

IEEE Standards Interpretation for IEEE Std 980™-1994 IEEE Guide for Containment and Control of Oil Spills in Substations

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Interpretation Request #1

Topic: Transformer foundations **Relevant Clause:** Subclause 7.1 and Annex B **Relevant Figure:** Figure 4 **Classification:** Unaddressed issues

In reference to Figure 4 in Subclause 7.1 and Annex B of IEEE Std. 980-1994 the requestor is asking for an interpretation of the application of different types of transformer foundations.

Interpretation Response #1

Transformer foundations are not a subject of discussion neither in the subclause 7.1 nor in Annex B of the IEEE Std 980-1994. As for the various applications of transformer foundations in the standard, the standard does not speak to this issue at all, and as such, no distinction can be made between alternative implementations based on this.

Interpretation Request #2

Topic: Containment **Relevant Clause:** Subclause 7.4 and subclause 7.5 **Classification:** Unambiguous

Is it acceptable in view of IEEE Standard to contain the spilled oil around and underneath a transformer?

Interpretation Response #2

In accordance with IEEE Std. 980-1994, spilled oil can be contained around and underneath a transformer. Design options for oil containment are discussed in details in sub-

clause 7.4 and subclause 7.5 of the IEEE Std 980-1994.

Interpretation Request #3

Topic: Containment **Relevant Clause:** Subclause 7.1

The requestor has described the system, which is comprised of a 5-inch thick layer of gravel spread over a steel grating installed above an open oil basin containment. The requestor is asking whether the above system refers to Figure 5 in IEEE Std. 980-1994 (7.1).

The requestor is also asking for interpretation of IEEE Standard requirements for the depth of fire quenching stone in a spill containment pit.

Interpretation Response #3

The subject design cannot refer to any of the stone-filled pit design concepts that the IEEE Standard refers to.

Figure 5, in subclause 7.1, which the requestor refers to, illustrates the concept of a collecting pit, i.e. when the stone-filled pit is used for fire quenching and collection of the spilled oil with further discharge of the collected oil to a retention pit or a discharge control structure.

Since the concept of a collecting pit is applied (assuming no oil is retained in the pit) a depth of stone in the pit would be a minimum of the 0.3m.

Should the concept of a retention containment pit be applied, the final oil level elevation (assuming a total discharge) should be situated approximately 0.3m below the top elevation of the fire quenching stone.