



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

के.वि.प्रा. केस सं. : HRA-244: / 478-480
पी.टी.सी.सी. प्रस्ताव 220 kV D/C line from 400/220 kV S/S Dhanonda to 220 kV S/S Deroli Ahir : 28.348 km

क्रमांक	सन्दर्भ सं.	दिनांक
(i)	HVPNL: Ch-21/HDP2397/Correspondance & details received via email	20.05.2021, 27.05.2022
(ii)	BSNL: DET/PTCC/ND/DV-9913/HR-870/2021-2022	26.07.2021
(iii)	North Western Railway : SG/158/NWR/PTCC/836	20.07.2021
(iv)	Defense : B/46937/Sigs 7(b)/2469	08.10.2021

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। बी.एस.एन.एल. के टेलिकॉम केबलों एवं उत्तर पश्चिम रेलवे के ब्लॉक और टेलीकॉम सर्किट पर निम्न आवृत्ति प्रेरण गणना क्रमशः उपरोक्त संदर्भ (ii) और संदर्भ (iii) में दिए गए विवरणों के संबंध में की गई है। सिंगल लाइन टू ग्राउंड फॉल्ट की स्थिति के तहत बी.एस.एन.एल. और उत्तर पश्चिम रेलवे के ब्लॉक और टेलीकॉम सर्किट के समानांतर दूरसंचार केबलों पर प्रेरित होने की संभावना वाले वोल्टेज क्रमशः अनुलग्नक-I और अनुलग्नक-II में संलग्न हैं। स्क्रीनिंग कारक का मान यथानुरूप लिया गया है। उपरोक्त संदर्भ (iv) द्वारा, रक्षा प्राधिकरण ने अनापत्ति प्रमाण पत्र (एन.ओ.सी.) जारी किया है।

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के लिए आवश्यक कार्रवाई की जाए।
संलग्न: उपरोक्त अनुसार

र.प.के.न्यू प्रताप मिश्रा
निदेशक 13.06.2022

सेवा में,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi-110001.	अनुलग्नक-I
2.	Dy. CSTE/Tele	NWR/Jaipur, Head Quarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur-302017.	अनुलग्नक-II
3.	XEN/TS Division	HVPNL; O/o EE, T.S. Division, Rewari-123401.	जानकारी हेतु



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Power Communication Development Division

CEA Case No. : HRA-244: /478-490
PTCC proposal for 220 kV D/C line from 400/220 kV S/S Dhanonda to 220 kV S/S Deroli
Ahir : 28.348 km

Reference:		
S. No.	Reference No.	Dated
(i)	HVPNL: Ch-21/HDP2397/Correspondance & details received via email	20.05.2021, 27.05.2022
(ii)	BSNL: DET/PTCC/ND/DV-9913/HR-870/2021-2022	26.07.2021
(iii)	North Western Railway : SG/158/NWR/PTCC/836	20.07.2021
(iv)	Defense : B/46937/Sigs 7(b)/2469	08.10.2021

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of North Western Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of North Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors, as applicable, have been considered. Vide above reference (iv), Defence Authority have issued No Objection Certificate (NOC).

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken.

Encl.: As above.

राधेशंकर प्रसाद सिंह
13.06.2022
Director

To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi- 110001.	Annexure-I
2.	Dy. CSTE/Tele	NWR/Jaipur, Head Quarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur-302017.	Annexure-II
3.	XEN/TS Division	HVPNL; O/o EE, T.S. Division, Rewari-123401.	Copy for information

Case No.: HRA-224

Name of the Power Line: 220 KV D/CTransmission Line from 400/220 KV S/Stn Dhanonda to 220 KV S/Stn Deroli Ahir

Annexure I

Toposheet Scale : 1cm=500mts
Total Length : 28.348 Kms
S.R Value : 7,500 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts
BSNL					
Reference No. DET/PTCC/ND/DV-9913/HR-870/2021-22 Dated:- 26.07.2021					
BSNL Details					
	Ateli to Gujrawas 50 pair 2 KM				00
	Rataa Ateli to katkai 50 pair 3 KM				00
	NSB to Silarpur 20 pair 3 KM				00
	Dongra Ahir to Kalwari 100 pair 3 KM				00
	Dongra Ahir to Dongra Jat 200 pair 1 KM	1	0.0018	7700	14
	Dongra Ahir to Mundiya Khera 200 pair 3 KM	1.6	0.0018	7700	14
	Dongra Ahir to Siphon 100 pair 4 KM	1.3	0.0043	7800	34
	Dongra Ahir to Dongra Ahir 200 pair 2 KM	1.5	0.0018	7700	14
	Rataa Ateli to Kharani 20 pair 2 KM	0.8	0.0015	8200	13
	Bhojawas to Jhagwan 20 KM 4 KM				00
	Bhojawas to Sundra 200 KM 3 KM				00
	Dongra Ahir to Bewal 100 pair 4 KM	1.5	0.0018	7700	14
	Dewas to Surjanwas 200 pair 3.5 KM	1.4	0.0189	5360	102
	Bhojawas to Rambas 100 pair 6 KM				00
	Bhojawas to Dhanā 200 pair 7 KM				00
	Bhojawas to Partal 200 pair 3.5 KM				00
	Mohanpur to Israna 20 pair 3 KM				00
	Mohanpur to Nangal 50 pair 1 KM	0.4	0.0003	6360	02
	Mohanpur to Koka 10 pair 3 KM	0.8	0.0006	6360	04
	Mohanpur to Rasulpur 10 pair 4 KM				00
	Dewas to Bawania 50 pair 4.5 KM	4.3	0.0217	5360	117
	Bawaniya to gagarwas 20 pair 1.5 KM	0.6	0.0006	5810	04
	Dewas to Meghnawas 20 pair 3.5 KM	3.4	0.0398	5360	213
	Jhagrauli to Buchawas 120 pair 1 KM	0.9	0.0008	5714	05
	Jhagrauli Exchange to Pathera 370 pair 2 KM	2.5	0.0018	6820	13
	Kanina to Gurha 100 pair 6 KM				00
	Kanina to Unhani 50 pair 2 KM				00
	Kanina to Chelawas 20 pair 2.5 KM				00
	Kanina to Kakrala 50 pair 6 KM				00
	Kanina to Kanina Khas 1350 pair 10 KM				00
	Sihor to Gahra 100 pair 2.5 KM				00
	Selang to Talwana 100 pair 4 KM				00

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संजय जयसिंग
सहायक निदेशक-II/Asstt. Director-II
रेल्वे विभाग प्राधिकरण/C.E.A.

Case No. :

HRA-244

Annexure I

Toposheet Scale : 1cm=500mts

Total Length : 28.348 Kms

S.R Value : 7,500 Ohm-cm

Name of the Power Line: 220 KV D/C Transmission Line from 400/220 KV S/Stn Dhanonda to 220 KV S/Stn Deroli Ahir

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts
	Selang to Kheri 100 pair 3 KM				00
	Selang Exchange to Selang 350 pair 5 KM				00
	Sihor to Jharli 30 pair 3 KM				00
	Sihor to Uchchant 10 pair 3.5 KM				00
	Sihor to Selang 250 pair 4 KM				00
	Sihor to bahuwa 100 pair 3 KM				00
	Bahuwa to Bhala 50 pair 3 KM				00
	Selang to Bhagot 50 pair 4 KM				00
	Selang to Pota 100 pair 1.5 KM				00
	Akoda to Basai 200 pair 4 KM				00
	Selang to Bawana afghanan 50 pair 4 KM				00
	Pali to palra 100 pair 4 KM				00
	Pali to Lawan 200 pair 3 KM				00
	M. Garh to Jhuk 50 pair 6 KM				00
	M. Garh to Sigri 20 pair 4 KM				00
	M. Garh to Majra Kalan 50 pair 4.5KM				00
	M. Garh to Sisot 50 pair 4 KM				00
	M. Garh to Mahendergarh 6000 pair 1 KM				00
	M. Garh to Khayara 50 pair 4 KM				00
	M. Garh to Payaga 50 pair 4 KM				00
	M. Garh to Riwasa 50 pair 4 KM				00
	M. Garh to Majra Khurd 200 pair 3 KM				00
	M. Garh to Salimabad 200 pair 1 KM				00
	Jhagrauli to Sigra 50 pair 4 KM				00
	Dewas to Bucholi 10 pair 6 KM	3.1	0.0197	6000	118
	M. Garh to Dulana 50 pair 5 KM				00
	Dewas to Chitlang 70 pair 1 KM	0.6	0.0007	6000	05
	Dewas to Bhandor Unchi 150 pair 2 KM	0.4	0.0003	6000	02
	Dewas to Jasawas 100 pair 3 KM	0.4	0.0003	6000	02
	Dewas to Chamdhera 50 pair 5 KM				00
	M. Garh to Beri 100 pair 5 KM				00
	M. Garh to Jatawas 100 pair 4 KM				00
	M. Garh to Bhandor Nichi 50 pair 5 KM				00
	M. Garh to Janjdiyawas 30 pair 5 KM				00

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 विद्युत मंत्रालय/Ministry of Power

File No. : HRA-244

Annexure I

Name of the Power Line: 220 KV D/C Transmission Line from 400/220 KV S/Stn Dhanonda to 220 KV S/Stn Deroli Ahir

Toposheet Scale : 1cm=500mts
Total Length : 28.348 Kms
S.R Value : 7,500 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts	
	Nangal Sirohi to Bairawas 50 pair 3 KM	1	0.0009	8929	08	
	Nangal Sirohi to Nihalawas 50 pair 2 KM	2	0.0019	8929	17	
	Nangal Sirohi Exchange to Sirohi nangal 200 4KM	3.8	0.0033	8929	30	
	Sihma to Deroli Ahir 20 pair 3 KM	Out of parallelism			00	
	Sihma to Atali 50 pair 4 KM	3.5	0.0043	8214	35	
	Dulot Exchange to Dulot 200 pair 2 KM	0.8	0.0033	8220	27	
	Sihma to Segarpur 50 pair 2 KM	0.5	0.0009	9520	09	
	Sihma Exchange to Sihma 400 pair 3 KM	0.5	0.0009	9520	09	
	Sihma to Khaspur 50 pair 2 KM	0.5	0.0009	9520	09	
	Sihma to Khampura 50 pair 2 KM	0.5	0.0009	9520	09	
	Sihma to Hudina 100 pair 3 KM	0.5	0.0009	9520	09	
	NSB to Hajipur 50 pair 7 KM	} Out of parallelism			00	
	NSB to Faizabad 20 pair 5 KM				00	
	NSB to Niwazpur 20 pair 6 KM				00	
	NSB to Lahroda 100 pair 3 KM				00	
	NSB to Bargaon 50 pair 3 KM				00	
	NSB to Bakroda 100 pair 4 KM				00	
	NSB to Selarpur 20 pair 3 KM				00	
	NSB to Bas-Kirarod Umrabad 100 pair 8 KM				00	
	Nangal Sirohi to Golawala 10 pair 5 KM		3.1	0.0027	8930	24
	Bachod to Saluni 100 pair 5 KM		} Outside IV consideration zone			00
	Bachod to Dublana 50 pair 5 KM				00	
	Bachod to Guwani 100 pair 2 KM				00	
	Narnaul to Chhapra Salimpur 40 pair 8 KM				00	
	Bachod to Jat Guwani 20 pair 6 KM				00	

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केंद्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-68

ANNEXURE - II**CEA Case No.: HRA-244****Name of the Power line:** 220 kV D/C line from 400/220 kV S/S Dhanonda to 220 kV S/S Deroli Ahir.**Map Scale** : 1 cm=500 m**Total Length** : 28.348 km**S.R. Value** : 7,500 Ω -cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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NORTH WESTERN RAIWAY Ref. No: SG/158/NWR/PTCC/836 Dated: 20.07.2021

Affected Blocks & Telecom Circuits Details

1	Satnali – Zerpur Pali	Outside IV Consideration Zone			00
2	Zerpur Pali – Mahendragarh	Outside IV Consideration Zone			00
3	Mahendragarh – Kanina Khas	7.4	0.0018	7800	14
4	Kanina Khas– Dahina Zainabad	Outside IV Consideration Zone			00



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