

**Draft**

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# American National Standard

withstand capability of relay systems to radiated  
electromagnetic interference from transceivers

ANSI/IEEE C37.90.2



american national standards institute, inc.

December 14, 1987

SH11775

***Draft American National Standard***

**IEEE Trial-Use Standard**

**Withstand Capability of Relay Systems  
to Radiated Electromagnetic Interference  
from Transceivers**

Sponsor

**Power System Relaying Committee  
of the  
IEEE Power Engineering Society**

***Draft American National Standard***

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Comments on standards and requests for interpretations should be addressed to:

Secretary, IEEE Standards Board  
345 East 47th Street  
New York, NY 10017  
USA

## Foreword

(This Foreword is not a part of ANSI/IEEE C37.90.2, IEEE Trial-Use Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers.)

The use of hand-held transceivers (walkie-talkies) has increased dramatically over the past few years. When operated in close proximity to a static protective relay, these transceivers will produce local, high field strength, electromagnetic radiation that may affect relay performance. The need for a standard on radiated interference withstand capability for static protective relays is therefore apparent.

The Working Group on Effects of High Frequency Radiation on Control and Protective Devices of the Power System Relaying Committee has been working on this document since 1976, and has now reached a point where further refinement of the document is not possible without feedback from those parties within the electric power industry who will be testing static protective relays per this standard. The Working Group hopes that the release of this document for trial use will provide the feedback needed to complete its task.

The following is a list of topics for comments of particular interest to the Working Group, although comments in other areas are welcome:

- (1) Is the test relatively straightforward to perform? Describe the problem(s) encountered.
- (2) Were the test procedures and test results easy to interpret?
- (3) Are the test results repeatable?
- (4) Does amplitude modulation or the keying test produce malfunctions not detected by the continuous wave test?

Comments are welcome and should be directed to:

Secretary  
IEEE Standards Board  
345 East 47th St  
New York, NY 10017  
USA

We would also encourage response in the form of technical papers which would permit formal discussion and closure.

The Working Group on High-Frequency Radiation Effects on Static Control and Protection Devices, of the Relay Electrical Environment Subcommittee, had the following membership at the time this standard was developed:

### **D. C. Dawson, *Chairman***

H. J. Calhoun  
H. A. Gauper  
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E. A. Hauptman

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