

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/MP-450/ 1142-1145

Date: 28.11.2019

The Divisional Engineer (PTCC), Western Zone, Bharat Sanchar Nigam Limited (BSNL), O/o DET (PTCC), QA & Inspection Circle, 3rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054

Subject: Induced voltage calculation in respect of 220 kV DCDS line from proposed 220 kV S/S Sailana to 220 kV S/S Ratlam (Nagda Switching Station) under Phase-I project of Green Energy Scheme of MNRE, GoI.

 Ref.:
 (i)
 MPPTCL Ref. No. 04-01/PTCC/2478/TR-I/9125
 Dated: 20.11-2018

 (ii)
 BSNL Ref. No. IC/MBI/PTCC/MP-587
 Dated: 05.03.2019

 (iii)
 Western Railway Ref. No. SG 158/28/10(L-195)
 Dated: 19.06.2019

 (iv)
 Defense Ref. No. B/46937/Sigs 7(b)/1360/
 Dated: 28.12.2018

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL cables and block circuits of Western Railways as per details furnished vide ref. (ii) and ref. (iii) respectively has been examined. The Soil Resistivity value has been taken as 10,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL cables and Railway block circuits under single line to ground fault condition are enclosed at Annex-I and Annex-II respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above ref. (iv) for this line (a copy enclosed at Annex-III).

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

Encl.: As above.

Upoutakama

(Upendra Kumar) Chief Engineer, PCD

M)c

Copy to:

1. Office of CSTE, S&T Dept., 5th Floor, Station Building, Churchgate, Mumbai-400020

2. Chief Engineer (Procurement), MPPTCL, 1st Floor, Block No. 3, Shakti Bhavan, Rampur, Jabalpur, Madhya Pradesh -482008.

<u></u>	A Carice Case No.: MP-450	· ,	Map Scale: 1:50,000				
ָנ ונו	T (PTCC) Office Case No.: IC/MBI/PTCC/MP-587	- 	Po			, , , , , , , , , , , , , , , , , , ,	
Rail	way Office Case No.	• •	, Koi	ute Length:	33.317 Kms		
`	way Office Case No.: 5G7 158/28/10 (L-19	5)	Ave	erage SD Vol	- - - - - - - - -	· · · ·	
Nam				arago DIC A 81	ue: 10,000	Ohm cm	
******	The second of the second secon	oposed 220	OKV	S/s Sailana	to 2201/3/	21	
-	Ratlam (Nagda Switching S Energy Scheme of MNRE C	Station) un	ider l	Phase-I Pro	iect of Cro	3/8 0m	
S. No	o. Name of Telecom Line/ Cable	GoI.	· '		Jeer of GIG	EII	
	zinc/ Cable	Length		Mutual	Fault	Induce	
<u> </u>		Paralleli	sm	Coupling	Current		
	RATLAM SSA	in Kms.		in Ohms	in Amps		
<u></u>	SDOT Ratlam						
(1) A D	Ratlam Main T/Exchange Shatrinagar						
A-B.	Exclinge to Fuvara Chouk - 800 Pain	· -					
C-D	Exchange to Aabkari Chouraha - 400 Pain	++	-				
E-F	Exchange to Katju Nagar - 400 Pair	- Out	- Of	Pasellel.	`km		
G-H	Exchange to Govt. College - 200 Pair	 					
<u>II)</u>	. Ratiam Kasturba Nagar RSII T/Freber						
1-B	Exclinge to Dongare Nagar - 200 Pair		 			,	
<u>-D</u>	Exchange to Alkapuri - 800 Pair	4 Out	, , ,	ange for	consides	sh on	
<u>II)</u>	Ratlam Vikram Nagar RSII T/Free		of	IVCOC	uletion		
λ-B	Exemige to Pillar - 400 Pair	<u> </u>			to the state of the state of		
$\overline{\mathbf{(V)}}$	Ratlam Industrial Area RSII T/Fycho-	Out of	Pa	Ralletier		TO A TO THE WAY OF THE TOTAL OF THE	
-B	Exchinge to Pillar - 400 Pair		-				
<u>)</u>	Bangrod T/Exchange	IV les	3 1	ham 43	$\circ V$		
-B	Exchnge to Bus Stand -400 Pair	The state of the s		72 J74 7 10 W - 777 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
70	Sailana T/Exchange	IV Des	2 1	ham 430	V	The state of the s	
-B	Exchange to Mata Mandir - 800 Pair	<u> </u>					
D	Exchange to Kirti Stambh Colony - 200 pair	7 IV Q	ess	than 4	30V	r	
	Trainin 1/Exchange	ر —————	<u>.</u>				
	γ		f				
<u>B</u>	Exchange to Palduna Road Pillar - 400 Pair Exchange to Bus Stand - 400 Pair	} IV J	<u> </u>		f	•	

मुख्य अभिष्ता/Chief Engineer केन्द्रीय विद्या अधिकरण/C.E.A. केन्द्रीय विद्या अधिकरण/C.E.A. विद्युत मंत्रालय/Ministry of Power विद्युत मंत्रालय/Ministry of India भारत संस्कार/Govt. of India मई दिल्ली/New Delhi नई दिल्ली/New Delhi

ANNEXURE -II Case No.: MP-450 Name of the Power line: 220KV DCDS line from proposed 220KV S/s Sailana to 220KV S/s Ratlam (Nagda Switching Station) under Map Scale : 1cm=500mts Phase-I Project of Green Energy Scheme of MNRE GoL Total Length 33.317 Km. S.R. Value 10,000 Ohms-cm Effective Length of Mutual Fault I.V **Parallelism** Coupling current in S.No. Telecom. Details in Km. in Ohms. in Amps. Volts. WESTERN RAILWAY Ref. No: SG. 158/28/10(L-195) DATED: 19-06-2019 Affected Blocks & Telcom Circuits Details Ratlam - Nauganwan Out Parallelism of Nauganwan - Runija range for IV consideration. Out of Ratlam - Dhosawas 7118 0.0009 Dhosawas - Namli 4 2.9 0.0080 6364 51 Namli - Baryala Chaurasi **ア**.ア 5496 0.0016 Ratlam - Ratlam cabin 9400 0.0006 Ratlam cabin - Bangrod 3 00043 8576 37 Bangrod - Runkhera 8 8200 0.5 0.0001 Ratlam - Ratlam A cabin. Out of Parallelism Ratlam A cabin - Morwani 10 Range for IV consideration Lehron मुख्य अस्थिता/Chief Engineer केन्द्रीय विद्युत गाधिकत्ण / C.E.A. विद्युत मंत्रालय / Ministry of Pewer भारत संस्था /Govt. of India मई दिल्ला/New Della

Tele: 23019746

Annexure-TIMP-450

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

₩ Dec 2018

B/46937/Sigs 7(b)/1360/

Chief Engineer (Procurement)
Madhya Pradesh PowerTransmission Co. Ltd.
Block No. 3, Shakti Bhawan, Rampur,
Japalpur(M.P.)482008

PTCC ROUTE APPROVAL FOR CONSTRUCTION OF 220KV DCDS LINE FROM PROPOSEI 220KV S/S SAILANA TO 220KV S/S RATLAM (NAGRA SWITCHING STATION) UNDER PHAS PROJECT OF GREEN ENERGY SCHEME OF MNRE GOI

- 1. Ref your letter No 04-01/ PTCC/2478/TR-I/9125 dt 20 Nov 2018. (copy att).
- 2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map she 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.