



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

No. CEA/PCD/PTCC/GOA-1/215-217

Date: 19/02/2019

Divisional Engineer (PTCC), Inspection Circle,
Bharat Sanchar Nigam Limited (BSNL),
3rd Floor, D-Wing, BSNL Admin Building
Juhu Tara Road, Santacruz (West)
Mumbai (Maharashtra)-400054

Subject: PTCC Route Approval for Xeldem-Mapusa 400kV D/C Transmission Line

- Ref:** i) BSNL Letter No. IC/MBI/PTCC/MRA-2390/04 Dated 10/12/18
ii) Konkan Railway Letter No. KR/KW/SG/PTCC/IV/400KV D/C Mapusa Dated 13/02/19
iii) Defense letter No. B/46937/Sig 7(b)/1356 Dated 21/12/18

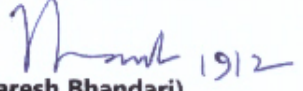
Sir,

The low frequency induction on BSNL and Konkan 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 15000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL and Konkan 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:

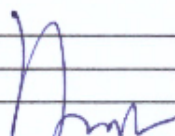
1. Regional Signal & Telecom Engineer, Konkan Railway Corporation Limited, Shirwad, Karwar-581306 (Karnataka) (Annexure-II only)
2. M/s Goa-Tamnar Transmission Project Limited, A2/2, Second Floor, New Horizons, D.B. Marg, Miramar, Panjim, Goa-403001

MIC

ANNEXURE - I

Case No.: GOA-1					
Name of the Power Line: XELDEM-MAPUSA 400kV D/C Transmission Line		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 54.77 कि.मी. एस. आर. मान : 15,000 ओम-सेमी			
S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

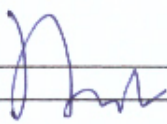
BSNL DETAIL		DATED: 10/12/2018			
Ref. No: IC/MBI/PTCC/MRA-2390/04					
(A)	MAPUSA Exchange				
	Exchange to Girim — 200 Pair	IV less than 430 V			
	Exchange to Khorlim — 200 Pair				
	Exchange to Gaunswada — 200 Pair				
(B)	BASTORA Exchange				
	Exchange to Girim — 100 Pair	IV less than 430 V			
(C)	UCASSIM Exchange				
	Exchange to Paliem — 100 Pair	IV less than 430 V			
(D)	KARASWADA Exchange				
	Exch to Danda — 50 Pair	IV less than 430 V			
	Exch to Kucheli — 100 Pair				
(E)	DLC Morod Exchange				
	Exch to Buvdez Bazar — 400 Pair	IV less than 430 V			
(F)	Khorjuem Exchange				
	Exchange to Kalvim — 100 Pair	IV less than 430 V			
	Exchange to Ponolem — 100 Pair				
	Exchange to Khol — 100 Pair				
(G)	Poira Exchange				
	Exch to Karbhat — 200 Pair	0.9	0.042	11576	486
	Exch to Ferry — 100 Pair	IV less than 430 V			
(H)	ATURLI (HATurli) Exchange				
	Exch to Narvem — 100 Pair	IV less than 430 V			
	Exch to Tikhajan — 100 Pair				
	Exch to Bavkoye — 100 Pair				
(I)	DICHOLI Exchange				
	Exch to Pilgaon — 100 Pair	IV less than 430 V			
	Exch to Mayem — 100 Pair				
	Exch to Walashi — 100 Pair				
	Exch to Van — 200 Pair				
	Exch to Maulinge -100 pair				
(J)	Sanquelim Exchange				
	Exch to Vijay Nagar — 200 Pair	IV less than 430 V			
	Exch to Karapur village — 100 Pair				
	Exch to Viridi — 100 Pair				
	Exch to Kudne — 200 Pair				


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

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Case No.: GOA-1					
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S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

(K)	Sanquelim HB Exchange				
	Exch to Harvale — 400 Pair	IV less than 430V			
	Exch to Pratap Nagar — 100 Pair				
	Exch to Vasant Nagar — 100 Pair				
(L)	HONDA Exchange				
	Exch to Ajoba Nagar — 400 Pair	IV less than 430V			
	Exch to Saleli — 100 Pair				
(M)	Pissurlem Exchnge				
	Exch to Honda tisk — 100 Pair	IV less than 430V			
	Exch to IDC — 100 Pair				
	Exch to Fomonto mine — 100 Pair				
(N)	AMONA Exchnge				
	Exch to Panaswada — 100 Pair	IV less than 430V			
	Exch to Ambeshi — 200 Pair				
(O)	PARYE Exchange				
	Exch. To Ravan -100pair	IV less than 430V			
	Exch to Morlem Colony — 100 Pair				
	Exch to Ranewada — 100 Pair				
(P)	Vantem Exchange				
	Exch to Desaiwada — 100 Pair	IV less than 430V			
	Exch to to signc — 100 Pair				
	Exch to Bhatwadi — 100 Pair				
	Exch to Vanteri Village -50 Pair				
(Q)	Bhironda Exchange				
	Exch to Savanshe — 50 Pair	IV less than 430V			
	Exch to Padeli — 50 Pair				
(R)	Khotodem Exchange				
	Exch to Molpan — 100 Pair	IV less than 430V			
	Exch to Velgliem — 100 Pair				
	Exch to Gukili — 100 Pair				
(S)	Parra Exchange				
	Exchange to Arjuna -400 Pair	IV less than 430V			
	Exchange to Verla — 200 Pair				
	Exchange to Girim- 100Pair.				
(T)	ALDONA (Haldna) Exchange				
	Exchange to Nachinola-400 Pair	IV less than 430V			
	Exchange to Panth-200 Pair				
(U)	MOIRA(MOIDA) Exchange				
	Exchange to Nova Portgal -400 Pair.	IV less than 430V			


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

ANNEXURE - I

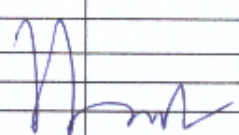
Case No.: GOA-1					
Name of the Power Line: XELDEM-MAPUSA 400kV D/C Transmission Line		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 54.77 कि.मी. एस. आर. मान : 15,000 ओम- सेमी			
S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

(v)	POMBURDA Exchange				
	Exchange to Salvormundo -200 Pair				
	Exchange to Volawali -200 Pair	IV less than 430V			
(w)	Kamurli Exchange				
	Exchange to Chikali-100 pair	IV less than 430V			
(x)	Kolvale Exchange				
	Exchange to chikali-100 pair				
	Exch to Revoda-100 Pair	IV less than 430V			
(y)	Dhargal Exchange				
	Exch to Kuhakhuza-100 Pair				
	Exch. To Nevalwado -50 pair	Out of Parallelism			
	Exch. To Tiwode -50 Pair	IV less than 430V			
(z)	Nadora Exchange				
	Exchange to Revoda -50 Pair.	IV less than 430V			
(1)	TISKA EXCHANGE				
	Exch. To Opwawada-200 Pair				
	Exch to Sanjeevani Sugar factory-200 pair	IV less than 430V			
	Exch to Usgao -400 pair				
(2)	DARBANDORA EXCHANGE				
	Exch to Tailsai -50 pair				
	Exch to Tatodi -50 Pair				
	Exch to Marad -50 pair	IV less than 430V			
(3)	SAKVORDA EXCHANGE				
	Exch to Murge-200 pair				
	Exch to Bolkhane-100 pair	IV less than 430V			
	Exch to Shivde -100 pair	1.0	0.0439	13358	589
	Exch to Kumbhavwada-50 pair	IV less than 430V			
(4)	Velgam Exchange				
	Exch to Phanashwada-200 pair	5.0	0.0562	8975	504
	Exch to Bhayliphel-200 pair				
	Exch to Bhatwada -200 pair				
	Exch to Gaukarwada-200 Pair	IV less than 430V			
(5)	Pale Exchange				
	Exch to Kosumwada-200 pair				
	Exch to Kotambe-200 pair				
	Exchange to Khajanwada-200 Pair	IV less than 430V			
	Exch to Ambegal-100 pair				
(6)	Savargal Exchange				
	Exchange to Valdav -100Pair				
	Exchange to Dakakomel-50 pair.	IV less than 430V			

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

ANNEXURE – II

Case No.: GOA-1 Name of Power line: XELDEM-MAPUSA 400kV D/C Transmission Line		Map Scale : 1cm=500mts Total Length : 54.77 Km. S.R. Value : 15,000 Ohm-cm			
S. No.	Telecom Details	Length of Parallelism (KM)	Mutual Coupling (Ohm)	Effective Fault Current (Amp)	Induced Voltage (Volt)

KONKAN RAILWAY Ref. No. KR/KW/SG/PTCC/IV/400KV D/C Mapusa Dated 13/02/2019					
	Karmali-Thivim	3.5	0.0154	11576	178
					
			नरेश भंडारी / NARESH BHANDARI मुख्य अभियंता / Chief Engineer केन्द्रीय विद्युत प्राधिकरण / C.E.A. विद्युत मंत्रालय / Ministry of Power भारत सरकार / Govt. of India नई दिल्ली / New Delhi-66		

Tele : 23019746

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

B/46937/Sigs 7(b)/1356/


21 Dec 2018

GOA - 1

Project Manager
Goa-Tamnar Transmission Project Limited
A/2/2, Second Floor, New Horizons,
D.B. Marg, Miramar, Panjim
Goa-403001

**SUBMISSION OF PTCC ROUTE APPROVAL WITH REFERENCE TO INSTALLATION
OF 400KV D/C XELDEM (NEW)-MAPUSA TRANSMISSION LINE**

1. Ref your letter No GTTPL/TL/18-19/23 dt 17 Oct 2018 (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 forwarded herewith for your further 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.