

भारत सरकार

Government of India विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority पावर कम्यनिकेशन डवलप्पेंट प्रभाग

Power Communication Development Division

No.CEA/PCD/PTCC/TN-666 /289 - 290

Date:15/03/2019

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

Subject:

PTCC Route Approval for 230kV S/C Arasur -Gobi T/L

Reference:

i) BSNL letter no. SR-PTCC/TN 1969/08 dated 26/07/2018

ii) Southern Railway letter no. W.384/3/2/1168 dated 18/01/2018

iii) Defense letter no. B/46937/Signs 7(b)/1283/ dated 21/01/2019

Sir.

The instant PTCC proposal has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom Circuits of Southern Railway; with respect to details furnished vide above reference has been computed. The average Soil Resistivity (SR) value has been taken as 5,000 Ohm Cm, as intimated by Power Authority (TANTRANSCO). The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of Southern Railway circuits under single line to ground fault condition have been computed and are enclosed at Annex-I & II respectively. The screening factors, as applicable, have been considered.

Vide Ref. (iii) above, the Defense authority have issued No Objection Certificate (NOC) (enclosed at Annex-III).

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval.

Encl.: As above

(Naresh Bhandari) Chief Engineer

Copy to:

(i)Dy.Chief Signal Telecommunication Engineer, Southern Railway, Headquarters Office, S&T Branch, Chennai- 600003 (with Annexure II only).

(ii) Superintending Engineer/Transmission-I, TNTRANCO,6th Floor, NPKRR Maaligai,144, Anna Salai.Chennai.-600002

MIC

CEA. Case No. TN-666

	No.STN 1969			SSA:	rode			
Name of the power line			Proposed 230KV SC line on DC towers from Arasur 400KV SS(PGCIL) to Gobi 230KV SS					
Lengt	4/1	917	17 Kms					
	age SR value: 9000 ohm cms							
SI.No	Tame of refecon line		LOP in KMs	MCin	/pe of BSNL telecom cable : PIJF C in Ohms FC in Amps IV in Voltage			
1	MALAYAPALAYAM Exge UG cables			IVIC III	Onns	FC in Amps	IV in Volts	
1	Exge to Pillar 22 to DP2215)					
2	Exge to Pillar 22 to DP2224		1	_				
3	Exge to Pillar 33 to DP3340		-	11/	1011	10	1	
4	Exge to DPIZ06		ſ	11.0	1215	Jun 2	30V -	
5	Exge to DPIZ12	-	1	-				
6	Exge to DPIZ23	+)					
1	KOLAPPALUR Exge UG cables	T		+		-		
1	Exge to Pillar 31 to DP3112	+)	1		-		
2	Exge to Pillar 21 to DP2132	+	/	-				
3	Exge to Pillar 21 to DP2145			111	1			
4	Exge to Pillar 21 to DP2155			IV	1ers o	men of	301 -	
5	Exge to DPIZ12	+		-				
6	Exge to DPIZ36	1	1,00		355			
					7 7 1	9000	202	
. 7	Exge to DPIZ56		117			9000	320	
. 7	Exge to DPIZ56	-	_ IV	10		m 43		
	Exge to DPIZ56 D.STN 1969		10	10	s de			
		_		SSA:Co	mbatore	W 43	b U	
ase No	D.STN 1969	Pr	oposed 230KV	SSA:Coi	mbatore on DC tow	W 43	b U	
ase No	o.STN 1969 of the power line	Pr	oposed 230K\	SSA:Coi	mbatore on DC tow		b U	
ase No	o.STN 1969 If the power line 47.91	Pr	oposed 230K\	SSA:Coi SC line bi 230KV	mbatore on DC tow	ers from Arasur	400KV	
ase No	o.STN 1969 If the power line 47.91: SR value: ohm cms	Pr	oposed 230K\	SSA:Coi SC line bi 230KV	mbatore on DC tow	W 43	400KV	
ase No	o.STN 1969 If the power line 47.91: SR value: ohm cms SULUR Exge UG cables	Pr	oposed 230K\	SSA:Coi SC line bi 230KV	mbatore on DC tow	ers from Arasur	400KV	
ase No ame o ngth: /erage	o.STN 1969 If the power line 47.91: SR value: Ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111	Pr	oposed 230K\	SSA:Coi SC line bi 230KV	mbatore on DC tow	ers from Arasur	400KV	
ase No ame o ngth: verage	o.STN 1969 If the power line 47.91: SR value: Ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ame o	o.STN 1969 If the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201	Pr	oposed 230K\	SSA:Coi SC line bi 230KV	mbatore on DC tow	ers from Arasur	400KV	
ame or ngth:	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
arme or night:	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: /erage	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ength: verage	o.STN 1969 of the power line 47.91: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 31	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ength: verage 1 2 3 4	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 30 to Pillar 32 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage 1 2 3 4 1 2 3 4	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 31 to DP3105 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 30 to DP1 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2 VAGARAYAMPALAYAM Exge UG cables	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage 1 2 3 4 1 2 3 4 5 IIII	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 32 to DP 3201 Exge to Pillar 23 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 30 Exge to Pillar 30 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2 VAGARAYAMPALAYAM Exge UG cables Exge to Pillar 01 to DP0126	Pr	roposed 230KV G(PGCIL) to Go ns	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ength: verage 1 2 3 4 1 2 3 4 5	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 32 to DP 3201 Exge to Pillar 32 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 30 to DP1 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2 VAGARAYAMPALAYAM Exge UG cables Exge to Pillar 01 to DP0126 Exge to Pillar 21 to DP2168	Pr	roposed 230KV S(PGCIL) to Go ns	SSA:Coi	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage 1 2 3 4 1 2 3 4 5 IIII 1 2	f the power line 47.91: SR value: SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 32 to DP 3201 Exge to Pillar 32 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 31 Exge to Pillar 30 Exge to Pillar 30 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2 VAGARAYAMPALAYAM Exge UG cables Exge to Pillar 01 to DP0126 Exge to Pillar 31 to DP3164	Pr	roposed 230K\s(PGCIL) to Go	SSA:Coi SC line bi 230KV	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	
ase No ame o ngth: verage 1 2 3 4 1 2 3 4 5 IIII 1 2 3 4	f the power line 47.91: SR value: ohm cms SULUR Exge UG cables Exge to Pillar 21 to DP2111 Exge to Pillar 32 to DP 3201 Exge to Pillar 32 to DP 2302 ARASUR Exge UG cables Exge to Pillar 20 Exge to Pillar 31 Exge to Pillar 30 to DP1 Exge to Pillar 20 to Pillar 32 Exge to Pillar 20 to Pillar 32 to DP2 VAGARAYAMPALAYAM Exge UG cables Exge to Pillar 01 to DP0126 Exge to Pillar 21 to DP2168	Pr	roposed 230KV S(PGCIL) to Go ns	SSA:Coi	mbatore on DC town / SS BSNL telec	ers from Arasur	400KV	

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नरेश भंडारी/NARESH BHANDARI मुख्य अभियन्ता/Chief Engineer केन्द्रीय विद्युत प्राधिकरण/C.E.A. विद्युत मंत्रालय/Ministry of Power भारत सरकार/Govt. of India नई दिल्ली/New Delhi-66

SI.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
IV	CHEYUR Exge UG cables	2		- mranps	IV III VOIES
2	Exge to Pillar 22 to DP2208				
3	Exge to Pillar 23 to DP2301	1-1V	Jess Than	430V	
4	Exge to Pillar 24 to DP2438	1			
V	Exge to Pillar 25 to DP2559				
1	KARUVALUR Exge UG cables	~			
2	Exge to Pillar 21 to DP2132				
3	Exge to Pillar 22 to DP2254 Exge to Pillar 23 to DP2356	1			
4	Exge to Pillar 24 to DP2452	-10	Less than	430V	pulled Proposition
VI	TEKKALUR Exge UG cables				
1	Exge to Pillar 21 to DP2158	7			
2	Exge to Pillar 22 to DP253	1	1		
3	Exge to Pillar 23 to DP2371	>-10	less the	430V .	
4	Exge to Pillar 24 to DP2497	1			
VII	THIRUMURUGAN POONDI ExgeUG cables	-			
1	Exge to Pillar 22 to DP2293	,			
2	Exge to Pillar 24 to DP2465	1-0w	11. 110		
VIII	AVINASHI Exge UG cables		side IV C	onsiderati	in Zont-
1	Exge to Pillar 21 to DP2176	7			
2	Exge to Pillar 22 to DP2284				
3	Exge to Pillar 23 to DP2375				,
4	Exge to Pillar 24 to DP2489				
5	Exge to Pillar 25 to DP2557				
6	Exge to Pillar 26 to DP2689				
7	Exge to Pillar 27 to DP2769				
8	Exge to Pillar 28 to DP2877				
9	Exge to Pillar 29 to DP2991				
10	Exge to Pillar 32 to DP3243	1 - IV	less that	V 4.30V -	-
11	Exge to Pillar 33 to DP3354	>			
12	Exge to Pillar 41 to DP4188				
13	Exge to Pillar 42 to DP4271	-			
14	Exge to Pillar 52 to DP5270				
9	Exge to Pillar 53 to DP5372				
10	Exge to Pillar 61 to DP6194				
11	Exge to Pillar 62 to DP6284				
12	Exge to Pillar 65 to DP6592				
13	Exge to Pillar 72 to DP7256				
14	Exge to Pillar 73 to DP7365		1 1		

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नरेश मंडारी/NARESH BHANDARI मुख्य अभियन्ता/Chief Engineer केन्द्रीय विद्युत प्राधिकरण/C.E.A. विद्युत मंद्रालय/Ministry of Power भारत सरकार/Govt. of India नई जिल्ली/New Delhi-66

ANNEXURE - II

Case No.: TN-666

Name of the Power Line: 230kV S/C Arasur--Gobi T/L

Map Scale: 1cm=500mts
Total Length: 47.917Km.
S.R. Value: 5,000 Ohms-cm

		Length of	Mutual	Effective	IV in
SI.No.	Block & telecom.circuit Details	Parallelism in	Coupling	Fault	Volts.
		Km.	in Ohms.	current in	
				Amps.	

Ref. No. W.384/3/2/1168 Date: 18/01/2018 AFFECTED BLOCK & TELECOM CIRCUITS DETA Tiruppur-Sulur Road	Outside IV cons	ideration zone		0
		ideration zone		0
		ideration zone		0
Firuppur-Sulur Road	Outside IV cons	ideration zone		0
Trappor-Odiur Road	Outside IV cons	Ideration zone		0
		1/1		
		1/		
		1/		
		/ \	1	
		1	V	
			PH BHANDARI	
	नर	भ भड़ारा/NARCE	nief Engineer	
	3	चीय विद्युत प्रा	THYOI/C.E.A.	
	<u></u> বি	युत मंत्रालय/Mir	istry of Power	
		भारत सरकार/C	w Delni-66	
		alf lacent		
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			भारत सरकार/प नई विस्ली/Ne	नरे हैं गंडारी/MARESH BHANDARI पद्ध अविवाद / Chief Engineer प्रकार विद्या प्राप्त कर है । पद्ध प्राप्त प्राप्त कर है । पद्ध प्राप्त प्राप्त कर है । पद्ध प्र प्राप्त कर है । पद्ध प्राप्त कर है ।

ANNEX-III TN-666

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)/1283/

2 Jan 2019

Superintending Engineer/Transmission-I&Secretary/ Power, SLPTCC, Tamil Nadu Transmission Corporation Limited 6th Floor, No. 144, Annasalai Chennai-600 002

PTCC PROPOSAL-230KV SINGLE CIRCUIT LINE ON DC TOWERS FROM ARASUR 400KV SS (PGCIL) TO GOBI 230KV SS-REG

- 1. Ref your letter No Lr. No. SE/TR-I/EM/A1/F.PTCC/D.No 01/18 dt 05 Jan 2018 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
- Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat)

Маj

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.