

IEEE/PES Transformer Committee
Bushing Overload Task Force

Meeting Minutes
Omni William Penn Hotel
Pittsburgh, PA, USA
Tuesday, March 27, 2018
4:45 PM – 6:00 PM

The meeting was called to order by Chair Matt Weisensee at 4:48 pm. Secretary Alwyn VanderWalt was also present. The Vice-chair position is vacant.

There were a total of 37 attendees present, of who 25 requested membership.

Agenda:

1. Attendance Roster Sign In
2. Patent Call - Slides
3. Approval of S18 agenda
4. Scope of Task Force
5. Task Force Discussion Topics:
 - 5.1 Power Transformer Overload Standards, Guides, and Practices
 - 5.2 Bushing loading Standards, Guides, and Practices
 - 5.3 Oil impregnated, paper-insulated, bushing loss of life calculations
 - 5.4 Is a guide needed or do industry standards need to be revised?

The chair presented the agenda, which was approved by unanimous consent.

A call for essential patent claims was made, but none were identified. The secretary stated that no recording of the meeting was being made, and reminded the audience that no-one was allowed to take pictures of any of the slides being presented, nor to make any recordings of the discussions.

The Chair and secretary introduced themselves, after which the attendees were asked to identify themselves and their affiliation.

The chair first presented the scope of the task force, followed by several slides that listed extracts of the existing standards and guides covering agenda items 5.1 to 5.3. These standards and guides include C57.12.00, C57.91 and C57.19.100.

The presentation concluded with the following four questions:

1. Does the Task Force have sufficient information to answer the questions proposed in the Task Force scope of work?
2. If not, what additional information is needed to be able to answer the questions in the Task Force Scope of work?
3. Are the existing bushing standards and guides and the transformer standards and loading guide sufficient for choosing OIP bushings to meet transformer overload requirements?
4. Does the Task Force want to recommend that a guideline be created for other bushing types (similar to the OIP guide) to help users and transformer manufacturers to size bushings to meet transformer overload requirements?

A general discussion was held that revolved around the questions posed. There was general consensus that:

- Guidance for overload of oil impregnated bushings existed in the guides, but it requires the user to go through a fairly complicated process using more than one guide and standard to determine the overload capability of a particular bushing.
- There is little to no overload guidance for any other bushing types.

The task force concluded that:

1. There was a continued need for discussion.
2. The topic raised significant and complex questions, most of which would require input from users, transformer manufacturers and bushing manufacturers to identify each group's needs, which could be used to steer the task force to a decision whether the existing guide should be updated, or whether a new guide should be created.
3. Discussed a survey that would be generated for each of the three main stakeholder groups (users, transformer manufacturers and bushing manufacturers), to get a better sense of the needs of each group.

The meeting ran out of time without identifying who would be tasked to generate the survey questions that would be distributed to the task force members. The chair will recruit help from members to prepare the surveys.

The meeting was adjourned at 6:12 pm.

TF Chair: Matt Weisensee, PacifiCorp

TF Vice-chair: Vacant

TF Secretary: Alwyn VanderWalt, PNM