



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पावर कम्युनिकेशन डवलपमेंट प्रभाग
Power Communication Development Division

No. CEA/PCD/ PTCC/RAJ- 595 & 597/155-158

Date: 11/02/2019

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 765 kV D/C Banaskantha to Chittorgarh Transmission Line (Part – III & IV)

- Ref:** (i) BSNL letter no. DET/PTCC/ND/DV-9303/Raj-1138/2018-19 dated 31.10.2018
(ii a) Northern Western Railway letter no. SG/158/NWR/PTCC/651 dated 18.05.2017
(ii b) Northern Western Railway letter no. SG/158/NWR/PTCC/654 dated 15.06.2017
(iii a) Defense letter no. B/46937/Sigs 7(b)/561/ dated 28.07.2017
(iii b) Defense letter no. B/46937/Sigs 7(b)/591/ dated 09.08.2017


Sir,

The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii –a & b) respectively has been examined. The Average Soil Resistivity value has been taken as 10000 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-A & B respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above Ref.(iii-a & b) for the above line (a copies enclosed at Annex-III-A & B)

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

Encl.: As above

Yours faithfully,

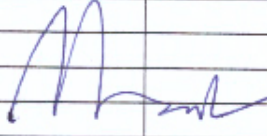

(Naresh Bhandari)
Chief Engineer

Copy to:

- 1) Dy. CSTE, North Western Railway, Head Quarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur – 302017. (Rajasthan) (With Annex – II A & B only)
- 2) DGM, PGCIL, 28-B, Pratap Nagar, Chittorgarh – 312001. (Rajasthan)

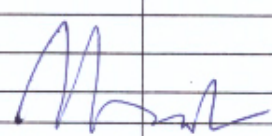
ANNEXURE - I

Case No.: RAJ-595 & 597		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : (81.585+ 74.166) कि.मी. एस. आर. मान : 10000 ओम- सेमी			
Name of the Power Line: 765 KV D/C Banaskantha – Chittorgarh Transmission Line (Part- III & IV)					
क्रम संख्या	टेलीकाम विवरण	समानांतरीय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

BSNL DETAIL		Ref. No: DET/PTCC/ND/DV-9303/Raj-1138/2018-19 DATED: 31-10-2018	
1	BHORIPAL TO SEEMRI	IV less than 430 V	
		 नरेश भंडारी/NARESH BHANDARI मुख्य अभियंता/Chief Engineer केन्द्रीय विद्युत प्राधिकरण/C.E.A. विद्युत मंत्रालय/Ministry of Power भारत सरकार/Govt. of India नई दिल्ली/New Delhi-69	

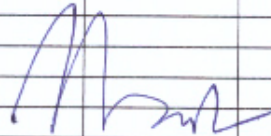
ANNEXURE – II A

Case No.: RAJ-595 & 597		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 74.166 कि.मी. एस. आर. मान : 10000 ओम- सेमी			
Name of the Power Line: 765 KV D/C Banaskantha – Chittorgarh Transmission Line (Part- III)					
क्रम संख्या	टेलीकाम विवरण	समानांतरिय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

NORTH WESRETN RAILWAY					
Ref. No: SG/158/NWR/PTCC/654 DATED: 15-06-2017					
Affected Blocks & Telcom Circuits Details					
1	Jaisamand Road – Surthand R/s	Out of parallelism			0
2	Surthand – Semari R/s*	5.0	0.0213	14665	312
3	Semari – Kunthagarh R/s*	7.5	0.0063	13998	88
4	Kunthagarh – Rikhabdev R/s*	5.0	0.0302	13330	402
5	Rikhabdev – Kotna R/s*	5.0	0.0042	13000	54
6	Kotna – Dungarpur R/s	Out of parallelism			0
<ul style="list-style-type: none"> • Located in Topo map 					
					
<p>नरेश भंडारी/NARESH BHANDARI मुख्य अभियंता/Chief Engineer केन्द्रीय विद्युत प्राधिकरण/C.E.A. विद्युत विभाग/Ministry of Power भारत सरकार/Govt. of India नई दिल्ली/New Delhi-66</p>					

ANNEXURE – II B

Case No.: RAJ-595 & 597		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 81.585 कि.मी. एस. आर. मान : 10000 ओम-सेमी			
Name of the Power Line : 765 KV D/C Banaskantha – Chittorgarh Transmission Line (Part- IV)					
क्रम संख्या	टेलीकाम विवरण	समानांतरीय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

NORTH WESTERN RAILWAY Ref. No: SG/ 158/NWR / PTCC /651		DATED: 18-05-2017			
Affected Blocks & Telcom Circuits Details					
1	MAVLI JUNCTION - VALLABHNAGAR	Out of parallelism			0
2	VALLABHNAGAR – KHERODA*	Out of parallelism			0
3	KHERODA – BHINDER*	Out of parallelism			0
4	BHINDER – KANOR*	Out of parallelism			0
5	KANOR – BANSI BOHERA*	Out of parallelism			0
6	BANSI BOHERA – BARISADRI	Out of parallelism			0
7	JASIAMAND ROAD – SURKHAND KA KHAN R/S	Out of parallelism			0
8	SURTHAND KA KHAN – SEMARI R/S*	5.0	0.0213	14665	312
9	SEMARI – KUNTHAGARH R/S*	7.5	0.0063	13998	88
10	KUNTHAGARH – RIKHABDEV R/S	5.0	0.0302	13330	402
<ul style="list-style-type: none"> Located in Topo map 					
 नरेश भंडारी / NARESH BHANDARI मुख्य अभियंता / Chief Engineer केन्द्रीय विद्युत प्राधिकरण / C.E.A. विद्युत मंत्रालय / Ministry of Power भारत सरकार / Govt. of India नई दिल्ली / New Delhi-66					

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)/591/

09 Aug 2017

Mr Raamesh Kumar
DGM (Chittorgarh)
28-B, Pratap Nagar, Chittorgarh - 312001
(Rajasthan)

**PTCC CLEARANCE FOR 765 KV D/C BANASKANTHA CHITTORGARH
TRANSMISSION LINE (PART-III) ASSOCIATED WITH GREEN ENERGY
CORRIDOR (ISTS) - PART-B**

1. Please reference your letter No NR-1/Chittor/TL-Const/39 dated 25 May 17.
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(AV Umdekar)
Lt Col
GSO 1 (Comn)
for SO-in-C

Enclosures (As above)

Copy to :-

✓ Central Electricity Authority
Power Communication, NRPC Complex,
18-A, Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016

- for information.

595
Tele : 23019746

AD/SG-III-B
Directorate General of Signals
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi - 110011

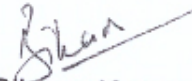
B/46937/Sigs 7(b)/561/

28 Jul 2017

Mr Ramesh Kumar
Dy General Manager, PGCIL,
28-B, Pratap Nagar,
Chittorgarh - 312001 (Raj)

**PTCC CLEARANCE FOR 765 KV D/C BANASKANTHA - CHITTORGARH
PART - IV TRANSMISSION LINE ASSOCIATED WITH GREN ENERGY
CORRIDORS (ISTS) - PART-B.**

1. Please reference your letter No NR-1/Chittorgarh/765 KV/TL dated 27 Apr 2017.
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(Bikram Kunwar)
Lt Col
GSO 1 (Comn)
for SO-in-C

Enclosures (As above)

Copy to :-

✓ Central Electricity Authority
Power Communication, NRPC Complex,
18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi - 110016

- for information.