Department of Telecommunications

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Sanchar Bhavan
20, Ashoka Road,
New Delhi-110001

No.114/2/92/TPL(CX)

May 17, 1994

To

The Chief General Manager Telecom,
RE Project Circle,
46, Bajaj Nagar,
Nagpur-440010

Sub: Recommendations of the Technical Committee.

A Technical Committee consisting of following members from DOT and Railways was constituted in December, 1992 to study the requirement of BT/RCs as well as payment to DOT for protective works due to Railway Electrification.

1. Sh. A.K. Trikha, Advisor(P), DOT
2. Sh. M.V. Bhaskara Rao, CGM/REPC, Nagpur
3. Dr. D.P.S. Seth, Dy. Dir. General; (TX), DOT
4. Sh. N.K. Goel, EDRE(S&T), Railway Board
5. Sh. Lobo Prabhu, Director(TI),RDSO, Lucknow
6. Sh. M.L. Gambhir, Director(Tele), RDSO, Lucknow

2.0 The recommendations of the Technical Committee have been examined in the Telecom Commission and the following guidelines, approved by the Telecom Commission, is furnished below for information and necessary action.

I. The following guidelines will be a decision factor for providing booster transformer by the Railways:

a) The Voltage on DOT Lines due to Railway Electrification should not exceed 60 volts longitudnal voltage and 5 volts as transverse voltage under normal working conditions and 430 volts under faulty conditions as per CCITT recommendations.

b) Railway Reduction Factor for the new schemes can be taken as 0.28 where all the four Rails are conducting under the following conditions:

i) The Rails have been provided with bonded joints and not mechanical bonds.

ii) After the Railways Electrification work is completed, if on actual measurements, the Rail Reduction Factor as observed is not more than 0.

In all other cases, RRF will be taken as 0.44.

II. No overhead alignment should exist within 50 meters from the railway track in electrified sections due to static charging by higher working voltage.

III. For the purpose of trunk link diversion for protection the cash component and 50% of the stores component of the overhead alignment, considering as if this alignment is to be provided new along the railway track, may be taken for the purpose of calculating the cost of protective works. The cost of cash component and 50% of stores component should be calculated only for the circuits which will be left over after surrender of railway circuits due to railway electrification. The cost of transferring the circuits on the microwave/UHF/PCM etc., should also be calculated and the cost of protective works should be taken as the lower of the two options for payment by Railways to DOT.

IV. The Committee recommends that the track sections will be categorised into rural and urban areas for the purpose of protective works. Urban and rural will be identified as per the norms laid down in the consensus report.

3.0 Further, it is also clarified that Railways will provide the protective equipment only for the existing installations and not for future installations.

Ganesh
(P.GANESH) 17/5/9
DIRECTOR(DF)

Copy to:

1) Shri N.K. Goel, Executive Director, RE(S&T), Railway Board, New Delhi for information.

2) Shri R. Lalwani, DDG(LL) T.E.C., New Delhi.

3) Shri T.K. Sampath Kumar, DDG(ML), DOT, New Delhi.