



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/MP-406/2119-22

Date: 19.09.2018

Divisional Engineer (PTCC), Inspection Circle,
Bharat Sanchar Nigam Limited (BSNL),
3rd Floor, D-Wing, BSNL Admin Building
Juhu Tara Road, Santacruz (West)
Mumbai (Maharashtra)-400054

Subject: Induced Voltage details in respect of PTCC proposal for 765kV D/C Vindhyachal pooling-Jabalpur pooling transmission line under system strengthening scheme associated with NTPC, Vindhyachal-V, being constructed by Powergrid Jabalpur Transmission Limited.

Reference:

- i) BSNL Letter No. TM/PTCC/RA-1/MP-708, Dated-06.04.2018
- ii) WCR Letter No. WCR/N-HQ/120/PTCC/CORR/T-50/Pt-III-155, Dated 02.06.2016
- iii) Defense Letter No. B/46937/Sigs 7(b)/527, Dated-10.04.2017

Sir,

The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii) under single line to ground fault conditions has been calculated and enclosed at Annex-I & II. In the calculations, the average Soil Resistivity value has been taken as 30,000 ohms-cm, as per data submitted by Transmission Licensee, and screening factors as applicable have been considered. The Defense has accorded NOC vide above Ref.(iii), a copy is enclosed at Annex-III.

The Transmission Licensee vide email dated 10/9/18 (a copy enclosed at Annex-IV) has forwarded email of SDE (PTCC), BSNL, Bhopal wherein it is informed that marking of 7 nos. telecom cables (Sr.no. E to J in Annex-I) are within 1.4 KM to 2.0 KM radius, hence, marking of directions of cables on route map are not possible due to short length. Accordingly, IV for these cables have not been calculated. The Transmission Licensee vide email dated 12/9/18 has intimated that line length at the time PTCC proposal submission was indicated as 371.911 KM, but during construction and tower spotting, the final line length is 373.33 KM, and requested CEA to consider the same for IV calculations.

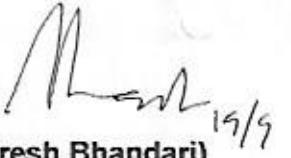
M/C

1/2

Consideration above, kindly take necessary action for issuing PTCC route approval.

Encl.: as above

Yours faithfully,


(Naresh Bhandari)
Chief Engineer

Copy to:

- (i) GM (S&T), West Central Railway, First Floor, Annex-II Building, Jabalpur-482001
(with Annexure-II only)
- (ii) Chief Manager (Engg.), PGCIL, Plot No. 54, Adjacent to Riya-Revti Resort, Opp. Ambe Vidyalaya, Sama-Savli Road, Vadodara (Gujarat)-390008

Copy for kind information to:

CGM, Inspection Circle, BSNL, Residency Rd, Prestige Town, South Civil Lines, Jabalpur, Madhya Pradesh 482001	With reference to Annex-IV, BSNL may confirm the limit of length of telecom cables upto which their marking on topomap may not be required.
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ANNEXURE - I

Case No.: MP-406					
Name of the Power Line : 765KV D/C Vindhyachal Pooling Station to Jabalpur Pooling Station Transmission Line		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 373.33 कि.मी. एस. आर. मान : 30,000 ओम-सेमी			
क्रम संख्या	टेलीकाम विवरण	समानांतरिय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

BSNL DETAIL					
Ref. No: TM/PTCC/RA-1/MP-708		DATED: 06.04.2018			
(A)	Sarai Exchange				
(1)	Exch to Nigari Road — 50 Pair				
(2)	Exch to Railway Station — 50 Pair				
(3)	Exch to Sarai Market — 100 Pair				
(4)	Sarai Market to Sarai Thana — 50 Pair	IV LESS THAN 430 V			
(5)	Sarai Market to Tehsil Office — 20 Pair				
(6)	Sarai Thana to Sarai Hospital — 20 Pair				
(7)	Sarai Thana to Forest Office — 20 Pair				
(B)	Nigari Exchange				
(1)	Exch to JP Township — 50 Pair				
(2)	Exch to Temp. Township — 20 Pair	IV LESS THAN 430 V .			
(3)	Exch to Nigari Power Plant — 20 Pair				
(C)	Majhauri Exchange				
1	Exch to Location (A) — 100 Pair				
2	Location (A) to Location (B) — 50 Pair				
3	Location (B) to Location (C) — 20 Pair				
4	Location (C) to Location (D) — 10 Pair	IV LESS THAN 430 V			
5	Location (D) to Location (E) — 5 Pair				
(D)	Madwas Exchange				
1	Exch to Location (A) — 100 Pair				
2	Location (A) to Location (B) — 50 Pair				
3	Location (B) to Location (C) — 20 Pair	IV LESS THAN 430 V			
4	Location (C) to Location (D) — 5 Pair				
(E)	Majhauri Exchange				
	UG Cable with in 1.5 km radius — 800 Pair				
(F)	Ponda Exchange				
(1)	UG Cable with in 2.0 km radius — (20+100) Pair				
(2)	Ponda Exch to Darshnic Village — 100 Pair				
(G)	Bahoriband Exchange				
	UG Cable with in 2.0 km radius — 200 Pair				
(H)	Indrana Exchange				
	UG Cable with in 1.4 km radius — 100 Pair				
(I)	Bachiya Exchange				
	UG Cable with in 1.5 km radius — 50 Pair				
(J)	Kuwa Exchange				
	UG Cable with in 1.6 km radius — 100 Pair				
(K)	Bhedaghat Exchange				
(1)	Bhedaghat Chouraha to Majeetha Village — 50 Pair	3.0	0.0210	19970	419




मुख्य अभियन्ता/Chief Engineer
NOT MARKED, SO IV COULD NOT BE CALCULATED
Sewa Bhawan, R. C. Puram,
New Delhi-110066

Case No.: MP-406

Name of the Power Line : 765KV D/C Vindhyachal Pooling Station to Jabalpur Pooling Station Transmission Line

मानचित्र स्केल : 1 सेमी=500 मीटर
कुल लम्बाई : 373.33 कि.मी.
एस. आर. मान : 30,000 ओम-सेमी

क्रम संख्या	टेलीकाम विवरण	समानांतरिय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में
(2)	Bhedaghat Chouraha to Sihora Village —50 Pair	1.9	0.0075	19952	150
(3)	Bhedaghat Chouraha to Meerganj Village —100 Pair				
(4)	Bhedaghat Chouraha to Bilha Village — 50 Pair				
IV LESS THAN 430 V					
(5)	Bhedaghat Chouraha to Bilkharna Village — 50 Pair	0.9	0.0022	19887	44
(6)	Bhedaghat Chouraha to Kheri Village —50 Pair	2.1	0.0115	19909	229
(7)	Bhedaghat Chouraha to Shilpi Nagar — 400 Pair				
(8)	Shilpi Nagar Exch to Panchvati Bhedaghat — 50 Pair				
IV LESS THAN 430 V					
(L)	Sahajpur Exchange				
(1)	Exch to Barkheda Village — 100 Pair	0.7	0.0090	19909	179
(2)	Exch to Sahajpur Basti —100 Pair				
IV LESS THAN 430 V					
(M)	Sahasran Exchange				
(1)	Exch to Basti (Left to Road)— 100 Pair				
(2)	Exch to Basti (Right to Road)— 100 Pair				
IV LESS THAN 430 V					
(N)	Burhwa Exchange				
(1)	Exch to Sukhao — 50 Pair	0.3	0.0147	12495	184
(2)	Exch to Market Burhwa — 50 Pair	0.2	0.0070	12516	88
(3)	Exch to Market Area Burhwa Towards (A) — 20 Pair, Towards (B) — 20 Pair	0.4	0.0210	12516	263


मुख्य अभियन्ता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
संस्था भवन, जार.के. पुरम,
Sewa Bhawan, R.K. Puram,
नई दिल्ली-110066/New Delhi-66

ANNEXURE – II

Case No.: MP-406					
Name of the Power Line : 765KV D/C Vindhyachal Pooling Station to Jabalpur Pooling Station Transmission Line		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 373.33 कि.मी. एस. आर. मान : 30,000 ओम-सेमी			
क्रम संख्या	टेलीकाम विवरण	समानांतरिय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

RAILWAY DETAILS					
Ref. No: WCR/N-HQ/120/PTCC/CORR/T-50/Pt-III-155				Dt. 02.06.2016	
1	Saraigram- Gajara Bahra	6.0	0.0134	17300	232
2	Gajara Bahra - Deoragram	1.1	0.0003	17990	5
3	Dubarikalan - Joba	2.2	0.0006	14200	9
4	Joba - Marwasgram	7.5	0.0028	14323	40
5.a	Marwasgram – Shankarpur*	10.5	0.0167	14600	244
5.b	Shankarpur - Niwas road	6.7	0.0203	14900	302
6	Niwas road - Bharsendi	6.4	0.0174	15635	272
7	Bharsendi - Surasaraighat jhara	3.7	0.0009	16011	14
8	Surasaraighat jhara - Saraigram	5.5	0.0008	17113	14
9	Hardua – Majhgawan phatak	4.9	0.0126	14450	182
10	Jhukehi - Patwara	2.7	0.0120	13700	164
11	Bitoni - Bheraghat	3.8	0.0138	19000	262
12	Bherghat – Madan mahal**	3.0	0.0007	18500	13

* Shankarpur Railway Station is not mentioned in the annexure provided by WCR but as per the information available in topo map this station exist in between Marwasgram and Niwas road. Hence, IV computation has been done accordingly.

** This railway section is not given in annexure provided by WCR, but as per topo map this section lies within 8 km radius of transmission line. Hence, IV computation has considered it.



मुख्य अभियंता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
सेवा भवन, अवर. जी. पुरम,
Sewa Bhawan, Awar. J. Puram,
पेड़ दिहाड़ा, जिला-86

Tele : 23019746

Sh. Unesh Tandel
May pl. arrange to
send five copies
Shalekh

24/04/17 III
Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi - 110011

B/46937/Sigs 7(b)/527/

10 Apr 2017

✓ Chief Engineer
Powergrid, WRTS-II, Vadodara
Regional Head Quarter, Plot No. 54.
Adjacent to Riya-Revati Resort, Opp. Ambe Vidhalaya,
Sama Savli Road, Vadodara - 390008

PTCC CASE FOR LILO OF 765 KV D/C VINDHYACHAL POOLING - ABALPUR
POOLING TRANSMISSION LINE UNDER SYSTEM STRENGTHENING
SCHEME ASSOCIATED WITH NTPC, VINDHYACHAL - V (ALONG WITH
ONE SET COPY OF TOPO MAP & OTHER RELEVANT DOCUMENTS)

1. Reference your letter No. WRTS-II/ENGG/VADODARA/PTCC/2106/765 KV DC VINDHYACHAL - JABALPUR TL/603/7779 dated 14 Mar 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
(Bikram Kunwar)
Lt Col
GSO 1 (Comn)
for SO-in-C

Encls : (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.

11/04/17



Naresh Bhandari <nbnareashbhandari@gmail.com>

Request for issuance of Induced Voltage Calculations in respect of 765KV D/C from Vindhychal Pooling to Jabalpur Pooling Trans. Line under VSTPP#5 Project of TBCB Scheme

2 messages

S Balakumar {एस. बालाकुमार} <sbalakumar@powergridindia.com> Mon, Sep 10, 2018 at 2:42 PM
 To: "nbnareashbhandari@gmail.com" <nbnareashbhandari@gmail.com>, "celdntcea@gmail.com" <celdntcea@gmail.com>, "rdptcc@gmail.com" <rdptcc@gmail.com>, "rp_cea@ymail.com" <rp_cea@ymail.com>, "sunnyp2.cea@gov.in" <sunnyp2.cea@gov.in>
 Cc: "detptccmbi@gmail.com" <detptccmbi@gmail.com>, "sdeptccbpl@gmail.com" <sdeptccbpl@gmail.com>, Tandal Umeshkumar Harilal {टंडल उमेशकुमार हरिलाल} <umesh.tandel@powergridindia.com>, wr2 engg <wr2engg@powergrid.co.in>, "catchbkumar1967@gmail.com" <catchbkumar1967@gmail.com>, "R.K. Gupta {आर.के. गुप्ता}" <rgupta@powergridindia.com>, "Labhesh Kr. Bansod {लभेश कुमार बनसोड}" <labhesh@powergridindia.com>, Hemraj Meena {हेमराज मीना} <hemraj.meena@powergridindia.com>

To

Respected Sh. Naresh Bhandari Sir, Chairman, CEA-PTCC-New Delhi

Respected Sh. Abraham Sir, Director-PTCC-CEA-New Delhi

Copy to :-

All concerned

We write this mail in reference to the below trailing mail and further discussion on the subject at your office.

As per the comments of SDE-PTCC-Bhopal, the underground cable are within 1.4 to 2.0 Kms. ranges and hence in the topo sheet route map, the same is not legibly marked in length and same is reflected in the Attachment sheets.

We request to kindly process the Induced Voltage calculations for 765KV D/C from Vindhychal Pooling to Jabalpur Pooling Trans. Line under VSTPP#5 Project of TBCB Scheme.

The subject transmission line are already delayed for commissioning due to severe ROW issue. We sincerely request your good office for kindly process the Induced voltage calculations, as the line is to be commissioned by 10th October-2018.

Looking forward for your kind perusal and issuance of Induced Voltage calculations.

Regards

S Balakumar

Chief Manager (Engg.)

WRTS#2, Vadodara

09428504066

From: SDE PTCC Bhopal [mailto:sdeptccbpl@gmail.com]
Sent: Thursday, August 30, 2018 2:53 PM
To: S Balakumar (एस. बालाकुमार) <sbalakumar@powergridindia.com>; Bala Kumar PGCIL Vadodara <catchbkumar@rediffmail.com>
Subject: Reg 765KV D/C from Vindhya Pooling to Jabalpur Pooling Trans. Line

Reference: Our Office No. MP-708 & Mumbai Office No. MP-449.

Jabalpur SSA (SDOT Sihora)

Refer Check List & Route Map (06) of (07) & (07) of (07).

Exchange: Majhauri, Ponda, Bahoriband, Indrana, Bachiya & Kuwa.

Sir,

It is intimated that all UG Cables are with in 1.4 Km to 2.0 Km radius. Hence, marking of directions of cables on Route Maps are not possible due to short length.

This is for your information please.

Yogendra Singh,

Sub Divisional Engineer (PTCC),

R.No. 04, Annexe Building,

Door Sanchar Bhawan,

Hoshangabad Road,

Bhopal - 462015.

0755-2767563, 09425603387.

दावात्याग: यह ईमेल पावरग्रिड के दावात्याग नियम व शर्तों द्वारा शासित है जिसे <http://apps.powergridindia.com/Disclaimer.htm> पर देखा जा सकता है।
Disclaimer: This e-mail is governed by the Disclaimer Terms & Conditions of POWERGRID which may be viewed at <http://apps.powergridindia.com/Disclaimer.htm>

Naresh Bhandari <nbnareshbhandari@gmail.com>

To: "S Balakumar (एस. बालाकुमार)" <sbalakumar@powergridindia.com>

Mon, Sep 10, 2018 at 4:36 PM