



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

CEA Case No.: MRA-1182 / 325-327
PTCC proposal for 220 kV D/C transmission line from proposed 400 kV Karjat S/S at District Ahmednagar to existing 220 kV Jeur S/S at District Solapur : 50.693 km

Reference:		
S. No.	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-579/4060	22.07.2021
(ii)	BSNL: IC/MBI/PTCC/MRA-2499	31.01.2022
(iii)	Central Railway: N.153/PTCC/220kV/MAH-781	20.09.2021
(iv)	Defense: B/46937/Sigs 7(b)/2949	15.09.2021

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of Central 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 Central 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) (a copy enclosed as Annexure-III).

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

Encl.: As above.

रघुवैन्दु प्रताप सिंह
 Director 4.4.22

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	Annexure-I & Annexure-III
2.	Dy. CSTE/Tele	Central Railway; O/o Principal Chief Signal & Telecom Engineer, 3 rd floor, Annex Building, CSMT Mumbai-400001.	Annexure-II
3.	SE (Projects Schemes)	MSETCL; Projects Schemes Department, "Prakashganga", Plot No. C-19, E Block, Bandra-Kurla Complex, Bandra (East), Mumbai-400051.	Copy for information



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. : MRA-1182: / 325-327
पी.टी.सी.सी. प्रस्ताव 220 kV D/C transmission line from proposed 400 kV Karjat S/S at District Ahmednagar to existing 220 kV Jeur S/S at District Solapur : 50.693 km

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-579/4060	22.07.2021
(ii)	BSNL: IC/MBI/PTCC/MRA-2499	31.01.2022
(iii)	Central Railway: N.153/PTCC/220kV/MAH-781	20.09.2021
(iv)	Defense: B/46937/Sigs 7(b)/2949	15.09.2021

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। बी.एस.एन.एल. के टेलिकॉम केबलों एवं मध्य रेल के ब्लॉक और टेलिकॉम 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 मध्य रेल के ब्लॉक और टेलिकॉम 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। (एक प्रति अनुलग्नक-III के रूप में संलग्न है)

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

संलग्न: उपरोक्त अनुसार

श.प्र.के.के. प्रमाण लि.ई
निदेशक 4/4/22

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	अनुलग्नक-I & अनुलग्नक-III
2.	Dy. CSTE/Tele	Central Railway; O/o Principal Chief Signal & Telecom Engineer, 3 rd floor, Annex Building, CSMT Mumbai-400001.	अनुलग्नक-II
3.	SE (Projects Schemes)	MSETCL; Projects Schemes Department, "Prakashganga", Plot No. C-19, E Block, Bandra-Kurla Complex, Bandra (East), Mumbai-400051.	जानकारी हेतु

CEA: MRA-1182

(Annexure-I)

DET(PTCC) office case no. Railway office case no.	Route length- 50.693 km; S.R. = 10,000 Ω cm
Name of the power line	Proposed 220kV DC line from 400/200 kV Karjat S/S (Dist. Ahmednagar) to 220kV Jeur S/S(Dist. Solapur) Length- 50.693km

S. No.	Name of telecom line/cable	Length of cable (km)	Mutual coupling (Ω)	Fault current (A)	Induced voltage (V)
1	Kettur TE to Railway Gate	0.5Km	IV less than 430V		
2	Kettur TE to Kettur No.1	3Km			
3	Kettur TE to DiveGhavan	5Km			
4	Kettur TE to Jadhav Ghar	6Km			
5	Kettur TE to Khatmude Ghar	0.4km			
6	Kettur TE to Phomal wadi	3Km			
7	Jinti TE to Kondhar Chincholi	8Km			
8	Jinti TE to Railway gate	2Km			
9	Jinti Railway gate to Kawalwadi	3Km			
10	Jinti Railway Gate to Bhillarwadi	3Km			
11	Jinti Railway Gate to Makhai Kharkhana	2Km			
12	Jinti TE to Takali	6Km			
13	Jinti TE to Khajgaon	8.5Km			
14	Jinti TE to Ramawadi	4Km			
15	Jinti TE to Vittalwadi	4Km			
16	Jinti TE to Bharathwadi	3.5Km			
17	Kumbhargaoon TE to Malibasthi	2Km			
18	Kumbhargaoon TE to Bhelawadi	3Km			
19	Kumbhargaoon TE Tobhevasti	3Km			
20	Washimbe TE to Soagaon	4Km			
21	Soagaon to Undhar gaon	4Km			
22	Washimbe TE Goyegaon	4Km			
23	Goyegaon to Kettur No.1	2Km			
24	Washimbe TE Bhanudas tapare	2Km			
25	Washimbe TE Bhuite Ghar	1Km			

तनुज/TANUJ

सहायक निदेशक-II/Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

(Annexure-I)

DET(PTCC) office case no. Railway office case no.	Route length-50.693km ; S.R. = 10,000 Ω cm
Name of the power line	Proposed 220kV DC line from 400/200 kV Karjat S/S (Dist. Ahmednagar) to 220kV Jeur S/S(Dist. Solapur) Length- 50.693km

S. No.	Name of telecom line/cable	Length of cable (km)	Mutual coupling (Ω)	Fault current (A)	Induced voltage (V)
26	Korti TE to Savadi	7Km	} TV less than 430V		
27	Korti TE to Rajuri	7km			
28	Korti TE to Kushkarwadi	4km			
29	Korti TE to Pandowadi	6km			
30	Korti TE to Gorewadi	3Km			
31	Korti TE to Bhairavanath sugar factory	5Km			
32	Jeur TE to Jeurwadi	1.5Km			
33	Jeur TE to Leve	4Km			
34	Jeur TE to Kondhej	4Km			
35	Jeur TE to Adinath sugar factory	6Km			
36	Jeur TE to Shelgaon	3Km			
37	Jeur TE to Dahigaon	3Km			
38	Jeur TE to Wangi No.2	6Km			
39	Jeur TE to Old MSEB office	1.5Km			
40	Umradi TE to Manjargaon	5Km			
41	Umradi TE to Undargaon	4Km			
42	Umradi TE to Soagaon	3Km			
43	Umradi TE to Poploj	3Km			

TANUJ
एक निदेशक-II/Asstt. Director-II
राज्य विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

ANNEXURE-II

Case No.: MRA – 1182
Name of the Power line: 220 kV D/C transmission line from proposed 400 kV Karjat S/S at District Ahmednagar to existing 220 kV Jeur S/S at District Solapur.

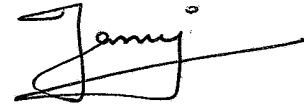
Map Scale : 1 cm=500 m
Total Length : 50.693 km
S.R. Value : 10,000 ohm-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
-------	------------------	------------------------------	--------------------------	----------------------------------	---------------

Central Railway: N.153/PTCC/220kV/MAH-781 Dated: 20.09.2021

Affected Blocks & Telecom Circuits Details

1	Boribial to Malthan	Outside IV Consideration Zone			00
2	Malthan to Bhigvan	Outside IV Consideration Zone			00
3	Bhigvan to Jinti Road	3.2	0.0003	6142	02
4	Jinti Road to Parewadi	7.8	0.0009	6099	06
5	Parewadi to Washimbe	5.3	0.0006	6048	04
6	Washimbe to Pophlaj	9.1	0.0008	7036	06
7	Pophlaj to Kem	6.4	0.0049	9111	45



तनुज/TANUJ
सहायक निदेशक-II/Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

Tele : 23019746

MRA-1182 Directorate General of Signals
Signals 7
General Staff Branch
(Annexure - III) Integrated HQ of MoD (Army)
DHQ PO, New Delhi - 110011

B/46937/Sigs 7(b)/2494/

15 Sep 2021

Office of the Superintending Engineer,
Projects Schemes Department
Maharashtra State Electricity Transmission Company Ltd
"Prakashganga", Plot No C-19, 'E' Block,
Bandra - Kurla Complex, Bandra (East),
Mumbai-400051

**PTCC PROPOSAL FOR 220KV DC LINE FROM PROPOSED 400KV KARJAT
S/S (DIST. AHMEDNAGAR) TO EXISTING 220KV JEUR S/S,
LENGTH=50.693KMS**

1. Refer your letter No MSETCL/CO/PS/PTCC/In/B-579/No 04060 dt 22 Jul 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are forwarded herewith for your further action.

(A Rawat)
Lt Col
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

The DET(PTCC), Northern Zone
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

- for information