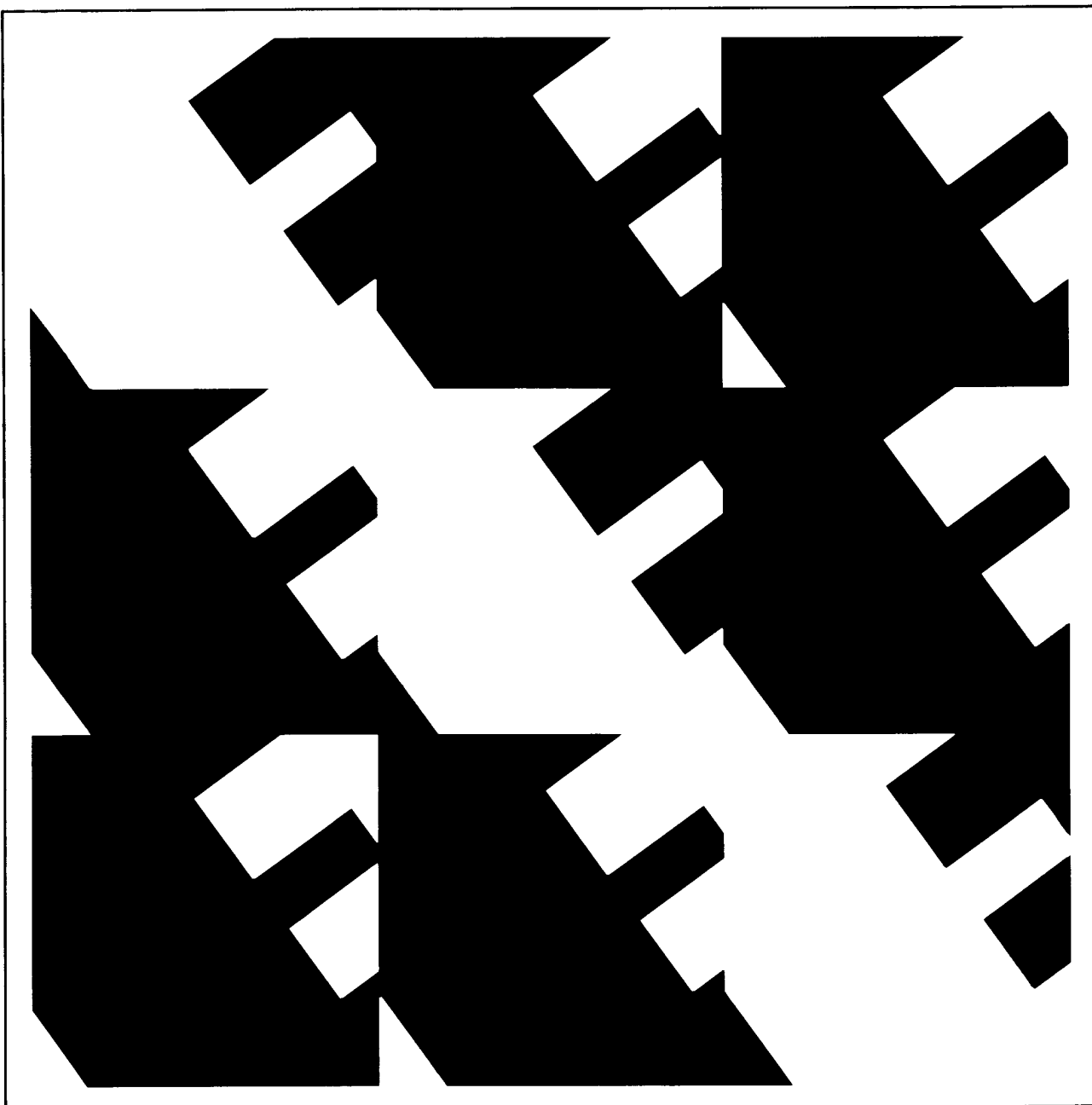


# IEEE Guide for Containment and Control of Oil Spills in Substations

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Control of Oil Spills in Substations**

Sponsor  
**Substations Committee  
of the  
IEEE Power Engineering Society**

Approved December 12, 1985  
**IEEE Standards Board**

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## Foreword

(This Foreword is not a part of ANSI/IEEE Std 980-1987, IEEE Guide for Containment and Control of Oil Spills in Substations.)

On December 31, 1973, the federal government published in its Code of Federal Regulations, under Title 40—Protection of the Environment, the federal requirements for the preparation and implementation of Spill Prevention Control and Countermeasure (SPCC) plans applicable to the discharge of oil at electrical facilities. While these regulations, in the strictest sense, relate to oil spills into navigable waters from shore facilities, it should be realized that these regulations could very easily be, and in some states are, extended to cover onshore areas. Onshore areas could be a distance away from navigable waters and could include those areas where substations are installed.

It is prudent, therefore, to recognize that there exists a potential for oil spills in almost every substation throughout the utility industry. It is consequently reasonable to identify the extent of the problem, if any, and to recommend plausible measures to control oil spills by means of an IEEE guide.

This guide has been prepared by a task force appointed by Working Group 73.2, Design and Location of Substations for Community Acceptance, under the sponsorship of the Substation Environmental Subcommittee of the IEEE Substations Committee. The assistance of R. H. Bower, Chairman, and other members of the Substation Environmental Subcommittee, is gratefully acknowledged.

At the time of approval of this guide, the membership of the Oil Spill Control Task Force was as follows:

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# *An American National Standard*

## **IEEE Guide for Containment and Control of Oil Spills in Substations**

### **1. Scope and References**

**1.1 Scope.** This guide discusses the significance of federal oil spillage regulations and their applicability to substations; identifies the problem of oil spills, which is latent in all substation facilities; discusses the economic aspects of oil spill control; quantifies the extent of the problem with respect to probability of occurrence and degree of risk; discusses methods of dealing with the problem; and provides guidelines for managing the problem.

It is not the intent of this guide in any respect to interpret federal regulations. Such interpretation is left to each individual company. The guide is intended in simple, abbreviated form to identify the problem, offer solutions, and let each company make its own evaluation and decisions.

A complete treatise on the subject of oil spill control, containment, and cleanup is contained in US Department of Agriculture REA Bulletin 65-3 [5].<sup>1</sup>

This guide only applies to insulating oil containing less than 50 ppm of PCB, which is considered to be non-PCB oil. Non-PCB oils have a PCB content that has been designated by the EPA as non-hazardous to the public, and they are not deemed to be toxic substances. It should be understood that local and state regulations could be more restrictive.

PCB oils (above 500 ppm) and PCB-contaminated (50–500 ppm) oils come under the purview of Public Law 94-469, Toxic Substances Control Act\*, and are beyond the scope of this guide.

<sup>1</sup> The numbers in square brackets correspond to those of the references listed in 1.2 of this standard.

\*This federal law can be located in Volume 90 of the US Statutes, p. 2003.

**1.2 References.** This standard shall be used in conjunction with the following publications:

[1] Code of Federal Regulations, Title 40: Protection of the Environment (40CFR), Parts 109–112.<sup>2</sup>

[2] Connecticut General Statutes, Title 25, Section 54dd ET SEQ, Water Pollution Control.<sup>3</sup>

[3] Electric Power Research Institute, EPRI-FP-1207, 1979, Disposal of PCBs and PCB-Contaminated Materials.<sup>4</sup>

[4] Massachusetts General Law, Chapter 21, Section 27 ET SEQ, Division of Water Pollution Control.<sup>5</sup>

[5] United States Department of Agriculture, REA Bulletin 65-3, 1981, Design Guide for Oil Spill Prevention and Control at Substations.

### **2. Statutory Requirements**

**2.1 Federal.** Complete information on the federal requirements for control of oil spills is contained in the Code of Federal Regulations, Title 40 (40CFR) [1], Chapter 1, Parts 110–112. Definitions and specifics regarding navigable waters are contained in this publication and it is not considered necessary to repeat the information in this guide.

<sup>2</sup> This document is available from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

<sup>3</sup> This document is available from the Office of the Secretary of State, 30 Trinity Street, Hartford, CT 06106.

<sup>4</sup> This document is available from the Electric Power Research Institute, 3412 Hillview Avenue, PO Box 10412, Palo Alto, CA 94303.

<sup>5</sup> This document is available from Citizen's Information Services, Office of the Secretary of State, One Ashburton Place, Room 1611, Boston, MA 02108.