

#### भारत सरकार

### Government of India विद्युत मंत्रालय

# Ministry of Power केन्द्रीय विद्युत प्राधिकरण

# Central Electricity Authority पावर कम्युनिकेशन डवलप्मेंट प्रभाग

Power Communication Development Division

No. CEA/PCD/ PTCC/UP-471/202-204

Date: 15.02.2019

DET (PTCC), Northern Zone, Bharat Sanchar Nigam Limited (BSNL), O/o PGM(N), Inspection Circle, CTS Compound, Netaji Nagar, New Delhi - 110023

Subject: Induced Voltage calculation in respect of PTCC proposal of LILO of 400 kV D/C Aligarh – Sikandarabad Line at Harduaganj Thermal Power Station

Ref: (i) BSNL letter no. DET/PTCC/ND/DV-9384/UP-680/2018-19 dated 31.10.2018

- (ii) Northern Railway letter no: 342-SIG/1/PTCC dated 20.06.2018
- (iii) Defense letter no. B/46937/Sigs 7(b)/1193/ dated 20.11.2018

Sir,

The low frequency induction on BSNL and 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 25000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL Telecom Cables and Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I&II respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above Ref.(iii) for the above line (a copy enclosed at Annex-III).

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval.

Encl.: As above

Yours faithfully,

(Naresh Bhandari) Chief Engineer

## Copy to:

- 1) GM(S&T), Northern Railway, Headquarter Office, Baroda House, New Delhi (Annex II only)
- 2) Executive Engineer, UPPTCL, Electricity 400 kV Substation Division, LalDiggi, Aligarh 202001

Case No.: UP-471

Annexure I

Name of the Power Line: 400 KV D/C Aligarh-Sikandrabad Line at

Total Length : 30.101 Kms

Harduaganj Thermal Power Station

S.R Value : 25,000 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volt
BSNL Reference	e No. DET/PTCC/ND/DV - 9 285/UP-	80/201 Date: 31/1	0/18		
	BSNL Details				
1	Jalali TE to Akansha School	7			
2	Jalali TE to Shekha Gas Godaam				
3	Jalali TE to Shekha Village				
4	Jalali TE to Nangla Ausafali	- IV less	than 43	D V	<del></del>
5. `	Jalali TE to Pilkhama Village				
6	Jalali TE to Sikandarpur				
7	Jalali TE to Ukavil				
. 8	Tala Nagri TE to Harduaganj	J			
				$\Omega$	

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

ANNEXURE - II

Case No.: UP-471 Name of the Power line: L!LO of 400 KV D/C Aligarh – Sikandarabad line at Harduaganj Thermal Power Station			Map Scale : 1cm=500mts Total Length : 30.101 Km. S.R. Value : 25000 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

	342-SIG/1/PTCC DATED:20.06.20				
ffected	Blocks & Telcom Circuits Details				
1.	Atrauli Road R/S to Godha R/S	out of parallelism			0
2.	Godha R/S to Harduaganj R/S	2	0.0045	14500	65
				$\cap$	
			. /		
			V	rwr	
			नरेश भंडारी/।	NARESH BHANDAF	RI
			मुख्य आन्त्र कन्द्रीय विश्वुत	सा/Chief Engineer त प्राधिकरण/C.E.A	
			भारत सरव	त प्राथकरण/C.E.A. I/Ministry of Powe हार/Govt. of India I/New Delhi-66	
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Tele: 23019746

UP-471

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

B/46937/Sigs 7(b)/1193

@ Nov 2018

O/o the Executive Engineer
Uttar Pradesh Power Transmission Corporation Limited
Electricity 400kV Substation Division, LalDiggi,
Aligarh-202001

# PTCC CLEARANCE FOR 400 KV DC ALIGARH-SIKANDRABAD LINE LILO AT HARDUAGANJ THERMAL POWER STATION

- 1. Ref your letter No Lt. No. 934/E400KVD(A)/PTCC LILO dt 25 May 2018 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
- Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat)

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GSO 1 (Comn) for SO-in-C

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.