



**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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CEA Case No. :Guj-813:
PTCC proposal of LILO of 2 <sup>nd</sup> circuit of 400 kV D/C Zerda - Ranchodpura transmission line at Banaskantha (PG): 17.34 km

Reference:		
S. No.	Reference No.	Dated
(i)	Vapi II-North Lakhimpur Transmission Ltd. :VNLTL/PKG-A/PTCC/21	23.07.2021
(ii)	BSNL: IC/MBI/PTCC/WGJ22008202122853_54	21.09.2021
(iii)	Western Railway: SG. 158/28/12(1173)	01.10.2021
(iv)	Defense: B/46937/ Sigs 7(b)/2489	26.08.2021

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 (copy enclosed as Annexure-III).

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

Encl.: As above.

राजेश कुमार सिंह  
10.2.22  
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.	Chief Manager	Vapi II-North Lakhimpur Transmission Ltd.;F-1, The Mira Corporate Suites, 1&2, Ishwar Nagar, Mathur Road, New Delhi-110065.	Copy for information

File No.CEA-PS-17-11(12)/7/2022-PCD Division /149-151



आजादी का  
अमृत महोत्सव

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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के.वि.प्रा. केस सं.: GUJ-813:
पी.टी.सी.सी. प्रस्ताव LILO of 2 <sup>nd</sup> circuit of 400 kV D/C Zerda - Ranchodpura transmission line at Banaskantha (PG): 17.34 km

क्रमांक	सन्दर्भ सं.	दिनांक
(i)	Vapi II-North Lakhimpur Transmission Ltd.:VNLTL/PKG-A/PTCC/21	23.07.2021
(ii)	BSNL: IC/MBI/PTCC/WGJ22008202122853 54	21.09.2021
(iii)	Western Railway: SG. 158/28/12(1173)	01.10.2021
(iv)	Defense: B/46937/ Sigs 7(b)/2489	26.08.2021

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। उपर्युक्त संदर्भों (ii) और (iii) में दिए गए विवरणों के संबंध में बीएसएनएल के दूरसंचार केबलों और पश्चिम रेलवे के ब्लॉक और दूरसंचार सर्किटों पर क्रमशः कम आवृत्ति प्रेरण की गणना की गई है। सिंगल लाइन टू ग्राउंड फॉल्ट की स्थिति में बीएसएनएल और पश्चिम रेलवे के ब्लॉक और टेलीकॉम सर्किट के समानांतर दूरसंचार केबलों पर प्रेरित वोल्टेज क्रमशः अनुलग्नक-I और अनुलग्नक-II में संलग्न हैं। स्क्रीनिंग कारकों, जैसा लागू हो, लिया गया है। उपरोक्त संदर्भ (iv) द्वारा, रक्षा प्राधिकरण ने अनापत्ति प्रमाण पत्र (प्रति अनुलग्नक-III) के रूप में संलग्न है) जारी किया है।

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के लिए आवश्यक कार्रवाई की जाए।

संलग्न: उपरोक्त अनुसार

21.10.2022  
निदेशक 10.2.22

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.	अनुलग्नक-I & अनुलग्नक-III
2.	Dy. CSTE/Co/CCG	Western Railway; O/o CSTE, S&T Dept., 5 <sup>th</sup> floor, Station Building, Churchgate, Mumbai-400020.	अनुलग्नक-II
3.	Chief Manager	Vapi II-North Lakhimpur Transmission Ltd.;F-1, The Mira Corporate Suites, 1&2, Ishwar Nagar, Mathur Road, New Delhi-110065.	जानकारी हेतु

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(Annexure-5)

Particulars details of parallel Telecom Alignment Proforma (Annexure)							
Case No - <b>WG 3 2008/2021/2853</b>		Map Scale : 1:50000					
Name of Power Line - Second Circuit of Lilo Of 400kV D/C Zarda-Ranchodpura Transmission line at Banaskantha (PG)		Total Length : - 17.34 Kms ; SR: 7,500.00					
Sr.No.	Telecom Circuits (Will be filled by BSNL)	Marked As (Will be filled by BSNL)	Length of Parallelism	Mutual Coupling in Ohms	Effective fault current	I.V. in Volts	Safe Separation in Yards
1	2	3	4	5	6	7	8
	<b>Deesa Telephone Exchange</b>	<b>A</b>					
a	Deesa Telephone Exchange to Risala Bazar : 800Pair U/G Cable, Distance = 0.6KM	A-1	}				
b	Deesa Telephone Exchange to Favara Circle : 800Pair U/G Cable, Distance = 0.6 KM	A-2					
c	Deesa Telephone Exchange to Bagicha Circle : 800Pair U/G Cable, Distance= 0.5KM	A-3					
d	Deesa Telephone Exchange to Patan Char Rasta : 800Pair U/G Cable, Distance=1 KM	A-4					
e	Deesa Telephone Exchange to Deesa Police Station : 200Pair U/G Cable, Distance=0.7 KM	A-5					
f	Deesa Telephone Exchange to Latl Bazar : 200Pair U/G Cable, Distance=0.3 KM	A-6					
g	Deesa Telephone Exchange to Rajpur Road : 100Pair U/G Cable, Distance=0.4 KM	A-7					
h	Deesa Telephone Exchange to Hira Bazar : 800Pair U/G Cable, Distance=0.6 KM	A-8					
i	Deesa Telephone Exchange to Jalaram Temple : 400Pair U/G Cable, Distance=1 KM	A-9					
	<b>Juna Deesa Telephone Exchange</b>	<b>B</b>					
a	Juna Deesa to Navapura : 100Pair U/G Cable, Distance=1 KM	B-1	}				
b	Juna Deesa to Patan Highway : 100Pair U/G cable, Distance=1 KM	B-2					
c	Juna Deesa to Dhuva Road : 100 Pair U/G Cable, Distance=1 KM	B-3					
d	Juna Deesa to Sadar Bazar : 100-Pair U/G Cable, Distance=0.9 KM	B-4					
e	Juna Deesa to PHC : 100 Pair U/G Cable, Distance=1 KM	B-5					
	<b>Akhol Telephone Exchange</b>	<b>C</b>					
a	Akhol Exchange to Kisan Mall : 200Pair U/G Cable, Distance=0.8 KM	C-1	}				
b	Akhol Exchange to Mahakali Temple : 100Pair U/G Cable, Distance=1 KM	C-2					
c	Akhol Exchange to Bhadath Road : 100Pair U/G Cable, Distance=0.8 KM	C-3					
d	Akhol Exchange to Bhiladi Road : 100Pair U/G Cable, distance=1 KM-	C-4					
e	Akhol Exchange to Dhanera Road : 100Pair U/G Cable, Distance=1 KM	C-5					
4	<b>YavarPura Telephone Exchange (Closed Not Working)</b>	<b>D</b>					

IV less than 430V

*Jang*

संयुक्त प्रशासक (I)  
 सहायक निदेशक-II/Asstt. Director-II  
 के शीय विद्युत प्राधिकरण/C.E.A.  
 विद्युत मंत्रालय/Ministry of Power  
 भारत सरकार/Govt. of India  
 नई दिल्ली/New Delhi-66

(1/5)

Particulars details of parallel Telecom Alignment Proforma (Annexure)

Case No - <b>UG 3200820212853</b>		Map Scale : 1:50000					
Name of Power Line - Second Circuit of Lilo Of 400kV D/C Zerda-Ranchodpura Transmission Line at Banaskantha (PG)		Total Length : - 17.34 Kms, SR = 7.5000					
Sr.No.	Telecom Circuits (Will be filled by BSNL)	Marked As (Will be filled by BSNL)	Length of Parallelism	Mutual Coupling in Ohms	Effective fault current	I.V. in Volts	Safe Separation in Yards
1	2	3	4	5	6	7	8
5	<b>Rampura Telephone Exchange</b>	E	}				
a	Rampura Telephone Exchange to Dedhal Pillar : 200 Pair U/G Cable, Distance=1 KM	E-1					
b	Rampura Telephone Exchange to Rampura Bus Stand : 200 Pair U/G Cable, Distance=0.4 KM	E-2					
c	Rampura Telephone Exchange to Dama : 200 Pair U/G Cable, Distance=1.5 KM	E-3					
d	Rampura Telephone Exchange to Rampura Bus Stand : 100 Pair U/G Cable, Distance=0.6 KM	E-4					
e	Rampura Telephone Exchange to Dama Bus Stand : 50 Pair U/G Cable, Distance=1.5 KM	E-5					
6	<b>Lorwada Telephone Exchange</b>	F					
a	Lorwada Telephone Exchange to Vasant Hotel : 800 Pair U/G, Distance=2 KM	F-1					
b	Lorwada Telephone Exchange to Lorwada Patiya : 100 Pair U/G Cable, Distance=0.7 KM	F-2					
c	Lorwada Telephone Exchange to Lorwada Patiya : 50 Pair U/G Cable, Distance=0.5 KM	F-3					
d	Lorwada Telephone Exchange to Indira Nagar : 100 Pair U/G Cable, Distance=1 KM	F-4					
7	<b>Bhildi/Ratanpura Telephone Exchange</b>	G					
a	Bhildi/Ratanpura Telephone Exchange to Jain Derasar Pillar : 400 Pair U/G Cable, Distance=1.1 KM	G-1					
b	Bhildi/Ratanpura Telephone Exchange to Bhildi Police Station Pillar : 800 Pair U/G Cable, Distance=1.4 KM	G-2					
c	Bhildi/Ratanpura Telephone Exchange to Bhildi Naka Pillar : 800 Pair U/G Cable, Distance=1.2 KM	G-3					
d	Bhildi/Ratanpura Telephone Exchange to Bhildi Naka Pillar : 200 Pair U/G Cable, Distance=0.65 KM	G-4					
8	<b>Wasna Telephone Exchange</b>	H					
a	Wasna Telephone Exchange to Wasna Pillar : 200 Pair U/G Cable, Distance=0.3 KM	H-1					
b	Wasna Telephone Exchange to Nava Goliya Patiya : 50 Pair U/G Cable, Distance=1 KM	H-2					
c	Wasna Telephone Exchange to Dasanawas Gam : 50 Pair U/G Cable, Distance=3 KM	H-3					
d	Wasna Telephone Exchange to Wasna : 50 Pair U/G Cable, Distance=0.5 KM	H-4					

*IV less than 430V*

*Jang*

सहायक नि. (Director) |  
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.  
 विद्युत मंत्रालय / Ministry of Power  
 भारत सरकार / Govt. of India  
 नई दिल्ली / New Delhi-00

Particulars details of parallel Telecom Alignment Proforma (Annexure)

Case No - W.A.T.200820212852

Map Scale : 1:50000

Name of Power Line - Second Circuit of Lilo Of 400kV D/C Zerda-Ranchodpura Transmission line at Banaskantha (PG)

Total Length : - 17.34 Kms, SR = 7,500.00m

Sr.No.	Telecom Circuits (Will be filled by BSNL)	Marked As (Will be filled by BSNL)	Length of Parallelism	Mutual Coupling in Ohms	Effective fault current	L.V.in Volts	Safe Separation in Yards						
1	2	3	4	5	6	7	8						
8A	Deesa Mobile BTS	}	NA										
8B	Deesa Mobile BTS (Sargam Tower)												
8C	Deesa Mobile BTS (Jalaram)												
8D	Deesa Mobile BTS (Vatenary Hospital)												
8E	Deesa Mobile BTS (Dimond)												
8F	Deesa Mobile BTS (Vaibhab)												
8G	Deesa Mobile BTS (Sainath)												
8H	Deesa Mobile BTS (Rajpur)												
8I	Deesa Mobile BTS (Bopanagar)												
8J	Deesa Mobile BTS (Kothari Chamber)												
8K	Deesa Mobile BTS (Maigadh)												
8L	Deesa Mobile BTS (Juna Deesa)												
8M	Deesa Mobile BTS (Dhua)												
8N	Deesa Mobile BTS (Akhil)												
8O	Deesa Mobile BTS (V N Park)												
8P	Deesa Mobile BTS (Surya Nagar)												
8Q	Rampura Mobile BTS							}	NA				
8R	Lorwada Mobile BTS												
8S	Wasna Mobile BTS												
8T	Ratanpura/Bhildi Mobile BTS												
8U	Bhildi Bazar Mobile BTS	}											
8V	Mudetha Mobile BTS												
8W	Khimana Mobile BTS												
8X	Paldi Mobile BTS	}											
8Y	Nesda Juna Mobile BTS												

*Jain*

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

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

Particulars details of parallel Telecom Alignment Proforma (Annexure)

Case No - <b>WGJ 2008 2021 2853</b>					Map Scale : 1:50000		
Name of Power Line - Second Circuit of Lilo Of 400kV D/C Zerda-Ranchodpura Transmission line at Banaskantha (PG)					Total Length : - 17.34 Kms, <i>SR=75,000</i>		
Sr.No.	Telecom Circuits (Will be filled by BSNL)	Marked As(Will be filled by BSNL)	Length of Parallelism	Mutual Coupling in Ohms	Effective fault current	(V.in Volts	Safe Separation In Yards
1	2	3	4	5	6	7	8
9	Paldi Telephone Exchange	1	}	}	}	}	}
a	Paldi Telephone Exchange to Paldi Gam : 400 Pair U/G Cable, Distance=0.06KM	1-1					
b	Paldi Telephone Exchange to Paldi Gam : 400 Pair U/G Cable, Distance=0.06KM	1-2					
c	Paldi Telephone Exchange to Paldi Gam : 400 Pair U/G Cable, Distance=0.06KM	1-3					
d	Paldi Telephone Exchange to Paldi Bus Stand : 200 Pair U/G Cable, Distance=0.15KM	1-4					

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-60

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Particulars details of parallel Telecom Alignment Proforma (Annexure)

Case No - <b>WGJ 200820212853</b>		Map Scale : 1:50000					
Name of Power Line - Second Circuit of Lilo Of 400kV D/C Zerda-Ranchodpura Transmission line at Banaskantha (PG)		Total Length : - 17.34 Kms ; SR = 7,500m					
Sr.No.	Telecom Circuits (Will be filled by BSNL)	Marked As (Will be filled by BSNL)	Length of Parallelism	Mutual Coupling in Ohms	Effective fault current	I.V. in Volts	Safe Separation in Yards
1	2	3	4	5	6	7	8
10	Khimana Telephone Exchange	J	}	IV less than	430V		
a	Khimana Telephone Exchange to Khimana old Exchange : 50 Pair U/G Cable, Distance=1.5KM	I-1					
11	Bukoli Telephone Exchange <del>...</del> Spare cable	K					

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

(5/5)

## ANNEXURE - II

CEA Case No.: GUJ-813

Name of the Power line: LILO of 2<sup>nd</sup> circuit of 400 kV D/C  
Zerda to Ranchodpura transmission line at Banaskantha (PG).

Map Scale : 1 cm=500 m

Total Length : 17.34 km

S.R. Value : 7,500  $\Omega$ -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(1173)

Dated: 01-10-2020

Affected Blocks & Telecom Circuits Details

1	Chandisar to Disa	Out of Parallelism			00
2	Disa to Lorwada	3.2	0.0031	11965	37
3	Lorwada to Bhildi	6.8	0.0036	11972	44
4	Bhildi to Jasali	1.5	0.0002	10675	02



सहायक निदेशक/Assistant Director  
केन्द्रीय विद्युत प्राधिकरण/C.E.A.  
विद्युत मंत्रालय/Ministry of Power  
भारत सरकार/Govt. of India  
नई दिल्ली/New Delhi-60



Tele : 23019746

(Annexure-III)

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

GUS-21

B/46937/Sigs 7(b)/2489/


26 Aug 2021

Vap-II North Lakhimpur Transmission Limited  
F-1 The Mira Corporate Suites,  
1&2 Ishwar Nagar, Mathura Road,  
New Delhi-110065, India

?

PTCC PROPOSAL FOR CLEARANCE OF LILO OF SECOND CIRCUIT OF 400KV  
DC ZERDA-RANCHODPURA TR. LINE AT BANASKANTHA (PG)

1. Refer your letter No VNLTL/PKG-A/PTCC/22 dt 23 Jul 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheet received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

  
(Rakesh Kumar)  
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

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

for information

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AB/9/21