



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/MRA- 1144/2594-96

Date:18/12/2018

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: IV calculation for PTCC Route Approval for Diversion work of 220kV overhead lines emanating from 220kV Baramati S/S by using underground cables at Baramati dist, Pune.

Ref: i) BSNL Letter No. IC/MBI/PTCC/MRA-2383/04, Dated-04/12/2018.
ii) Central Railway ESTE/Network, Letter No. SG.N.153/PTCC/220kV/MAH-706 Dated 12/09/2018.
iii) Defense letter No. B/46937/Sig 7(b)/1255 Dated 15/10/2018

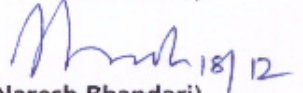
Sir,

The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii) respectively has been examined. The Average Soil Resistivity value has been taken as 10,000 Ohms-cm, as per data submitted by Power Authority i.e MSETCL. Voltages likely to be induced on paralleling BSNL and Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered. Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC) (enclosed as Annex – III).

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

Encl: As above

Yours faithfully,


(Naresh Bhandari)
Chief Engineer

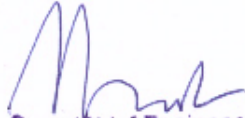
Copy to:

1. AESTE, Central Railway, Headquarters Office (S&T Branch) 3rd Floor, Annex Building, CST Mumbai-400001 (Annexure-II only)
2. The Chief Engineer(PS Deptt.), MAHATRANSCO (Maharashtra State Electricity Transmission Co.Ltd.,Prakashganga,Plot No.C-19, E Block,Bandra(East), Mumbai-400-051

ANNEXURE - I

Case No.: MRA-1144					
Name of the Power Line : Diversion work of 220kV overhead lines emanating from 220kV Baramati S/S using underground cables at Baramati dist, Pune.		मानचित्र स्केल : 1 सेमी=500 मीटर कुल लम्बाई : 1.5 कि.मी. एस. आर. मान : 10,000 ओम- सेमी			
क्रम संख्या	टेलीकाम विवरण	समानांतरिय लम्बाई (कि.मी) में	म्युचुअल कप्लिंग (ओम) में	प्रभावी फाल्ट करंट (एम्पियर) में	प्रेरण वोल्टेज (वोल्ट) में

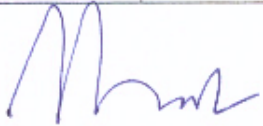
BSNL DETAIL		
Ref. No: IC/MBI/PTCC/MRA-2383/04		DATED: 04/12/2018
A	Baramati Exchange	
1	Exch to Malad — 50 Pair	IV LESS THAN 430 V
2	Exch to Gunwadi — 50 Pair	
3	Exch to Patas Rd — 100 Pair	
4	Exch.to Bhigwan Road — 200 Pair+50 pair	
5	Exch to Margaon 100 Pair +50 pair	Out of parallelism
B	MIDC Exchange	
1	Exch to Bhigawan Road — 50 Pair	Out of parallelism
2	Exch to Kataphal Road — 100 Pair	IV LESS THAN 430 V
c	Gojubawi Exchange	
1	Exch to Patas Rd — 50 Pair	Outside IV consideration zone.
2	Exchange to Shirsufal — 100 Pair	
D	Court Exchange	
	Exch to Bhigawan Road — 100 Pair	Out of parallelism


 मुख्य जलियन्ता/Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 सेवा भवन, आर.के. पुरम,
 Sewa Bhawan, R.K. Puram,
 नई दिल्ली-66/New Delhi-66

ANNEXURE – II

Case No.: MRA-1144					
Name of the Power line: <u>Diversion work of 220kV overhead lines emating from 220kV Baramati S/S by using underground cables at Baramati Dist, Pune.</u>		Map Scale : 1cm=500mts Total Length : 1.5Km S.R. Value : 10,000 Ohms-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

CENTRAL N RAILWAY					
Ref. No. 153/PTCC/220kV/MAH-706 Dated the 12/09/2018					
Daund –Baramati		1.27	0.0005	10000	5


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

ANNEX-II

MPA-1144

Tele : 23019746

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

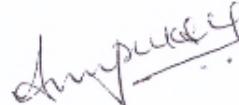
B/46937/Sigs 7(b)/1255/

15 Oct 2018

Office of the Chief Engineer (PS Deptt.)
Maharashtra State Electricity Transmission Co. Ltd.
"Prakashganaga" Plot No C- 19,
'E' Block, Bandra - Kurla Complex
Bandra (East), Mumbai - 400051

**PTCC PROPOSAL FOR DIVERSION WORK OF 220KV OVERHEAD LINES
EMANATING FROM 220KV BARAMATI S/S BY USING UNDERGROUND
CABLES AT BARAMATI, DIST. PUNE, LENGTH=1.5KMS**

1. Ref your letter No. MSETCL/CO/PS/S-I/PTCC/B-556/ No. 9287 dt 28 Aug 2018 (copy att).
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 forwarded herewith for your further 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.