



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. : MRA-1163:	df. 16.06.21
PTCC proposal of 220 kV D/C Navsari (Powergrid) to Bhestan/ Popda (GETCO) transmission line: 18.60 km	

Reference:		Dated
S. No.	Reference No.	
(i)	PGCIL : WRHQ-II/Engg/PTCC/2016/220 KV Dastan-Bhestan/441/644	18.08.2020
(ii)	BSNL: IC/MBI/PTCC/GUJ-2845	12.01.2021
(iii)	Western Railway: SG. 158/28/12 (1144)	03.02.2021
(iv)	Defense: B/46937/ Sigs 7(b)/2149	07.12.2020

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of Western 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 Western 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 reference (iv) above, The Defence Authority have issued No Objection Certificate (NOC). (a copy enclosed as Annex-III).

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

Encl.: As above.

Signature Not Verified
Digitally signed by PRADEEP SINGH
PRATAP SINGH
Date: 2021.08.16 15:40:27 IST

Director

To,			
1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	Annexure-I & Annexure-III only
2.	Dy. CSTE/Co/CCG.	Western Railway; O/o CSTE, S&T Dept., 5 th floor, Station Building, Church gate, Mumbai-400020.	Annexure-II only
3.	Sr. DGM- Vadodara	PGCIL, Plot No.-54, Adjacent to Riya- Revati Resort, Sama-Savli Road, Vadodara-390008.	Copy for information

MIC

CEA office case No: _____
 DET (PTCC) Office Case No: 2845 (Annexure - I)
 Railway Office Case No: _____
 Name of Power Line: C/MBT/PTCC/GJ-2845-12/121
 Newseri (PGCIL)-Bhestan (Poda) GETCO 220 KV DC Transmission Line
 Map Scale: 1 Cm=500 Meters
 Route Length: 18.60 Kms
 Soil Resistivity: 15047 Ohm-Cm
 2000 Ωcm

Telecom Details from BSNL

SI No.	Name of the Telecom Cable/Line	Length of Parameter in Km	Mutual coupling in Ohms	Fault current in Amp	Induced Voltage in Volts
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SI No.	Name of the Telecom Cable/Line	Length of Parameter in Km	Mutual coupling in Ohms	Fault current in Amp	Induced Voltage in Volts
1.	Kadodara Exch				
1A	" to Talva Raha 400x2, 200x1, 100x2, 50x4		} Outside	} IV	} consideration
2A	" to local 800x1, 400x1, 50x4				
3A	" to local 800x1, 400x2, 50x1				
4A	" to pillar 200x1				
5A	Pillar to local 400x2, 100x2, 50x4				
2.	Chaltham Exch		} Zone		
1B	" to local 800x2, 400x1, 50x6				
2B	" to local 400x1				
3B	" to local 200x1, 50x2				
3.	Palsama Exch		} IV less than 430V		
1C	" to local 100x1				
2C	" to Baleshwar 200x2, 50x4				
3C	" to local 800x1, 200x1, 100x3, 50x6				
4C	" to Harva 100x1				
4.	Gangadhara Exch (Kareli Village)		} IV less than 430V		
1D	Kareli to Gangadhara 800x2, 400x2, 200x2, 50x4				
2D	Gangadhara 4x to local 200x1, 50x3				
3D	Gangadhara Highway X to Fine Jundi 200x2, 50x4, 20x4				
4D	Kareli to Dastan 400x1				
5D	Dastan to Haldaru 100x2				
6D	Dastan to Bagumra 100x2				
7D	Gangadhara highway X to Soyani 100x1				

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

CEA office case No: _____ Map Scale: 1 Cm=500 Meters
 DET (PTCC) Office Case No: 2845 Route Length: 18.60 Kms
 Railway Office Case No: _____ Soil Resistivity: ~~1500~~ Ohm-C
 Name of Power Line: 2,000 - 20m
 Narsari (RGCL) - Bhestam (Poda) GFTCO-220KV o/c Transmission

Telecom Details from BSNL		Details from Power Company/Authc			
SI No.	Name of the Telecom Cable/Line	Length of Parameter in Km	Mutual coupling in Ohms	Fault current in Amp	Induc Voltage Vol
5.	Nesma Greh				
1E	" to Patham-Patra 200x1, 100x1, 50x2				
2E	" to Sedodora 50x3				
3E	" to Dabhel 200x1, 100x1, 50x1				
4E	" to local 100x1, 50x2				Outside IV consideration zone
5E	" to local 100x3, 50x1				
6.	Mesali Greh				
1E	" to local 200x1, 100x1, 50x2				
2E	" to local 100x1, 50x1				
3E	" to local 200x1, 50x3				
4E	" to local 100x1, 50x4				
7.	Sachin Greh (G.D.C)				
1G	" to Police station + local 800x3, 200x2, 50x6				
2G	" to Budiyagern 800x1, 100x1, 50x4				
3G	" to Sachin village 800x1, 100x3, 50x6				
4G	" to Prasad Cinema + local 800x1, 100x2, 50x4				
5G	" to local 800x1, 400x2, 50x4				
8.	Gaji Greh				
1H	" to Gaji village 800x1, 50x4				IV less than 430V
2H	" to Lajpat 100x2, 50x2				
3H	" to towards Sachin village 800x2, 400x1, 50x6				
9.	Pesadi Pata Greh				
1I	" to local 100x3, 50x3				Outside IV consideration zone
2I	" to local 100x2, 50x2				
6E	Nesma Greh to Kalkasha (local) 50x1				

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

(2/2)

ANNEXURE - II

Case No.: MRA-1163
Name of the Power line: 220 kV D/C Navsari (Powergrid) to Bhestan/ Popda (GETCO) transmission line.

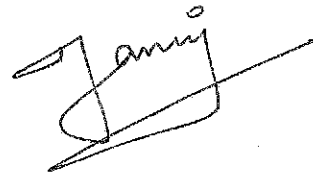
Map Scale : 1 cm=500 m
Total Length : 18.60 km
S.R. Value : 2,000 ohm-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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WESTERN RAILWAY Ref. No: SG. 158 / 28 / 12 (1144) DATED: 03-02-2021

Affected Blocks & Telecom Circuits Details

1	Udhna to Chalthan	Outside IV consideration zone			00
2	Chalthan to Gangadhara	0.6	0.0023	9981	23
3	Gangadhara to Bardoli	Out of Parallelism			00
4	Udhna to Bhestan	Outside IV consideration zone			00
5	Bhestan to Sachin	Out of Parallelism			00
6	Sachin to Maroli	Out of Parallelism			00
7	Maroli to Navsari	Outside IV consideration zone			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-68

Tele : 23019746

MRA-1163

(Annexure-III)

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


B/46937/Sigs 7(b)/2149

07 Dec 2020

PowerGrid Bhuj Transmission Limited
B-9, Qutub Institutional Area, Katwaria Sarai
New Delhi-110016

**CONSTRUCTION OF NAVSARI (PGCIL)-BHESTAN (POFDA) GETCO 220KV D/C
TRANSMISSION LINE "NEW TRANSMISSION LINE TO BE TAKEN UP UNDER
COMPRESSED TIME SCHEDULE THROUGH REGULATED TARIFF MECHANISM (RTM)
ROUTE ASSOCIATED WITH WRSS#22" FOR MARKING OF DEFENCE TELECOM DETAILS**

1. Ref your letter No WRHQ-II/Engg/PTCC/2106/220KV Dastan-Bhestan/446/687 dt 26 Aug 2020 (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.


(A Rawat)
Maj
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

The DET(PTCC), Northern Zone
O/o PGM (North), QA & Inspection Circle
D-Tax Building, Janpath
New Delhi-110001

for information