T/L under Kaleshwar Lift Irrigation Scheme

## Reference:

BSNL letter no. SR-PTCC/STS-2085/5 dated 14/12/18

ii) South Central Railway letter no. SG85/4/3/PTCC/SCRTS201824 RTD dated 30/4/18

iii) Defense letter no. B/46937/Sig 7(b)/1070 dated 18/7/18

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 10000 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 (Lift Irrigation Scheme), TSTRANSCO, Vidyut Soudha, Hyderbad-520 082

MIC

Sc	ase No.SRPTCC/STS/2085 cale: 1:50000	S	SA: M	eda	ak				
N	Jame of Power I'm								
1	Vame of Power line: :- 400 KV TMDC Line 400/220/132 KV Nar	from	propos	ed	400/11 KV	/ Tukk	2011 00	4-	
		rsapu	ır SS ur	nde	r Kaleshw	aram	l ift Irrigo	10	
Le	ength: 55.079 KMs		_			arann	Liit iiriga	tion -LF com	ments .
-								Type o	of Cable: PIJ
Av	rerage SR value: 10,000 ofm	-				-		-	
No	Name of telecom line								
	rame of telecom line	LO	P in KN	Лs	MC in	FC	in Amps	IV in Volts	Safe
					Ohms			1 TO III VOIL	Separatio
Α	Toopran Exchange	+							Distance
1					-				Distance
1	Exchange to AI (P-21)		2	-	0 11 0	11	2.0		
2	Exchange to A2 ~ D P .	+-		_	0.0402		324	455	
3 .	. Exchange to Pillai p-23	-	. 3		0.057	- 11	324	645	
В	Nacharamgutta Exchange			11	1 de		tion	+301-	
1	Exchange to B1(Pular 22)	_						1	
2	Exchange to B2 DP			11	1128	100	on a	3011.	
3	Exchange to B5 Pagier		5.2		2.0685	- 9	259	630	
4.	Exchange to B4 Pillar.	1					,		
	Narsapur SDCA	5	1	$\vee$	1-285	d'h	m-	4300.	
4	Shivampet Exchange			1					
	Exchange to A21 DP			4					
2	Exchange to A22 DP		_	1	V 1/2	N C	neat	430V -	
	3	_	$-\circ$	W	0+	Da	rellet	Inn	
3	Shabashpally Exchange			+					
	Exchange to B2 / Pondy Dillow	,		1					-
	Exchange to B3 ( Poteram 1/1 laye pillar)	-		$\perp$					
3.	Exchange & B 1.	7	-10	1	1211	the	m 4	364	-
	Thoguta Exchange	_		$\perp$					
	Exchange to Z6- Dp 53	-		$\perp$					
	Exchange to Z6-DP 54	200	2		0419		000	629	
	Exchange to A5- DP a	01-	7	10	·Oulg	15	000	629	
	Exchange to A5- DP b	<del>) -</del>		-				1	
	Exchange to A5- DP c		- 7	$\vdash$	0				
	Exchange to A5- DP d		-1	-	len	th	m 4	30V -	
	Exchange to A5-DPe			-					
	Exchange to A6-DP101			-					
	Exchange to A6-DP102	-		_					
	Exchange to A6-DP103	-							
]	Exchange to A6-DP104			_					
]	Exchange to A6-DP105		1 4	1	1 1	-			
1	Exchange to A6-DP106	_		V_	12%	dh	en 4	300 -	
I	Exchange to A6-DP107								
I	Exchange to A6-DP108		-	-	<u> </u>	Λ.			
E	Exchange to A6-DP109					A			
	Exchange to A6-DP110		-						
			-		2				
			-	or s	TETT /NARI	ESH B	HANDARI		
C	antial.			क्य	अभियन्त /	Chief E	ngineer		
	Toppran Erchange to AZIDP			1775	थ विद्युत प्रार्ग मंत्रालय/Mir	यकरण.	C.E.A.		

1/2

1	8 Exchange to J-	
-	9 Exchange to K- DP 48	
2	- TO IC DI 40	
2	Be to K. DI 49	
	go to R- DI 50	y - W less then 430V
2	Be to IC DI 31	1 1-25 mm 433V
23	Exchange to K- DP 52	
	Miridoddi Exchange	
24	Be to IC DI 0/	
25	Exchange to R- DP68	
26	Exchange to R- DP69	
27	Exchange to R- DP70	- W les onen 430V -
28		
29		
30	Exchange to M- DP g	
31		
32	Exchange to M- DP i	> - Out of Parallelism
33	Exchange to M- DP j	
34	Exchange to B5- DP 86	
35	Exchange to B5- DP 87	
6	Exchange toB5- DP 88	
7	Exchange to B5- DP 89	- out of Varaldism
8	Exchange to B5- DP 90	
0	Exchange to M- M14	
1	Exchange to Y-DP91	- 1V less than +38V
2	Exchange to Y-DP92	
3	Exchange to Y-DP93	
4	Exchange to Y-DP94	, L
5	Exchange to Y-DP95	
5	Exchange to Z-DP96	
7	Exchange to Z-DP97	7 - V 129 Than 430V
3	Exchange to Z-DP98	
)	Exchange to Z-DP99	
	Exchange to Z-DP100	
	Exchange to Z1	
	Exchange to Z2	
	Exchange to Z3	6 - outside IV Consideration some
	Exchange to Z4	S M
-		नर्श भड़ेरा/NAREAH BHANDAR
		केन्द्रीय विद्युत श्रीधकरण / C.E.A. विद्युत मंत्रालय/Mimstry of Power

बहुत महालय/Millisty का Ex-भारत सरकार/Govt. of India मई दिल्ली/New Delhi-66

ANNEXURE - II

400kV D/C Tukkapur - Narsapur T/L under Kaleshwar Lift Irrigation Scheme			Map Scale : 1cm=500mts Total Length : 55.079 Km S.R. Value : 10000 Ohm-cm		
S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

	South Central Railway Ref. No. SG85/4/3/PTCC/SCRTS201824 RTD dated 30/4/18						
1	Wadiaram(WDR)-Masaipet(ME)	Out of Parallelism					
2	Masaipet(ME)-Manoharabad(MOB)	7	0.0035	11300	0 40		
3	Manoharabad(MOB)-Medchal(MED)		Out of Parallelism		0		
			1.1				
		न	BHANDARI				
			Engineer T/C.E.A.				
		पि	of India				
			नई दिल्ली/New D				
			,				

ANNEX-III-Ma-51

Tele: 23019746

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

& Jul 2018

B/46937/Sigs 7(b)/1070 /

Chief Engineer, Lift Irrigation Schemes, TSTRANSCO, Vidyut Soudha, Hyderabad - 5000082

## ERECTION OF 400 KV TMDC LINE FROM PROPOSED 400/11 KV TUKKAPUR S/S TO 400/220/132 KV NARSAPUR SS UNDER KALESHWARAM LIFT IRRIGATION SCHEME

- Reference your letter LR.No.CE(LIS)/SE(LI)/DE3(LI)/AE/PTCC/400KV Tukkapur/ D.No.07/2018 dt 06 Apr 2018.
- No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
- 3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat)

Maj

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.