

Working Group on Smart Distribution
Meeting: Monday, January 11, 2016, Memphis, TN
Chair: Larry Clark

Larry Clark welcomed the Group that included 34 representatives of utilities, vendors, and academic institutes. Elections were conducted with the current officers being nominated and elected to another term. Larry reviewed the IEEE policies on patents, copyrights, membership, etc. The minutes of the last meeting (Denver, CO, July 2015) were briefly discussed including online availability and were subsequently approved unanimously. Introductions of attendees were made.

Nominations are underway for the 2016 Douglas M. Staszkesy DA Award. Nomination and the supporting letters should be submitted to Anil Pahwa by the nominator by January 31, 2016 via email (Pahwa@ksu.edu) with 'Douglas M. Staszkesy DA Award Nomination' in the subject line.

Larry Clark indicted the following panel sessions/ tutorials have been proposed:

- a. IEEE PES 2016 T&D Invited Panel Session
 - i. 'DMS Integration with DERMS & Microgrid Controllers', Chair Bob Uluski
- b. IEEE PES 2016 GM Invited Panel Sessions
 - i. Session 1 'Protection design for Micro Grids', Chair: Georges Simard and Nouredine Hadjsaid
 - ii. Session 2 'Distribution planning under uncertainties', Chair: Georges Simard and Nouredine Hadjsaid [Submitted to SDWG, may be aligned with Power System Planning & Operations working group invited panel sessions]
- c. IEEE PES 2016 GM
 - i. Smart Distribution System (SDS) tutorial

Larry Clark reviewed the requirements for development of an invited panel proposal. For the IEEE PES 2017 GM, invited panel proposals need to be submitted to Larry by October 2016. The proposal is to include the title, the moderator for the invited panel proposal, and the committed speakers for the proposed invited panel. The SDWG officers will decide which panel sessions will be proposed to the T&D committee for their consideration and approval. There was discussion on having a NERC / CIP panel session focused on DA. Murty Yalla volunteered to organize it.

A brief update was given on the Smart Distribution Application Guide (P1854). The guide was reviewed and updated in a separate meeting.

Larry Clark moderated a roundtable discussion. Attendees made brief statements about their ongoing activities in Smart Distribution (at end of report). Attendees were requested to submit a brief write-up on major activities in Smart Distribution to one of the SDWG officers for posting on the website.

Smart Distribution related conferences to come

- a. DistribuTECH 2016, February 9-11, 2016, Orlando, FL
- b. IEEE PES T&D 2016 Conference and Exhibition, May 2-5, 2016, Dallas, TX
- c. Power Systems Computation Conference, psc2016, June 20-24, 2016, Genoa, Italy

d. IEEE PES 2016 GM, July 18-21, 2016, Boston, MA

The next SDWG meeting will be at the 2016 IEEE PES GM, 18- 21 July 2016, in Boston, MA.

Roundtable

Francisc Zavoda, Hydro Quebec: past just in substation, receiving alarm from distribution devices through communication, providing condition based maintenance.

Mike Simms, Duke, full deployment in Ohio, in few years all across territory (future presenter)

Larry Conrad, Conrad Technical Services: load control, pre-cooling, integrated resources, hosting capacity interactions.

John Grooters, Beckwith: moving target

Ron Rumrill, Sentient Energy: Sentient is developing a new line mounted sensor. The final requirements are still under development based upon discussions with some key customers. I can make a non-commercial presentation at a future meeting.

Bryan Hobson, Idaho Power: investigating ideas

Jason Lombardo, S&C: evolution of DA integration and adaption

Murty Yalla, Beckwith: reverse power detection/ reaction (future presentation)

Dave Moller, Enernex: proactive and/ or immediate challenges (pres

Tyler Jones, Pacifcor: learning

NRCEA: system planning aspect

Tom McCarthy, Lindsay Manufacturing: underground sensors

Tom Beckwith, Beckwith Electric: challenges with managing multiple changes occurring on the distribution system

Joe Viglietta: 1600 reclosers in DA schemes with single setting group, basic. Need more dynamic setting changes

Ray Hisayyasu, Puget Sound: years ago home grown automation system using SCADA pad-mount switches, isn't flexible, looking at vendor supplied system.

Laura Garcia, ComED: ?

Kim Chul-Hwan, Sungkyunkwan University: trying to find DA function to DER interconnection

Val Werner, WE Energies: 1700 ckt 34 DA schemes 166 devices (one – two /year)

Fred Friend, AEP: DA, VV, secondary network deployment (actionable information for operations of smart grid)

Bob Uluski, transitioning naval base to modern grid

Larry Clark, Alabama Power: The deployment of SCADA Technology in distribution substation and at discrete locations along the distribution feeders was illustrated. The Distribution Automation (DA) Star was reintroduced to illustrate the multi-disciplined nature of the Distribution Automation sites. The DA Star deployments are defined in terms of functionality, operations, fault detection, planning and power quality. Thus, each DA Star site is multi-disciplined with enhanced benefits above the functionality installed at the DA Star site. Several DA Star sites were illustrated including the distribution substation, distribution line monitoring, gang-operated switch, pole-mounted recloser, line regulators, per phased switched capacitor banks and network protectors. DA deployment is maximized with the installation of multi-disciplined and dissimilar devices. Thus, DA becomes the operational Eyes & Ears for the distribution system operator.