IEC Project 1&C systems important to safety. Methods for condition monitoring of electrical equipment.

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Scope

- This International Standard specifies standard methods for condition monitoring of electrical equipment of safety system for nuclear power plants. It includes monitoring methods using mechanical, dielectric and chemical condition indicators.
- The standard identifies and defines the parameters of primary importance for the results of condition measurements, specifies requirements for the performance of measurements in order to ensure accuracy and repeatability, and provides standard formats for reporting the results.
- The methods specified in this standard are applicable to electrical equipment containing polymeric and organic materials. Condition monitoring of metallic materials is not included. Some methods are especially designed for measurement of conditions of a limited range of components whilst others can be applied to all types of components for which the polymeric and organic materials are accessible.

Format

- Part 1: General. Includes Introduction, Scope, Definitions, Applicability, a chapter on Requirements on accuracy and repeatability of condition monitoring methods when used as a tool in management of ageing, etc. and a Bibliography.
- One part (Part 2-1, 2-2,...) for each condition indicator.

Reasons for the division in parts

- Convenient to the user of the Standards. If we put all methods into one Standard it will be very comprehensive and contain a large amount of information which is not relevant to a user of one or a limited number of methods.
- Allows methods to be added or improved by adding new parts or amending separate parts.
 This has been extremely beneficial in the development of IEC 60068 Environmental Test Methods.

First draft

The first draft will include

- Part 1: General
- Part 2-1: Indenter modulus
- Part 2-2: Elongation at break
- Part 2-3: Oxidation Induction Temperature
- Part 2-4: A method related to condition monitoring of optical cables (will be investigated)

Schedule

- Beginning of September 2008: Drafts on part 2-1, 2-2, 2-3 and (possibly) 2-4 sent by the project leader to all WG10 members, the participating experts from TC112WG2, and the experts from IEEE appointed by IEEE SC-2.
- September 25 and 26, 2008 (preliminary dates): Meeting in Stockholm (or Forsmark). Invited: The members of WGA10, experts from TC112WG2 and experts from IEEE SC-2. The drafts will be discussed at the meeting.
- End of November 2008: Based on the results of the discussions, the project leader will put together first WG drafts of Part 2-1 to 2-4 and circulate them to the group (WGA10, TC112WG2 experts and IEEE SC-2 experts) for comments. He will also make a more complete draft of Part 1 and circulate to the group for comments.
- April 2009: A further meeting is anticipated where all the drafts will be discussed together with the comments and the content of the proposal for a CD will be decided upon.
- End of April 2009: The project leader submits the proposal to the Secretary of SC45A for distribution to the National Committees as Draft Proposal.

Expert representing IEEE SC2

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