



सत्यमेव जयते

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-1273		
PTCC proposal for Induced Voltage (IV) calculation of 132 kV S/C Solapur(400/132 kV) – Ujjani (132 kV) Transmission Line [Length- 131.454 km]– Regd.		
S. No	Reference No.	Dated
(i)	NTPCL: NTPC-Solapur/132kVTL/SC/PTCC/01	08.05.2024
(ii)	NTPCL: e-Mail	11.12.2024
(iii)	BSNL: IC/MBI/PTCC/MRA-2657/03	23.11.2024
(iv)	South Western Railway: SG/SWR/PTCC/Corres/E:2-12	26.08.2024
(v)	Central Railway: N.153/PTCC/132kV/MAH-877	18.06.2024
(vi)	Defense: B/46937/Sigs7(b)/3951	20.08.2024

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL, South Western Railway & Central Railway with respect to details furnished vide above reference (iii), (iv) & (v) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL, South Western Railway & Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I, Annexure-II & Annexure-III respectively. The screening factors as applicable have been considered. DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (vi).

Taking above into consideration, necessary action regarding issuance of PTCC approval for the subject cited transmission line may be taken under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Bldg., Santa Cruz (West), Mumbai-400054	Annexure-I
2.	GM (S&T) South Western Railway	O/o PCSTE, S&T Dept. South Western Railway Rail Soudha, Hubballi	Annexure-II
3.	GM (S&T) Central Railway		Annexure-III
4.	AGM- NTPCL	Solapur Super Therna Power Project Solapur-NTPCL	

ANNEXURE-I

CEA Case No.: MRA-1273 Name of the Power line: 132 kV S/C Solapur(400/132 kV) –Ujjani (132 kV) Transmission Line			Map Scale : 1 cm= 500 m Total Length : 131.454 km S.R. Value : 7500 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL: IC/MBI/PTCC/GUJ-2977 Dated 03.09.2024					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Hotgi TE to Hotgi Gaon 100 Pr U/G Cable				IV Less than 430 V
2.	Hotgi TE to Hotgi Gaon 50 Pr U/G cable				
3.	Hotgi TE to Fatatewadi 50 Pr U/G cable				
4.	Hotgi TE to Hotgi Station 100 Pr U/G cable				
5.	Hotgi TE to Hiple 100 Pr U/G cable				
6.	Hotgi TE to Shingadgaon 100 Pr U/G cable				
7.	Hattur TE to shamshapur 50 pr U/G cable				
8.	Hattur TE to Kulkarni Tanda 50 pr U/G cable				
9.	Hattur TE to Madre 50 pr U/G cable				
10.	Hattur TE to Chandral 50 pr U/G cable				
11.	Hattur TE to Solapur Road 100 pr U/G cable				
12.	Mandrup TE to Basavnagar 50 pr U/G cable				
13.	Mandrup TE to Basavnagar 100 pr U/G cable				
14.	Mandrup TE to Nandani 100 pr U/G cable				
15.	Mandrup TE to Nimbargi Rd 100 pr U/G cable				
16.	Mandrup TE to Malkavathe Rd 200 pr U/G cable				
17.	Mandrup TE to wangi Rd 50 pr U/G cable				
18.	Mandrup TE to solapur Rd 50 pr U/G cable				
19.	Mandrup TE to kandalgaon Rd 200 pr U/G cable				

20.	Hotgi TE to Hotgi Gaon 50 Pr U/G cable	IV Less than 430 V
21.	Hotgi TE to Hotgi Gaon 100 Pr U/G cable	
22.	Hotgi TE to Fatatewadi 50 Pr U/G cable	
23.	Hotgi TE to Hotgi Station 100 Pr U/G cable	
24.	Hotgi TE to Hiple 100 Pr U/G cable	
25.	Hotgi TE to Shingadgaon 100 Pr U/G cable	
26.	Hattur TE to shamshapur 50 pr U/G cable	
27.	Hattur TE to Kulkarni Tanda 50 pr U/G cable	
28.	Hattur TE to Madre 50 pr U/G cable	
29.	Mandrup TE to Basavnagar 100 pr U/G cable	
30.	Hattur TE to Chandral 50 pr U/G cable	
31.	Hattur TE to Solapur Road 100 pr U/G cable	
32.	Mandrup TE to Basavnagar 50 pr U/G cable	
33.	Mandrup TE to Nimbargi Rd 100 pr U/G cable	
34.	Mandrup TE to kandalgaon Rd 200 pr U/G cable	
35.	Mandrup TE to Malkavathe Rd 200 pr U/G cable	
36.	Mandrup TE to wangi Rd 50 pr U/G cable	
37.	Mandrup TE to solapur Rd 50 pr U/G cable	
38.	Mandrup TE to Nandani 100 pr U/G cable	
39.	Mangalwedha Telephone Exchange to Bus Stand 400 Pr	
40.	Bus Stand to New Tahasil 50 Pr	
41.	Bus Stand to MSEB 50 Pr	
42.	Mangalwedha Telephone Exchange to Borale Naka 400 Pr	
43.	Borale Naka to Doordarshan 50 Pr	
44.	Borale Naka to SPR Rd 50 Pr	
45.	Metkari Galli to Shanivar Peth 50 Pr	
46.	Mangalwedha Telephone Exchange to matkari Galli 400 Pr 4B	

47.	Bhamhapuri Exch to Main Rd 200 Pr	IV Less than 430 V
48.	Bhamhapuri Exch to Karkhana Rd 50 Pr	
49.	Bhamhapuri Exch to BOM Rd 50 Pr	
50.	Bhamhapuri Exch to gavthan 50 Pr	
51.	Pandharpur Telephone Exchane to Mandir 400 Pr	
52.	Mandir to River 50 Pr	
53.	Mandir to Kalika Chowk 50 Pr	
54.	Mandir to Sant Peth 50 Pr	
55.	Pandharpur Telephone Exchange to Takali 100 Pr	
56.	Pandharpur Telephone Exchange to 50 Pr	
57.	Pandharpur Telephone Exchange to Railway Station 50Pr	
58.	Pandharpur Telephone Exchange to KBP collage 200 Pr	
59.	KBP collage to Isbavi 50 Pr	
60.	Pandharpur Telephone Exchange to Karad Rd 100 Pr	
61.	Pandharpur Telephone Exchange to Manishanagar 100 Pr	
62.	Manisha Nagar to Link Rd 50 Pr	
63.	Pandharpur Telephone Exchange to Station Rd 100 Pr	
64.	Pandharpur Telephone Exchange to Station Rd 50 Pr	
65.	Bhimanagar TE to Aadhegaon 100 Pr U/G Cable	
66.	Bhimanagar TE to Highway Gate 200 Pr U/G Cable	
67.	Bhimanagar TE to Ranzani 50 Pr U/G Cable	
68.	Ranzani to Alegaon-Bk 50 Pr U/G Cable	
69.	Bhimanagar TE to Ujani-Te 20 Pr U/G Cable	
70.	Tembhurni TE to Shevare 50 Pr U/G cable	
71.	Tembhurni TE to Venegaon 50 Pr U/G cable	
72.	Tembhurni TE to Nagorli 50 Pr U/G cable	
73.	Bembale TE to Mitkalwadi 50Pr U/G cable	
74.	Tembhurni TE to Shiral-Te 100 Pr U/G cable	

75.	Tembhurni TE to Surli 100 Pr U/G cable	IV Less than 430 V
76.	Bembale TE to Ghoti 20 Pr U/G cable	
77.	Bembale TE to Parite Road 50 Pr U/G cable	
78.	Bembale TE to Anapat Wasti 50Pr U/G cable	
79.	Parite TE to Bembale Road 50Pr U/G cable	
80.	Akole-Kh TE to Footjavalgaon 50 Pr	
81.	Akole-Kh TE to Tembhurni road 50 Pr	
82.	Sangam TE to Highway	
83.	Sangam office to Temple	
84.	Sangam office to Bawada	
85.	Indapur City	
86.	Indapur Rural	
87.	Kandalgan TE	
88.	Kandalgan TE	

ANNEXURE-II

CEA Case No.: MRA-1273 Name of the Power line: 132 kV S/C Solapur(400/132 kV) –Ujjani (132 kV) Transmission Line			Map Scale : 1 cm= 500 m Total Length : 131.454 km S.R. Value : 7500 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
South Western Railway: SG/158/28/12(1339) Dated 13.07.2023					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	TVL R/s to HG R/s	-Out of Parallelism-			

ANNEXURE-III

CEA Case No.: MRA-1273 Name of the Power line: 132 kV S/C Solapur(400/132 kV) –Ujjani (132 kV) Transmission Line			Map Scale : 1 cm= 500 m Total Length : 131.454 km S.R. Value : 7500 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/132kV/MAH-877 Dated 18.06.2024					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Tikekarwadi R/s to Hotgi R/s	2.0	0.0064	22400	144
2	Pandarpur R/s to Babulgam R/s	2.5	0.0052	15600	81