## Task Force: Aging of Lubricants Virtual Meeting 9:00 AM - 10:30 AM (EDT), August 26, 2022

1. Call meeting to order

Jack Harley

Meeting called to order at 9:05 AM (EDT).

2. Introduction of Members and Guests, and attendance

Doug Edwards

- Participants self-introductions with affiliations
- Participants self-introductions with affiliations made.
- 3. Quorum verification

D. Edwards

- Quorum was met.
- 11 of 22 members present at beginning of meeting. 12<sup>th</sup> member joined later in the meeting.
- 12 guests present
- 4. Approval of Meeting Agenda

Jack Harley

- Agenda was approved via consent.
- 5. Call for patents, copyright issues

Jack Harley

- Discussed Copyright Policy.
- No known issues identified.
- 6. Minutes D. Edwards

Approval of previous meeting minutes

- Orlando April 12, 2022
  - o Motion made by Ted Burse to approve minutes with Second.
  - Approved by consent.
- Virtual August 10, 2022
  - Motion made by Jeff Ward to approve minutes with Second.
  - Approved by consent.
- 7. Scope for PAR review.

Jack Harley

Draft Scope for discussion:

The information in this guide is intended to assist in developing methodologies for establishing the expected life of lubricants as used in equipment covered within the scope of the IEEE Power and Energy Society Switchgear Standards Committee including the following:

- Automatic reclosers and sectionalizers
- Current limiting devices
- Fuses and cutouts
- Gas-insulated switchgear
- Metal-enclosed buses and all buses included in switchgear assemblies
- Power circuit breakers
- Switches, including pad-mounted switches
- Switchgear assemblies
- Switchgear devices

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#### Scope discussions included:

- Recommendation to consider stating, "in switchgear" instead of in Scope of Switchgear Committee – Accepted.
- Request to detail the applications of the lubricants in the Scope.
  - Lubricants to reduce friction, heat, and wear applications (mechanisms, sliding surfaces) are – original concept for this document.
  - Surface coating applications Yes/No to include?

#### Decisions:

- o Only cover "lubricants to reduce friction, heat, and wear" applications.
- Do not cover coating applications.
- Wordsmithing: "in switchgear" or "on switchgear" Decision: "in switchgear"
- Potential addition to Scope "recommendations for maintenance of the lubricants" Decision: Not to include "and maintenance".
- Keep the list all devices from the Switchgear Committee Scope Decision: Yes
  include list from Switchgear Committee Scope but with addition of wording "including
  but not limited to:"

#### Scope developed during meeting:

The information in this guide is intended to assist in developing methodologies for establishing the expected life of lubricants as used in switchgear equipment including but not limited to:

- Automatic reclosers and sectionalizers
- Current limiting devices
- Fuses and cutouts
- Gas-insulated switchgear
- Metal-enclosed buses and all buses included in switchgear assemblies
- Power circuit breakers
- Switches, including pad-mounted switches
- Switchgear assemblies
- Switchgear devices

Lubricants used as a surface protectant, for applications other than reducing friction or wear, are not included.

8. Title Jack Harley

Drafted title for discussion:

Guide For Provides Methodologies to Demonstrate the Expected Life of Lubricants Used in a Switching Devices

No discussions.

9. Purpose statement

No discussions.

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10. Develop concept for Table of Content

No discussions.

- 11. Review methodologies
  - Other standards

Note: Request for reference to the following documents has been made (2022-08-19 to Jennifer Santulli - IEEE PES Switchgear Program Manager).

- Reference to IEC 60947-1 (2020-04), LV Swgr and Controlgrear Part 1 General Rules
- Reference to EN 50326 (2002-08), Conductors for overhead lines Characteristics for greases
- Arrhenius equation concepts

No discussions.

12. Future discussion points

Jack Harley

Doodle Poll to be provided for next meeting.

13. Adjourn Jack Harley

The meeting agenda was not completed but time was met.

- Motion made by Ted Burse to adjourn with Second.
- Approved by consent.

Meeting adjourned at 10:35 AM.

# Task Force: Aging of Lubricants Virtual Meeting 9:00 AM – 10:30 AM (EDT), August 26, 2022

Chair Harley, John FirstPower Group LLC X Secretary Edwards, Doug Siemens Industry, Inc. X Member (Voting) Burse, Ted Powell Industries, Inc X Member (Voting) Carne, Clint Schneider Electric X Member (Voting) Eftink, Emily Burns & McDonnell Member (Voting) Flowers, Keith Siemens Industry, Inc. X Member (Voting) Grahor, Lou Eaton Corporation X Member (Voting) Hartzel, Ronald Eaton Corporation Member (Voting) Jarnigan, Christopher Southern Company Services Member (Voting) Lanning, Scott S&C Electric Member (Voting) Leccia, Brad Eaton Member (Voting) Marzec, Peter S&C Electric Co. Member (Voting) Moser, Darryl ABB X Member (Voting) Orosz, Miklos Myers Controlled Power
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Member (Voting) Orosz, Miklos Myers Controlled Power
Member (Voting) Reid, Laura Hubbell Power Systems
Member (Voting) Ricciuti, Anthony Eaton Corporation X
Member (Voting) Riffe, Dave Westinghouse Electric Company
Member (Voting) Rohr, Richard Powell Electrical Systems
Member (Voting) Ward, Jeffrey Doble Engineering Company X
Member (Voting) Webb, John ABB X
Member (Voting) Weishuhn, William ABB X
Member (Non-Voting) Ambrose, Chris Federal Pacific X
Member (Non-Voting) Barfield III, Walter Electric Power Research Institute
Member (Non-Voting) Blake, Randy Hubbell
Member (Non-Voting) Bray, Elizabeth Southern Company
Member (Non-Voting) Brunke, John Power Engineers
Member (Non-Voting) Christian, Michael ABB X
Member (Non-Voting) Di Lillo, Patrick Consolidated Edison Co. of NY, Inc. X
Member (Non-Voting) Dunne, David Schneider Electric
Member (Non-Voting) Dwyer, Bernie PECO
Member (Non-Voting) Esco, Tanner Eaton Corporation
Member (Non-Voting) French, Christopher Eaton Corporation
Member (Non-Voting) Hall, John Tennessee Valley Authority X
Member (Non-Voting) Hawkins, Tom Siemens Industry, Inc.
Member (Non-Voting) Hetzer, Matthew PEPCO
Member (Non-Voting) Hohnstadt, Benjamin DTE
Member (Non-Voting) Hutchins, Roy Southern Company Services X
Member (Non-Voting) Irwin, Todd GE Grid Solutions
Member (Non-Voting) Jala, Roopendra Hemanth S&C Electric Company
Member (Non-Voting) Keels, Thomas kEElectric Engineering
Member (Non-Voting) May, Steven Southern Company X
Member (Non-Voting) Meyer, Peter S&C Electric Company X
Member (Non-Voting) Monroe, Andrew Southern Company

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Member (Non-Voting)	Nenning, Andrew	Omicron Electronics	
Member (Non-Voting)	Owens, John	3M	
Member (Non-Voting)	Owens, Mary	Eaton	
Member (Non-Voting)	Parks, Owen	ABB	X
Member (Non-Voting)	Pellerito, Thomas	DTE Energy	
Member (Non-Voting)	Peterson, Alan	Utility Service Corporation	
Member (Non-Voting)	Peterson, Andrew	ABB	
Member (Non-Voting)	Rakus, Paul	Eaton	
Member (Non-Voting)	Salinas, Alex	Doble/Vanguard	
Member (Non-Voting)	Shiller, Paul	FirstPower Group LLC	X
Member (Non-Voting)	Sippel, Kevin	Eaton Electric	
Member (Non-Voting)	Stemmerich, Joe	Trayer Engineering Corp.	
Member (Non-Voting)	Sullivan, Paul	Dupont	X
Member (Non-Voting)	Thomas, Christo	Schneider Electric	X
Member (Non-Voting)	Weeks, Casey	Siemens Energy	
Member (Non-Voting)	Weisker, Jan	Siemens Energy	
Member (Non-Voting)	Wen, Jerry	BC Hydro	
Member (Non-Voting)	Worthington, Charles	Hubbell Power Systems	
Member (Non-Voting)	Zehnder, Lukas	Hitachi	
Member (Non-Voting)	Zhang, Wei	Hitachi	X
Member (Non-Voting)	Zia, Danish	UL LLC	