



**भारत सरकार**  
**Government of India**  
**विद्युत मंत्रालय**  
**Ministry of Power**  
**केन्द्रीय विद्युत प्राधिकरण**  
**Central Electricity Authority**  
**विद्युत संचार विकास प्रभाग**  
**Power Communication Development Division**

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Case No. : GUJ-751:

PTCC proposal of 400 kV D/C transmission line from Wanakbori TPS Unit 8 to existing switchyard at Wanakbori TPS [ Interlink between switchyard] with twin AL-59 conductor : 1.364 km

Reference:

16-08-2021

S. No.	Reference No.	Dated
(i)	GETCO:CE(Project)/EE(Tr.-3)/2521	08.03.2018
(ii)	BSNL: IC/MBI/PTCC/GUJ-2550	20.02.2019
(iii)	Western Railway: SG. 158/28/12(1024) (details received on 20.01.2021)	17.12.2020
(iv)	Defense: B/46937/ Sigs 7(b)/1093	31.07.2018

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.

Digitally signed by RAGHUVENDRA PRATAP SINGH  
 Date: 2021.08.16 14:35:11 IST

Director

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 <sup>rd</sup> 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 <sup>th</sup> floor, Station Building, Churchgate, Mumbai-400020.	Annexure-II only
3.	I/C Chief Engineer (Project)	GETCO; Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390007.	Copy for information

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## ANNEXURE - II

Case No.: GUJ- 751

Name of the Power line: 400 kV D/C transmission line from Wanakbori TPS Unit 8 to existing switchyard at Wanakbori TPS [Interlink between switchyard] with twin AL-59 conductor.

Map Scale : 1 cm=500 m  
Total Length : 1.364 km  
S.R. Value : 5,000 ohm-cm

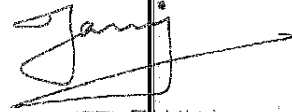
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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WESTERN RAIWAY Ref. No: SG. 158/28/12(1024)

Dated: 17-12-2020

Affected Blocks & Telcom Circuits Details

1	ANGADI - SEVALIYA	Outside IV Consideration Zone	00
2	SEVALIYA - TIMBAROAD	Outside IV Consideration Zone	00
3	TIMBAROAD - TUVA	Outside IV Consideration Zone	00



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

CEA Office Case No. --- <b>GUJ-751</b>	Map scale- 1 Cms = 500 Meters
DET (PTCC) File Case No. <b>2550</b>	Route Length- <b>1.364</b> k.Ms
Railway Office Case No.	Soil Resistivity- <del>220 Ohm/cm<sup>2</sup></del> <b>5,000 <math>\Omega</math>- cm</b>

Name of Power Line: **400 KV D/C line from Wanakbori TPS Unit-8 to existing Switchyard at Wanakbori TPS (Interlink Between Switchyard) with Twin AL-59 Conductor.**  
*(Annexure - I)*

DETAILS FROM BSNL SIDE		DETAILS FROM POWER COMPANY			
Sl.No.	Name of the Telecom line/Cable	Length of parameter in KM	Mutual coupling in Ohms	Fault Current in Amp	Induce Voltage in Volts
1	<b>VADASINOR EXCHANGE</b>				
1A	Vadasinor Ex- Local -1200*1 P	}			
2A	Vadasinor Ex- Local -800*1 P				
3A	Vadasinor Ex- Local -400*1 P				
2	<b>VANGROLI EXCHANGE</b>				
1B	Vangroli Ex- Local- 200x1P	}	<i>Outside IV consideration zone</i>		
2B	Vangroli Ex- Local- 50x1P				
3	<b>SEVALIA EXCHANGE</b>				
1C	Sevalia Ex- Local- 400x1P	}			
2C	Sevalia Ex- Local- 400x1P				
3C	Sevalia Ex- Local- 200x1P				
4C	Sevalia Ex- Local- 100x1P				
4	<b>WTPS EXCHANGE</b>				
1D	WTPS Ex- Local 400x2+200*2 P	}	<i>IV less than 430V</i>		
2D	WTPS Ex- Local -200*1 P				
5	<b>VANODA EXCHANGE</b>				
1E	Vanoda Ex- Local -200*1 P	}	<i>Outside IV consideration zone</i>		
2E	Vanoda Ex- Local -100*1 P				

*Jamij*

सहायक निदेशक II / Assit. Director II  
 केंद्रीय विद्युत प्राधिकरण / C.E.A.  
 विद्युत मंत्रालय / Ministry of Power  
 भारत सरकार / Govt. of India  
 नई दिल्ली / New Delhi-65

(Annexure IV) GSO-751

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)/1093 /

3 Jul 2018

Gujarat Energy Transmission Corporation Ltd.  
Chief Engineer (Project)  
Sardar Patel Vidyut Bhavan,  
Race Course, Vadodara-390 007

**SUBMISSION OF PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO  
FOR PTCC APPROVAL FOR 400 KV D/C LINE FROM WANAKBORI TPS UNIT 8  
TO EXISTING SWITCHYARD AT WANAKBORI TPS (INTERLINK BETWEEN  
SWITCHYARD) WITH TWIN AL - 59 CONDUCTOR**

1. Reference your letter No CE(Project)/EE (Tr-3)/ 2521 dt 08 Mar 2018 (copy att).
2. 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 (Comm)  
for SO-in-C

**Copy to :-**

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

- For information.

