

#### 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-473 / 749-51

Date: 2306.2019

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

Subject:

Induced Voltage Calculation in respect of PTCC proposal for LILO of 220 kV

Sikandrarao - Jawaharpur line at 220 kV substation Kasganj

Reference:

(i) BSNL letter no. DET/PTCC/ND/DV-9434/UP-693/2019-2020 dated 29.05.2019

(ii) North Eastern Railway letter no. N/242/0(Tele)(PTCC)-Pt.-1/333 dated 22.05.2019

(iii) Defense letter no. B/46937/Sigs 7(b)/1398 dated 01.03.2019

Sir,

The instant PTCC proposal has been examined. Low frequency induction on Block & Telecom circuits of North Eastern Railway with respect to details furnished vide above reference has been computed. The Soil Resistivity (SR) value has been taken as 15,000 Ohm-cm. The voltages likely to be induced on paralleling Block & Telecom circuits of North Eastern Railway under Single Line to Ground fault condition have been computed and are enclosed as Annex – I. The screening factors, as applicable, have been considered. Vide ref. (i) above, BSNL have issued No Objection Certificate (NOC). Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC) (enclosed as Annex – II).

Taking above into consideration, kindly take necessary action for PTCC route approval.

Encl.: As above

(Naresh Bhandari) 2

### Copy to:

- 1. GM (S&T), North Eastern Railway, Office of the General Manager (S&T), Gorakhpur, Uttar Pradesh-273012 (Annexure-I only)
- Executive Engineer, UP Power Transmission Corporation Limited, Electricity Transmission Division, 220 kV Sub Station Compound, Mainpuri, Uttar Pradesh - 205001

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ANNEXURE - I

Case No.: UP-	473		ANNE	KUKE – I	
Name of the Jawaharpur lin	<b>Power line</b> : LILO of 220 kV Sikandrarao - e at 220 kV substation Kasganj		cale : 1ci Length : 44 esistivity :		cm
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

	North Eastern Railway letter no. N/242/0(Tele)(PTCC)-Pt1/333 dated 22.05.2019							
1	Kasganj - Marahra	11.3	0.0141	6900	97			
2	Marahra - Agasauli	2.9	0.0006	7700	5			
3	Kasganj – Badhari Kala	1.0	0.0002	6800	1			
4	Kasganj – Kasganj City	2.9	0.0011	6600	7			

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

UP-473

Annex-II

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)/1398/

O ( Mar 2019

Office of the Executive Engineer U.P. Power Transmission Corporation Limited Electricity Transmission Division 220K.V. Sub Station Compound Mainpuri-205001

# CONSTRUCTION OF LILO OF 220KV SIKANDRARAO-JAWAHARPUR LINE @ 220KV SUBSTATION KASGANJ

- 1. Ref your letter No 1106/ETD(M)/Sik-Jaw. Line dt 15 Dec 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 (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

for information.