



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

CEA Case No.: BHR-154

PTCC proposal for LILO of 220 kV D/C Ara (PG) to Khagaul (BSPTCL) transmission line at Naubatpur (New) S/S: 13.391 km

Reference:

S. No.	Reference No.	Dated
(i)	Bihar Grid Company Ltd. : BG/JV/PAT/TW-01/PTCC/1298 (and details received via mail on 21.02.2022)	27.01.2019
(ii)	BSNL: DE/PTCC/ER/EBR240720192523-529/01	13.03.2020
(iii)	East Central Railway: ECR/S&T/PTCC/134, Pt. III/66	08.04.2019
(iv)	Defense: B/46937/ Sigs 7(b)/1746	11.09.2019

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

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

Encl.: As above.

Raghuwendra Pratap Singh
22.02.22

Director

To,

1.	DET (PTCC), Eastern Zone	BSNL; QA & Inspection Circle, Q.A. Bhawan, EP-GP Block, Sector-V, Salt Lake, Kolkata- 700091.	Annexure-I & Annexure-III
2.	Dy. CSTE/HQ	East Central Railway; O/o General Manager (S&T), East Central Railway, Hajipur, District- Vaishali-844101.	Annexure-II
3.	Sr. General Manager (Projects)	Bihar Grid Company Ltd.; 2nd Floor, Alankar Place, Boring Road, Patna-800001.	Copy for information



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के.वि.प्रा. केस सं.: BHR-154
पी.टी.सी.सी. प्रस्ताव LILO of 220 kV D/C Ara (PG) to Khagaul (BSPTCL) transmission line at Naubatpur (New) S/S: 13.391 km

क्रमांक	सन्दर्भ सं.	दिनांक
(i)	Bihar Grid Company Ltd. : BG/JV/PAT/TW-01/PTCC/1298 (एवं 21.02.2022 को मेल द्वारा प्राप्त विवरण)	27.01.2019
(ii)	BSNL: DE/PTCC/ER/EBR240720192523-529/01	13.03.2020
(iii)	East Central Railway: ECR/S&T/PTCC/134, Pt. III/66	08.04.2019
(iv)	Defense: B/46937/ Sigs 7(b)/1746	11.09.2019

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

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

संलग्न: ऊपरोक्त अनुसार

राधेशंकर प्रसाद सिंह
22.2.22
निदेशक

To,		
1.	DET (PTCC), Eastern Zone	BSNL; QA & Inspection Circle, Q.A. Bhawan, EP-GP Block, Sector-V, Salt Lake, Kolkata-700091. अनुलग्नक- I & अनुलग्नक- III
2.	Dy. CSTE/HQ	East Central Railway; O/o General Manager (S&T), East Central Railway, Hajipur, District- Vaishali-844101. अनुलग्नक- II
3.	Sr. General Manager (Projects)	Bihar Grid Company Ltd.; 2nd Floor, Alankar Place, Boring Road, Patna-800001. जानकारी हेतु

CEA: BMR-154

(Annexure-I)

Particulars details of parallel Telecom alignment proforma							
Case no. EBR240720192523				Map scale : 1" = 1 Mile / 1 cm. = 500Mts.			
Name of the power line: LILO of 220 KVD/C Ara (PG) - Khagaul(BSPTCL.) line at Naubatpur (New)				Total length :- 13.391 Km			
				Average S.R. value : 15,000 Ohm			
Sl.no.	Telecom circuits	Marked as	Length of parallelism in km	Mutual coupling in Ohms	Effective fault current in Amp.	I.V.in Volts	Safe saperat in Year
1	2	3	4	5	6	7	8
1	NAUBATPUR EXCHANGE	A	}				
	NAUBATPUR XGE TO MARKET PILLAR (800 pair U/G cable, dist.1 km)	1					
	MARKET PILLAR TO NAUBATPUR PS (200 pair U/G cable, dist.0.15 km)	2					
	MARKET PILLAR TO KHAGAU ROAD (200 pair U/G cable, dist.0.205 km)	3					
	MARKET PILLAR TO POST OFFICE (200 pair U/G cable, dist.0.100 km)	4					
	MARKET PILLAR TO BIKKRAM ROAD (200 pair U/G cable, dist.0.175 km)	5	IV less than 430V				
2	FARIDPUR EXCHANGE	B					
	FARIDPUR XGE TO 8NO PILLAR (100 pair U/G cable, dist.0.250km)	1					
	8NO PILLAR TO RAMPUR & KORRA (50 pair U/G cable, dist.1.500 km)	2					
	8NO PILLAR TO 7NO PILLAR (200 pair U/G cable, dist.0.300 km)	3					
	7NO PILLAR TO PASHI & BIRAN CHAK (50 pair U/G cable, dist.0.450 km)	4					

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

ANNEXURE - II

CEA Case No.: BHR-154			Map Scale : 1 cm=500 m		
Name of the Power line: LILO of 220 kV D/C Ara (PG) to			Total Length : 13.391 km		
Khagaul (BSPTCL) transmission line at Naubatpur (New) S/S.			S.R. Value : 15,000 ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

East Central Railway: ECR/S&T/PTCC/134, Pt. III/66			Dated : 08.04.2019		
<u>Affected Telecom Circuits Details</u>					
1	Neora to Sadisopur	Outside IV Consideration Zone		00	
2	Sadisopur to Bihta	Outside IV Consideration Zone		00	

Tanuj

TANUJ
 सहायक निदेशक-2/Asstt. Director-II
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-66

Tele : 23019746

(Annexure-III)

BHR-154
Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi - 110011

B/46937/Sigs 7(b)/1746/

11 Sep 2019

Sr. GM
Bihar Grid Company Limited
2nd Floor, Alankar Place, Boring Road,
Patna-800 001

**PTCC PROPOSAL OF CONSTRUCTING A LILO OF 220KV D/C ARA-KHAGAUL
TRANSMISSION LINE AT 400KV GIS NAUBATPUR SUBSTATION FOR STRENGTHENING OF
TRANSMISSION SYSTEM OF BIHAR UNDER PHASE-I, PART-2**

1. Ref your letter No JV/PT/BG/TW-01/A-K/1991 dt 16 Jul 2019. (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 (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

Divisional Engineer Telegraph (PTCC)
O/o GM (North); BSNL, QA & Inspection Circle,
CTS Compound, Africa Avenue Road,
Netaji Nagar, New Delhi-110023

}
for information