Working Group: Methodologies to Demonstrate Expected Life of Lubricants Used in Switching Devices 4:15 – 6:00 pm (PDT), October 10, 2023

1. Call Working Group (WG) meeting to order

Doug Edwards

(acting Chair)

Meeting called to order at 4:15 pm (PDT).

2. Introduction of Participants

Doug Edwards

Participants provided self-introductions with affiliations.

For reference, Voting-Members are:

Burse, Ted Powell Leccia, Brad Eaton Carne, Clint Schneider Ricciuti, Anthony Eaton

Christian, Michael ABB Shiller, Paul First Power Group

Edwards, Doug Siemens (Secr) Thomas, Christo Schneider Harley, Jack First Power Group (Chair) Wolfe, Dan MEPPI Hunt, Terry Westinghouse Webb, John ABB

- 3. Quorum was met with:
 - 8 of 12 Voting Members
 - 1 Ex-Officio Members
 - 31 Non-Voting Members
- 4. Approval of Meeting Agenda

Doug Edwards

- Approved by consent.
- Agenda was circulated, but only five (5) days prior to meeting. Meeting was announced via the Switchgear Committee's website.
- 5. Policies & calls for (provided prior to meeting)

Doug Edwards

- IEEE's Patent Policy
- IEEE's Copyright Policy
- IEEE's Participant behavior in IEEE-SA activities' Policy

Patent Policy: No issues reported. Copyright: No issues reported.

Participant Behavior: Reminder to behave provided

6. Approval of previous virtual WG meeting

Doug Edwards

- F23 ADSCOM C37.100.8 WG V2 2023-08-31 Minutes R02.pdf
 - Minutes provided with Meeting invitation.
 - Approved by consent.

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7. WG Chair Comments

Doug Edwards

Comments of Jach Harley, the Chair, are shared by Acting Chair for this meeting Doug Edwards (WG Secretary).

Chair was not able to attend due to a personal issue.

Chair appreciated everyone's understanding.

Document has made progress.

Thanks to Secretary for stepping-in to Chair meeting.

Thanks to Terry Hunt for stepping-in to serve as secretary.

We are up to draft 9, it is marked 10 for the meeting for us to go/edit live.

8. C37.100.8/D**9** (attached to Meeting Invitation)

Doug Edwards

Two (2) versions provided via Meeting Invitation and in <u>IMeetCentral</u>.

- Highlighted Changes version (D6 to D9)
- Clean version
- 9. Highlight of revisions incorporated into draft & Task Force Reports
 - Introduction: Doug Edwards

Text added discussing history of the Arrhenius equation. Same text is added in D9-8.2.7.

WG Questions:

Keep text - Yes/No? Edit to shorten

Decision: Yes

If yes, which location, Introduction or 8.2.7 or Annex?

• Decision: Introduction - OR 8.2.7

Comments:

- Add the extra verbiage in the introduction.
- Trim down the verbiage. Doug Edwards to draft revisions for the intro.
- Text includes background info that maybe not pertinent and should be trimmed.
- Add as a generally accepted method for aging.
- Clause 3: Definition updates
 One definition added.

Doug Edwards

 Table 1: Lubricants – aging effects, Moved in document Location of Table 1 discussed.

Doug Edwards

Table 1 was moved from Arrhenius section.

Action Item (AI): Table to be relocated to appropriate section of the document, after Table is first referenced.

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5.7 Compatibility

Donnie Swing

Input was provided concerning compatibility. Discussed the possibility of relubricating with a new grease which could lead to an undesirable condition. Text was provided to the group for discussion.

- o Editorial comment- there is redundant text.
- Manufacturer may (or should) provide recommendations.
- End users may look for recommendations added to an annex concerning compatibility.
- o Providing recommendations may be out of the scope.
- o Entire section should be removed, relubricating is not in the scope.
- Keep Section/Delete Section/Define further
- o Provide more clarity concerning compatibility

Vote to move to an informative annex?

AI: Donnie Swing and Doug Edwards will draft the text and add verbiage. AI: Add Section 5.8 to discuss lubricant interactions (Donnie Swing/Doug Edwards)

 Clause 6.1 Devices which mechanically operate and performance is speed depending
 Clint Carne

Clint Carnes leading the group.

No progress has been made since August.

General strategy is to provide outline of the appropriate production tests.

AI: Task Group to continue.

 Table 2: LV PCB test requiring lubricant aging Clint Carnes leading the group. Clint Carne

No progress has been made since August.

AI: Task Group to continue.

6.2 Devices which mechanically operate but which are not dependent on speed
 Darryl Moser

Darryl Moser not present, thus no report.

AI: Task Group to continue.

Clause 7 Test Objects
 No actions to date.

On Hold

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• 8.2 Arrhenius model

Terry Hunt

Proposed text reviewed. Basic of text is supported.

AI: Task Group to continue. Constant of proportionality to be added

• 8.2.7 History of the Arrhenius equation

AI: Move text to Introduction with some revisions per comments above.

• 8.3 Booser equation

Paul Shiller

Provided text was reviewed.

Booser equation explained as an alternative to the Arrhenius equation.

No actions yet for:

, 460,0115		
•	8.4 Long term laboratory testing	On Hold
•	8.5 Field experience	On Hold
•	Clause 9 Diagnostic factors	On Hold
•	Clause 10 Interpretation of data	On Hold
•	Clause 11 Test reports	On Hold

Guide versus Recommended Practice

Not an immediate issue but discussed that WG members should consider whether the document should continue as a Guide with the use of "may" or change to a Recommended Practice with the use of "should".

AI: Table for future discussions after document is more complete.

10.Next meetings

Doug Edwards

Will be scheduled via Doodle Poll with target of early to mid-November.

11.Adjourn

Doug Edwards

Adjourned at 5:36 pm (PDT).