

**MINUTES**  
**Task Force: Aging of Lubricants Virtual Meeting**  
**9:00 AM – 10:30 AM (EDT), August 10, 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
  - 9 of 22 members present. Quorum was **not** met.
  - 14 guests present
  - Request for membership was made.
    - Review for membership is based on PES Switchgear PnP which requires attendance to 2 or last 4 meetings.
    - Subsequent to meeting: No membership changes were made based on review of attendance.
  
4. Approval of Meeting Agenda Jack Harley
  - Acknowledging meeting did NOT have quorum, meeting agenda was approved by consent for this meeting.
  
5. Call for patents, copyright issues Jack Harley
  - Discussed Copyright Policy.
  - No known issues identified.
  
6. Minutes D. Edwards
  - Without quorum, no action taken to approve [Orlando April 12, 2022 Meeting Minutes \(R4\)](#).
  - Approval of the minutes of the previous meeting is postponed to next meeting.
  
7. Scope for PAR review Jack Harley  
Draft Scope Strawman presented for discussion.

The information in this guide is intended to assist in establishing an expected functional life (without maintenance) of a lubricant used in equipment covered within the scope of the IEEE Power and Energy Society Switchgear Standards Committee including the following:

- Automatic reclosers and sectionalizers
- Power circuit breakers
- Switches, including pad-mounted switches
- Switchgear devices

Discussion points:

- Include, or not, Switchgear Assemblies?  
Decision – Yes, include Switchgear Assemblies.
  - Argument made to YES limit discussion of lubricant to be for equipment with mechanisms as the key issue to be addressed.

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- Argument made to NOT limit to equipment with mechanisms, rather to cover all lubricants targeting the “claim” of life of lubricants for all the various lubricants used in equipment within the Scope of the Switchgear Committee.
- Argument to NOT limit to Scope as the Scope may be reduced without PAR Revision issues with a reduction of Scope while the Scope may not be expanded. At this time, discussions continue to include lubricants used on non-mechanism items, e.g. racking mechanisms, primary disconnects.
- “expected functional life” or “functional life” or “service life”?  
Deleted the adjective “functional” as including an adjective would limit the Scope.
- “life” or “life (without maintenance)”  
Deleted “(without maintenance)” from the Scope. Wording like “(without maintenance of the location where the lubricant is used)” will be considered for use in the document.
- Normal Service Conditions
  - Normal Service Conditions per the equipment standard will need to be detailed in the equipment standard.
  - Discussion was to NOT include such wording in the Scope.
- General wordsmithing
  - “Methodologies for” was discussed as appropriate but was not worked into the Scope statement during the meeting.
  - Post meeting, Scope statement (per below) was revised to include “methodology for”.

Updated Scope Statement post August 10, 2022 meeting:

The information in this guide is intended to assist in [developing methodologies for](#) establishing [an-the](#) expected [functional](#) life [\(without maintenance\)](#) of [a-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

Comments:

- Detailed list of equipment types from Scope of Switchgear Standards Committee is added back for clarity and searchability of Scope statements of IEEE documents.
- Current limiting devices, fuses, cutouts, and M-E buses and all buses in switchgear assemblies are added back as interface points which may include lubricants.
- GIS and Switchgear Assemblies added back per discussion of Task Force (detailed above).

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8. Title Jack Harley  
Drafted title for discussion:

[This](#) Guide [Provides For](#) Methodologies to Demonstrate the Expected [Service](#) Life of Lubricants Used in a Switching Devices

Dropped adjective “Service”. Cover this detail in document.

Updated Title text from the Agenda “strawman” text is indicated above. Deleted adjective “Service” based on revisions of the “strawman” text of the Scope.

9. Future discussion points Jack Harley
- Review Scope and Title
  - Develop Purpose statement
  - Develop Table of Content concept
  - Review methodologies
    - IEC standards
    - Arrhenius equation details
  - Not discussed but for future meetings, consider moisture.

10. Adjourn Jack Harley  
Meeting adjourned at 10:32 AM.  
Doodle Poll to be provided.

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**Attendance**

<b>Role</b>	<b>LastName, FirstName</b>	<b>Company</b>	<b>8/10/2022</b>
Chair	Harley, John	FirstPower Group LLC	X
Secretary	Edwards, Doug	Siemens Industry, Inc.	X
Member	Burse, Ted	Powell Industries, Inc	
Member	Carne, Clint	Schneider Electric	
Member	Eftink, Emily	Burns & McDonnell	
Member	Flowers, Keith	Siemens Industry, Inc.	
Member	Grahor, Lou	Eaton Corporation	X
Member	Hartzel, Ronald	Eaton Corporation	
Member	Jarnigan, Christopher	Southern Company Services	X
Member	Lanning, Scott	S&C Electric	
Member	Leccia, Brad	Eaton	X
Member	Livshitz, Albert	Qualus Power Services	X
Member	Marzec, Peter	S&C Electric Co.	
Member	Moser, Darryl	ABB	
Member	Orosz, Miklos	Myers Controlled Power	
Member	Reid, Laura	Hubbell Power Systems	
Member	Ricciuti, Anthony	Eaton Corporation	X
Member	Riffe, Dave	Westinghouse Electric Company	
Member	Rohr, Richard	Powell Electrical Systems	
Member	Ward, Jeffrey	Doble Engineering Company	X
Member	Webb, John	ABB	
Member	Weishuhn, William	ABB	X
Guest	Ambrose, Chris	Federal Pacific	X
Guest	Barfield III, Walter	Electric Power Research Institute	
Guest	Blake, Randy	Hubbell	
Guest	Bray, Elizabeth	Southern Company	
Guest	Brunke, John	Power Engineers	
Guest	Christian, Michael	ABB	
Guest	Di Lillo, Patrick	Consolidated Edison Co. of NY, Inc.	X
Guest	Dunne, David	Schneider Electric	
Guest	Dwyer, Bernie	PECO	
Guest	Esco, Tanner	Eaton Corporation	
Guest	French, Christopher	Eaton Corporation	X
Guest	Hall, John	Tennessee Valley Authority	
Guest	Hawkins, Tom	Siemens Industry, Inc.	X
Guest	Hetzer, Matthew	PEPCO	
Guest	Hohnstadt, Benjamin	DTE	
Guest	Hutchins, Roy	Southern Company Services	X
Guest	Irwin, Todd	GE Grid Solutions	
Guest	Jala, Roopendra Hemanth	S&C Electric Company	
Guest	Keels, Thomas	kEElectric Engineering	X
Guest	May, Steven	Southern Company	X

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Guest	Meyer, Peter	S&C Electric Company	
Guest	Monroe, Andrew	Southern Company	
Guest	Nenning, Andrew	Omicron Electronics	X
Guest	Owens, John	3M	
Guest	Owens, Mary	Eaton	
Guest	Parks, Owen	ABB	X
Guest	Pellerito, Thomas	DTE Energy	
Guest	Peterson, Alan	Utility Service Corporation	
Guest	Peterson, Andrew	ABB	
Guest	Rakus, Paul	Eaton	X
Guest	Reigart, Carl	CDR Technical Services, LLC	
Guest	Salinas, Alex	Doble/Vanguard	X
Guest	Shiller, Paul	FirstPower Group LLC	X
Guest	Sippel, Kevin	Eaton Electric	
Guest	Stemmerich, Joe	Trayer Engineering Corp.	
Guest	Sullivan, Paul	Dupont	X
Guest	Thomas, Christo	Schneider Electric	
Guest	Weeks, Casey	Siemens Energy	X
Guest	Weisker, Jan	Siemens Energy	
Guest	Wen, Jerry	BC Hydro	
Guest	Worthington, Charles	Hubbell Power Systems	
Guest	York, Richard	Mitsubishi	
Guest	Zehnder, Lukas	Hitachi	
Guest	Zhang, Wei	Hitachi	
Guest	Zia, Danish	UL LLC	