Seismic Qualification

What

- Guide for Seismic Qualification of Electrical Equipment to Conform with ASCE/SEI 7 Seismic Design Requirements for Nonstructural Components
- No such industry guide or standard exists
- Provides guidance to determine test specimens
- Provides guidance for acceptance criteria (post test)
- Enables all stakeholders to participate in selection criteria

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Why

- Regulators invoking their own criteria for specimen selection
- Not familiar with distribution and control equipment
- Produces unnecessary testing and expense
- Basis for specimen selection is not documented or based on equipment characteristics
- Without a formal guide, criteria may change at the whim of regulators and legacy testing can be deemed obsolete

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Scope

5.2 Scope: This guide establishes guidelines that may be used by equipment manufacturers to determine representative devices and assembly specimens (indoor and outdoor) to test as part of seismic qualification efforts for building code applications fitting within the scope of the International Building Code and ASCE/SEI 7 Seismic Design Requirements for Nonstructural Components. Additionally, guidance for specific acceptance criteria is provided. Equipment types covered in this guide include metal-enclosed switchgear as defined by ANSI/IEEE Std C37.20.1, C37.20.3 and C37.20.9; metal-clad switchgear as defined by C37.20.2; metal-enclosed bus as defined by ANSI/IEEE Std C37.23; busways as defined by UL 857; enclosed and dead-front switches as defined by UL 98; panelboards as defined by UL 67; medium-voltage ac controllers as defined by UL 347; medium-voltage power conversion equipment as defined by UL 347A; motor control centers as defined by UL 845; uninterruptible power supplies and accessories as defined by UL 1778; industrial control equipment as defined by UL 508; industrial control panels as defined by UL 508A; power conversion equipment as defined by UL 508C; transfer switch equipment as defined by UL 1008; medium-voltage transfer switches as defined by UL 1008A, switchboards as defined by UL 891; control switchboards as defined by ANSI/IEEE C37.21; pad-mounted load interrupter switchgear as defined by ANSI/IEEE C37.74; transformers as defined by ANSI/IEEE C57.12 or UL 1561; power factor correction equipment as defined by UL 508; and metal-enclosed medium-voltage air insulated circuit breakers for outdoor application defined by ANSI/IEEE C37.04.

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Request approval to form task group to

- Refine Scope
- Develop outline for draft and frame work for proposed Guide
- Develop time line for activity