

**IEEE Distribution Subcommittee
Meeting Minutes
July 20, 2016
Boston, MA**

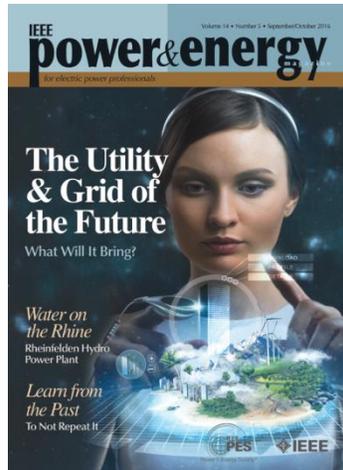
ADMINISTRATIVE

Chair Julio Romero Aguero called the IEEE Distribution Subcommittee meeting to order at 1:30 p.m. with 28 members/guests present. Introductions were the first order of business. Julio called for congratulations to new Fellows: Larry Clark, Dan Sabin, and John Granger. Next was the approval of the 2016 JTCM minutes. A motion to accept the minutes was made by Fred Friend, seconded by Dave Gilmer and the vote to approve was passed.

CHAIR REPORT – Julio Romero Aguero, Distribution Subcommittee

I have represented the Distribution Subcommittee in the following activities.

- I have been serving as Editor of IEEE Transactions on Power Delivery (TPWRD), assisting the Editor-in-Chief, Prof. Wilsun Xu from University of Alberta, in the review of distribution related papers. I have been involving several of our distribution subcommittee members in these reviews, as well as other colleagues. I am Guest Editor-in-Chief of the following special section:
 - ❖ Protection and Real-Time Monitoring of Transmission and Distribution Systems with High Penetration of Distributed Generation and Microgrids
<http://www.ieee-pes.org/images/pdf/calls-for-transactions/Special%20Edition%20of%20IEEE%20Transactions%20PD-DER-Protection-SubmissionChange.pdf>
 - Guest Editorial Board
 - Walmir Freitas, University of Campinas (UNICAMP), Brazil
 - Solveig Ward, Quanta Technology, USA
 - Robert Uluski, UISOL, USA
 - Fred Friend, American Electric Power (AEP), USA
 - Bartosz Wojszczyk, Decision Point Global, USA
 - Amin Khodaei, University of Denver
 - Babak Enayati, National Grid
 - 21 papers have been selected for publication from over 100 submissions, I am working with Prof. Wilsun Xu (Editor-in-Chief) to schedule publication.
- I served as Guest Editor in Chief of the Sep/Oct 2016 issue of IEEE Power and Energy Magazine on Utility and Grid of the Future. Issue has been published, it included six articles from authors from the US, Europe, and Latin America.



<http://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=7549123&punumber=8014>

<http://online.qmag.com/PNE0916#pg1&mode2>

- I have been serving as Editor of IEEE Transactions on Smart Grid (TSG), assisting the Editor-in-Chief, Dr. Jianhui Wang from Argonne National Laboratory, in the review of papers pertaining to smart grid applications in distribution.
- I am also serving as Chair of the IEEE Working Group on Distributed Resources Integration, Dr. Babak Enayati has volunteered to serve as Vice Chair.
- We continue looking for volunteers for Vice Chair of the Distribution Subcommittee. Key responsibility of Vice Chair is coordinate review of distribution papers for IEEE TPRWD. While a Vice Chair is appointed I will continue representing the Distribution Subcommittee as Editor of IEEE TPWRD.
- I participated in the following activities in the 2016 IEEE T&D Conference and Exposition:
 - ❖ Moderated Super Session on Distributed Energy Resources – Interconnection Challenges and Standards
 - ❖ Chaired Paper Forum Session on Power Systems Operations
- I participated as a speaker in the following activities at the 2016 IEEE PES General Meeting:
 - ❖ Tutorial on Smart Distribution Systems <http://www.pes-gm.org/2016/tutorials#smart-distro-systems>
 - ❖ Panel Session on Current R&D in Photovoltaics: technology and grid integration

VICE CHAIR REPORT –

Vacant position - see Chair Report.

WORKING GROUP REPORTS

DISTRIBUTION RELIABILITY – Val Werner, Chair

Tuesday & Wednesday, July 19-20, 2016

Val Werner, chair called the WG meeting to order. Vice chair and sec; attendance was by as many as 69 individuals however at its peak approximately 45 were present. The sign-in sheet was circulated.

Note: All presentations are available on the DRWG website
<http://grouper.ieee.org/groups/td/dist/sd/>

Approval of January 12/13, 2016 JTCM WG Meeting Minutes
Motion to accept: Dave Gilmer, Seconded: Sal Martino.

Bill Chisholm presented awards: IEEE 1782 Guide was recognized by the T&D Committee with the major contributors recognized; in addition Rodney Robinson received the T&D Distinguished Individual Service Award

Introductions

EPRI 2016 Outage Data for Grid Resiliency: Sal Martino

Sal shared that they would be performing a survey to further the understanding about grid resilience and measures taken by utilities. It would be valuable to compare against other benchmark studies, such as CEER. The survey will be sent to DRWG members after approval by DRWG leadership.

Cost of Power Interruptions Update: Joe Eto

Joe shared information about the International cost of power interruptions
Presentation will be shared on website.

Historic talk with this group-12 years ago inaugural study

Flaws in the data: customer counts and classes, old inconsistent data versus current EIA data, duration of interruptions, more MAIFI information

Economic cost of interruptions included such parameters as customer damage functions, changes in energy use, values are sometimes not very believable, long duration interruptions, and momentary interruption values might be misinterpreted as reflected in the cost of the impact.

Joe further discussed vulnerability: standby generator sales, equipment resilience to momentary interruptions, customer weighted SAIDI, SAIFI, MAIFI by region.

The DRWG pointed out that momentary data needs to be better understood; in fact, a momentary interruption is an avoided sustained interruption and the value of avoided sustained interruptions should be calculated. Joe Eto will consider how they could modify their report to estimate the benefits that reclosing devices have delivered using the ICE calculator. It was also pointed out that large scale events aren't properly valued in the ICE calculator.

Cost/benefit of undergrounding: Peter Larsen

Presentation to be shared

This study conclusion was shared with the group. The environment is a small Alaska utility in which weather is a substantial impact for a compact system, with approximately 75 customers/line mile (which the IEEE benchmark study would characterize as suburban). They found reduced costs for undergrounding due to the consistency of the program. They made cost assumptions about the cost of right of way for overhead transmission.

Data Analysis & Benchmarking Task Force - Heide Caswell

Heide Caswell reviewed the 2016 DRWG Benchmark results. The presentation is posted on the website
Anyone interested in joining the Data Analysis TF can contact Heide: Heide.Caswell@pacificorp.com
APPA Reliability Major Event-Alex Hoffman

Alex's questions: culture of reliability, is there such a thing at certain utilities? Yes, although there are places where the value versus reliability is the more prominent concern. Certain folks have compensation tied to reliability metrics, so they would assert that reliability is important to them. Resiliency and reliability are interesting topics to be considered.

Tony Thomas: NRECA Benchmarking Performance

"Product quality" as a comparison to "distribution reliability".

Consider improvements on better cost/reliability improvements versus "worst performing".

1366 Task Force: John McDaniel Chair

IAS-stats for industrial customers only: paper developed (get link...John McD?)

PAR will be taken out in 2018 where partial power etc can be re-evaluated. Clarification: partial power should be considered to be an interruption, according to the DRWG

We are measuring whether the system is able to deliver power to the customer

1782 Task Force: Val Werner Chair

No suggestions or volunteers to add to or change the 1782 guide.

APPA Reliability Major Event: Alex Hoffman

Alex's questions: culture of reliability, is there such a thing at certain utilities? Yes, although there are places where the value versus reliability is the more prominent concern. Certain folks have compensation tied to reliability metrics, so they would assert that reliability is important to them. Resiliency and reliability are interesting topics to be considered.

NRECA: Tony Thomas

Presentation to be shared. Alvin Razon is back at NRECA. Discussed how the focus could be on power quality instead of phrasing as distribution reliability. Suggested distribution businesses benchmarking against themselves, look at trending. Power quality need feedback loop as shown in the presentation.

Distribution Underground Cable Failures: John Ainscough

Presentation to be shared. Excel Energy has several different systems, one of which has HMW bare concentric neutral in Colorado, which exists in a dry climate and has performing pretty well. In contrast, in Texas, their sister company has an underground system, fully in conduit. Finally in Northern States Power, where they have markedly different experience due to lightning, soil moisture, etc. They undertook investigating these differences.

DRWG Presentations Wanted

Anyone interested in making a presentation (limit 30 minutes or less) should send the Title, Presenter, Duration, and 1-3 line description to v.werner@ieee.org at least two months before the meeting at which you want to present. The topics below were suggested.

Reliability Tools-Joe Viglietta

Multispeak interoperability standard being talked about (Tony Thomas)

It was requested that PacifiCorp provide a suite of tools demonstration (note to DNB)
Dashboard usage (no specific speaker identified)

Task Forces

It was proposed that three task forces, namely 1) Cost/Funding, 2) Tools and 3) Predictive Reliability Task Force, be retired and that the venue be working group meetings in the future; email Val in advance of working group meetings for items to be addressed during DRWG meeting.

Panel discussions

Volunteers will be requested, one topic of which that was suggested was AMI and its impact on reliability. Another set of topics possible were: reliability issues, rural versus suburban, etc., regional reliability

Roundtable Discussion

Yaping (National Grid): questions about replacement system

Larry Clark, Alabama Power, reliability tools can be great additions but be careful your changes don't negatively impact your operations. Resiliency definition versus reliability definition.

Rusty Soderburg, Consumers Energy, NESC preprint coming out in August, has a set of questions for an informal survey; to leadership and then onto working group.

Brett Efaw, Idaho Power, OMS replacement, location information about outages and faults.

Rob Tucker, SCE, reliability culture question, how to evolve one?

Ray Hisayasu, PSE, catastrophic event

Stanford professor application of fundamental reliability theory

John Ainscough-Completion time by start and end time (erring on the side of half hours and hours)

Regulatory Update

No regulatory update was completed.

Next meeting is scheduled for January 10-11, 2017 in New Orleans, LA.

Motion to adjourn by Bouford, seconded Dave Gilmer

SWITCHING AND OVERCURRENT PROTECTION – Fred Friend, Chair

Chair Fred Friend (fafriend@aep.com) called the meeting to order at 8:00 am with 16 participants present.

Introductions of WG members and visitors

The Memphis, TN, Jan 12, 2016 meeting minutes were reviewed and approved without comment.

The IEEE required slides for working Groups were presented.

The WG reviewed Draft 3.3 of P1806 Guide for Reliability Based Placement of Overhead and Underground Switching and Overcurrent Protection Equipment Up to and Including 38 kV with the following review/ comments/ assignments (Draft 3.3):

- a. Section 6 Protection Zones
 - i. Dave Gilmer writing accepted
- b. Section 9.6 Choosing candidate locations for devices on radial circuits
 - i. Proposed changes accepted
- c. Section 10.0 Bypassing options for overhead distribution sectionalizing devices
 - i. Discussion on the need for the section
 - ii. Lee Taylor will provide additional information
- d. Section 11.1 Application of Customer Exposure Ratio (CER)
 - i. Accepted as written, submitted by Val Werner

- e. Section 12.0 FLISR (Fault location/isolation/service restoration)
 - i. Lee Taylor will provide review/ additional information
 - ii. The 3D diagram on page 33 needs the axis labelled (Jim Bouford?)
- f. Section 13.0 Momentary Interruptions
 - i. Proposed changes accepted
- g. Section 14.0 Special Considerations
 - i. Need a different section title?
 - ii. Need to add DER?
- h. Section 15.0 Section needs revised and moved to the beginning of the guide (Joe Viglietta)
- i. Section 18.0 The effect of fault causes and fault rates on device placement
 - i. Accepted contribution by Tyler Jones, addition work is needed on this section
- j. Section 19.0 Use of reliability software for device placement
 - i. Accepted contribution by Tyler Jones
 - ii. Lee Taylor will provide incremental method
- k. Fred Friend will accept the approved changes and Joe Viglietta will reorder the sections as discussed

Assignments are due by September 30

Presentation was given by Julio Romero Agüero

Using predictive models to estimate distribution reliability benefits of modern reclosing and distribution automation schemes

New Business

- a. Ideas for future panel sessions – 2017 GM in Chicago
- b. Proposed joint session with Distributed Resource Integration WG. Julio Romero Agüero will provide framework
 - i. Proposed joint session with Smart Distribution WG, Georges Simard will provide framework
- c. Roundtable (no time available)

Announcements

Next Meeting: January 9 – 12, 2017, New Orleans, LA @ New Orleans Marriott Hotel

12:00 pm: Adjourn

Web Site: <http://grouper.ieee.org/groups/td/dist/sop/>

SMART DISTRIBUTION – Larry Clark, Chair

Larry Clark called the meeting to order at 1:00 pm EST on July 18, 2016 in room SB – Liberty BC and welcomed the Group that included 64 representatives of utilities, vendors, and academic institutes. The SDWG leadership, Larry Clark-Chair, Bob Uluski-Vice Chair and Fred Friend-Secretary, were introduced. Larry reviewed the IEEE policies on patents, copyrights, etc. The minutes of the last meeting (Memphis, TN, January 2016) were discussed including online availability and were subsequently approved unanimously.

Larry reported that Mani Venkata, new chair of the DMS DA Award selection committee, is accepting nominations for the 2017 award. The Nomination deadline for the 2016 award is January 31, 2017. Nomination and the supporting letters should be submitted to Mani Venkata by the nominator by the deadline through email (mani.venkata@ge.com) with the subject of the email message being "2017 IEEE

PES Douglas M. Staszkesky Distribution Automation Award - Nomination". The DMS DA Award 2016 recipient is Dr. Mohammad Shahidehpour.

The Smart Distribution Working Group sponsored 2 invited panel sessions in 2016. At the 2016 T&D in Dallas, the SDWG panel topic is 'DMS Integration with DERMS & Microgrid Controllers', Chair Bob Uluski. At the 2016 GM in Boston, the SDWG panel topic is 'Protection design for Micro Grids', Chair: Georges Simard and Nouredine Hadjsaid.

The 'Smart Distribution Systems' tutorial (Full day, 8-hour course) is to be performed on Thursday, July 21, 2016 at the GM in Boston, MA.

Larry Clark reviewed the requirements for the development of an invited panel proposal. For the IEEE PES 2017 GM, invited panel proposals need to be submitted during 4th quarter 2016. The proposal is to include the title, description (150 words maximum) and the moderator with the list of 4 panelists for the invited panel proposal.

Larry Clark reviewed the working group voting member requirements from the T&D Policies & Procedures. The list of 40 qualifying SDWG voting members was presented.

Shay Bahramirad and Aleksy Paaso updated the progress of the P1854 Project, identified the content of the guide and provided the plan to complete the remaining review and revision of the guide for submitted review comments. The revised planned completion date is December 31, 2016 for SDWG vetting. Upon achieving SDWG approval, the guide is to be submitted to the IEEE – Standards Association. The PAR 1854 expiration date is 31-Dec-2017.

Mike Simms, SDWG member, presented his presentation titled: 'Duke Energy Production Experience with CVR'. Murty Yalla, SDWG member, presented his presentation titled: 'Cyber Security of the Electric Distribution System'.

The next SDWG meeting is at 2017 IEEE PES JTCM in New Orleans, LA on January 8-12, 2017.

Additional information available at: <http://grouper.ieee.org/groups/td/dist/da/>

VOLT/VAR (VVTF) TASK FORCE – Larry Conrad, Chair

Bob Uluski of UISOL, Vice Chair of the VVTF, called the meeting to order at 3:00 pm EST on July 18, 2016 in room SB – Liberty BC and welcomed the group which included 41 representatives of utilities, vendors, and academic institutes. Bob briefly reviewed the IEEE policies on patents, copyrights, etc. He stressed the importance of adhering to these policies as VVTF members review the draft of the P1885 VVO M&V Guide.

Dr. Murty Yalla summarized the Volt-VAR tutorial that will be presented this Wednesday at the General Meeting in Boston for the second year in a row following a very successful tutorial in 2015. Currently, 17 persons have signed up for this tutorial, and we are expecting another full room.

Russ Griffith of PG&E briefly discussed his panel session on the role of smart inverters in VVO conducted on Tuesday at the GM. Several attendees expressed interest in the topic, and it was suggested that we plan on a more detailed discussion and presentation at the next meeting.

Bob Uluski invited attendees to suggest topics for presentations and panel sessions at future meetings. Options include presentations to the task force as well as proposals for General Meeting sessions. Much of the meeting was dedicated to the VVO M&V guide (P1885) that is being prepared by the VVTF. Bob Uluski, who is coordinating the P1885 effort, indicated that considerable progress has been made toward completing the P1885 draft, with key contributions over the past 6 months from Larry Clark, Fred Friend, Valentina Dabic, Suresh Gautem, Mike Simms, and Jeremy Wilson. We are targeting December 31, 2016 as the date for submitting the document to SA. In order to meet this date, the updated draft versions will be circulated to VVTF members and SDWG voting members for comments and approval, and review comments will be handled via email and conference calls.

The next meeting of the VVTF will be held at the JTCM, January 2017 in New Orleans.

DISTRIBUTED RESOURCES INTEGRATION – Julio Romero- Aguero, Chair

Call to Order/Review Agenda

Julio Romero Aguero (Chair) chaired the session. The agenda was reviewed and approved. Julio briefly introduced the “Participants, patents, and duty to inform” and other guidelines for IEEE WG meetings, reviewed the agenda, and received agreement to proceed per the agenda.

Agenda Approved

Introduction of Attendees - 41 attendees

Discussion on appointment of new Vice Chair of DRI WG

Opened the floor to discuss candidates. Motion to vote, voted to have Babak Enayati to serve as vice chair. Babak Enayati elected to serve as Vice Chair

Minutes of January 2016 meeting in Memphis

The minutes of the last session were reviewed and approved. Julio committed on behalf of the WG board on providing the minutes and the agenda with enough anticipation for attendees to review them and suggest changes. Meeting minutes and agendas will be posted. Minutes were approved

Update on IEEE P2030.7 Standard for Specification of Microgrid Controllers - WG on Distributed Resources Integration – Prof. Geza Joos (McGill University) (Absent)

Prof. Joos not in attendance and no one provided a status to the group. Agreed that a status will be sent out and/or a status will be provided at the next meeting.

Update on MicroGrid Taskforce (Amin Khodaei)

Provided the scope and objectives of the taskforce. Covered the technical and economic aspects of the task force. Reminded attendees of ongoing TF activities, including sponsored panel sessions in the GM. Discussed the white paper of the TF with a first draft by 7/2017.

Presentation by Dr. Babak Enayati (National Grid) “Update on 1547”

Status of the 1547 standard, provided an example of the 1547 new requirements for ride-through and new voltage regulation requirements.

Presentation by Ani Sadikovic and Rustom Dessi (PG&E) “Volt-Var Optimization – Use of Smart Inverters on High DG Penetration Circuits

Provided a status of the CVR (Conservation or Voltage Reduction) being performed at PG&E. Provided an update on inverter performance for Volt-Var Optimization studied at PG&E. Discussed the testing conducted at PG&E.

Update on Proposal for Distribution System Operator Task Force
Julio will work with John McDaniel (T&D Chair) on this proposal and provide a status update in the next meeting.

Next meeting, 2017 IEEE PES JTCM (Jan 8-12, 2017 New Orleans)

Julio reminded attendees about upcoming meeting. Amin Khodaei indicated that there will be a need for a separate room/meeting for the TF in the next meeting. Amin will work with Julio on this.

STRAY AND CONTACT VOLTAGE WORKING GROUP – Matt Norwalk, Chair

The Stray and Contact Voltage Working Group met at the 2016 IEEE PES General Meeting on Monday morning July 18th at the Sheraton Boston Hotel in Boston, MA. There were approximately 39 people in attendance.

The meeting began with a review of the meeting Agenda and then moved on to attendee introductions. The Meeting Minutes from Memphis were reviewed and approved.

New Working Group Policies and Procedures were drafted by the Chair. A brief review was held and there were no issues with the new policies. A motion was made in favor of the new Policies and Procedures and they were approved by the working group.

Matt announces that an election will be held for the appointment of new officers to fill the positions of Vice Chair and Secretary. He appointed Dave Kalokitis as the election officer to handle the nomination and voting process, which will be done electronically before the next meeting.

The group discussed changes for the next revision of the guide and if it should be elevated to a recommended practice or standard. Matt started generating a revision to the outline of the guide, but there wasn't agreement as to how it should be laid out. The consensus was that the Clauses and content need to be reorganized for better flow. Stu Hanebuth volunteered to put together an outline by September and determine what information needs to be moved around.

After the outline is complete the content will be modified for review at the January meeting.

Additionally, the group agreed to revise the guide to elevate it to a recommended practice.

Jim Bouford officially announced that he is resigning as Vice Chair of the working group.

An announcement was made that the Jodie Lane Conference will be held Dec 1, 2016. If anyone is interested in presenting, the call for papers and presenters will be in July or August.

The meeting adjourned at 1:35PM.

The next meeting will be at the 2017 IEEE PES Joint Technical Committee Meeting, January 8-12, 2017, in New Orleans, Louisiana.

LIAISON REPORTS

Insulated Conductors

No report is available

Power System Communications

No report is available.

Power Systems Instrumentation and Measurement (PSIM)

No report is available.

C84 – Larry Conrad

C84.1 is in the revision cycle again. Very few changes are expected. There have been some discussions about clarifying voltage levels in consideration of Conservation Voltage Reduction. A possible outcome might be a statement that Range A is recommended for all continuous energy saving strategies and for frequent demand reduction strategies. Range B could be used for occasional demand reduction. It is too soon to tell if this will happen. Members of the Distribution Subcommittee should contact Larry Conrad, l.conrad@ieee.org for comments or questions.

Power System Relaying Committee – Fred Friend

The next meeting will be at the Westin Cincinnati, Cincinnati, OH, 19 – 22 September 2016.

Subcommittees of the PSRC are Systems Protection, Line Protection, Relaying Communications, Relaying Practices, Rotating Machinery and Substation Protection.

Meeting minutes can be viewed from the following link: <http://www.pes-psrc.org/Aminutes.html>

The following items may be of special interest to the Distribution Subcommittee members of the T&D Committee.

Working Group C2, chaired by Alex Apostolov, is nearing completion of a report to the PSRC to identify the functions and data available in Protective Relaying Devices used at different functional levels and different applications within a Smart Grid.

Working Group C25, chaired by Martin Best, is preparing a report on the Protection of Wind Electric Plants to provide guidance on relay protection and coordination at wind electric plants, covering protection of generator step up transformers, collector system feeders, grounding transformers, collector buses, reactors, capacitors, main station transformers, tie lines and points of interconnection and associated arc flash issues.

A new Working Group C30, chaired by Michael Higginson, was formed to prepare a report that will investigate and assess techniques, approaches, and potential solutions to the challenges of microgrid protection.

Working Group D28, chaired by Brian Boysen, is revising and updating C37.230 – Guide for Protective Relay Applications to Distribution Lines.

Link to completed PSRC reports:

http://www.pes-psrc.org/Reports/Apublications_new_format.htm

Transformers Committee – Fred Friend

The latest Transformer Committee information is included in the publication: Liaison Report Transformers Jul2016 posted on the website.

SCC 21 - ?

STANDARDS

NESC – Rusty Soderberg

The latest NESC information is included in the presentation: NESC for PES Dist Sub July 2016 posted on the website.

PANEL SESSIONS

Panel sessions for future meetings:

Proposed joint session with Distributed Resource Integration WG. Julio Romero Agüero will provide framework

Proposed joint session with Smart Distribution WG, Georges Simard will provide framework

Papers are due in November for 2017 General Meeting

PRESENTATIONS

One presentation on Microgrids was given at this meeting by Manuel Avendano, ComEd

Presentations from previous meetings are posted at the Distribution Subcommittee website:

<http://grouper.ieee.org/groups/td/dist/presentations/>

NEW BUSINESS / ROUNDTABLE

Robert Harris, NRECA – Energy Star original DOE standard now renewed interest for overhead and underground use transformers. The amorphous core transformer was expensive and why the energy star support died in about 2007.

Motion to Adjourn: Rusty Soderberg, seconded by Rob Nathan

PAR Number	Title	Working Group	Chair
P1695	Draft Guide to Understanding, Diagnosing and Mitigating Stray and Contact Voltage	Stray and Contact Voltage WG	Matt Norwalk
P1782	Guide for Collecting, Categorizing and Utilization of Information Related to Electric Power Distribution Interruption Events	Distribution Reliability WG	Val Werner
P1854	Guide for Smart Distribution Applications	Smart Distribution WG	Larry Clark
P1885	Guide for Assessing, Measuring and Verifying Volt-Var Control Optimization on Distribution Systems	Smart Distribution WG	Larry Clark

P1806	Guide for Reliability Based Placement of Overhead and Underground Switching and Overcurrent Protection Equipment	Switching and Overcurrent Protection WG	Fred Friend
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Appendix: Current Membership Roster

Chair: Julio Romero Aguero, Raleigh, NC
Vice Chair: vacant
Secretary: Val Werner, WI

Beckwith, T., Largo, FL
Bouford, J., Augusta, ME
Caswell, H., Portland, OR
Clark, L., Birmingham, AL
Cole, J., Bozeman, MT
Conrad, L., Plainfield, IN
Flaherty, A., Everett, WA
Friend, F., Columbus, OH
Gilmer, D., Kerrville, TX
Hayes, H., St Louis, MO
Jones, T., Portland, OR
Lambert, F., Forest Park, GA
McDaniel, J., North Syracuse, NY
Miller, L., Kennewick, WA
Norwalk, M., Fullerton, CA
Robinson, R., Topeka, KS
Romero Aguero, J., Raleigh, NC
Rumrill, R., Burlingame, CA
Sabin, D., Beverly, MA
Saint, B., Granby, CO
Smith, J., Phoenix, AZ
Soderberg, R., Jackson, MI
Venkata, M., Redmond, WA
Viglietta, J., Philadelphia, PA
Ward, D., Richmond, VA
Werner, V., Milwaukee, WI