



## *IEEE PES Distribution System Analysis Subcommittee (DSASC)*

### Minutes

Meeting on July 26<sup>th</sup>, 2011  
2011 PES General Meeting, Detroit, MI

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A meeting of the Subcommittee was held on July 26<sup>th</sup> at the IEEE PES General Meeting. In conjunction with the subcommittee, the Working Group on Recommended Practices (P1729), and the Distribution Test Feeder Working Group Force also met during the same period, meeting notes from those groups may be found in a separate document link on the main DSA website.

Fourteen participants were in attendance:

The meeting attendees were:

<b>Attendee</b>	<b>Affiliation</b>
Andrew Keane	University College Dublin
Bo Yang	General Electric
Chee-Wooi Ten	Michigan Technology University
Yonghe Cuo	Michigan Technology University
Greg Shirek	Milsoft Utility Solutions
Bikash Pal	Imperial College London
Kevin Schneider	Pacific Northwest National Laboratory
Jason Fuller	Pacific Northwest National Laboratory
Roger Dugan	Electric Power Research Institute
Sukumar Brahma	New Mexico State University
Jignesh Solanki	West Virginia University
Sandoval Carneiro Jr	Federal University of Rio De Janeiro
Ilhan Kocar	Ecole Polytech
Sarika Khushalani-Solanki	West Virginia University

### Contact Information

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- Subcommittee Chair: [Sukumar Brahma](#), New Mexico State University, [sbrahma@nmsu.edu](mailto:sbrahma@nmsu.edu)



- Subcommittee Vice Chair: [Kevin Schneider](#), Pacific Northwest National Laboratory, [kevin.schneider@pnnl.gov](mailto:kevin.schneider@pnnl.gov)
- Subcommittee Secretary: [Greg Shirek](#), Milsoft Utility Solutions, [greg.shirek@milsoft.com](mailto:greg.shirek@milsoft.com)
- Test Feeder Working Group Chair: Roger Dugan, Electric Power Research Institute, [rdugan@epri.com](mailto:rdugan@epri.com)
- Subcommittee Web Site: <http://ewh.ieee.org/soc/pes/dsacom/index.html>
- Distribution Test Feeder Working Group: <http://ewh.ieee.org/soc/pes/dsacom/testfeeders/index.html>
- P1729 Recommended Practices for Electric Power Distribution System Analysis Chair: Tom McDermott, Meltran, [tom@meltran.com](mailto:tom@meltran.com), <http://ewh.ieee.org/cmte/pes/p1729>.

## Action Items

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- 1) [IEEE PES T&D 2012 panel](#): DSASC will sponsor EPRI Panel on Green Circuit results, will be chaired by Karen Forsten of EPRI. Roger says 3 or 4 other possible papers for potential second session. Fault Current results for some of the IEEE test feeders will be presented.
- 2) [IEEE PES GM 2012 panel](#): Three potential panels were proposed:
  - Challenges in Distribution System State Estimations: Bikash Pal.
  - Control Algorithm in Distribution Systems: Kevin Schneider
  - Possibly New Test Feeder
- 3) [New Task Force](#): Schneider to draft a scope/purpose/objective statement for a Load Modeling TF

## DSASC Meeting Minutes

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1. Welcome and introductions
2. Minutes of the DSASC meeting at the 2010 PES General Meeting in Minneapolis were approved as presented.
3. A DSA Panel Session was held at the 2011 PSCE chaired by Jason Fuller. There was obviously much interest in the papers since the room was filled to capacity, standing room only.



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4. A DSA Paper Session was held at the 2011 General Meeting chaired by Jason Fuller; 25 out of 34 papers were accepted, with 22 being presented. Much attendance during the first hour with over 60 attendees, but trailed off as attendees needed to depart for travel.
5. Discussion on the Paper Forum structure and presentations. Need to educate presenters that they only have about five minutes to present a high-level overview of their subject and then follow-up interest and questions can take place while they stand by their posters. Contact PES Technical Council to emphasize that this needs to be relayed to Paper Forum presenters.
6. Bikash from Imperial College of London discussed how much interest he has received from vendors regarding distribution state estimation algorithms and modeling. Sandoval is aware of some people in Brazil doing work and research in this field. Sandoval was possibly going to contact them to get more detail on what exactly they are doing. Sarika voiced she knows much work is being done with state estimation and how PMU's (Phasor Measurement Units) are aiding in the effort. This topic is a potential DSA sponsored panel session at GM 2012. Good industry representation is desirable to make this topic more attractive and real-world applicable.
7. Deadline for submittal of panels for 2012 General Meeting is November 2011.
8. Kevin thought possibly a panel to discuss modeling of DER on a distribution system and what algorithms are used in the analysis would be a good idea for a future meeting, possibly General Meeting 2012. Many software vendors are modeling DER differently. Panel members could use IEEE Test Feeders to help with comparison of results. Possibly Tom McDermott's DG Protection model could be used for this.
9. Advanced Controls for Distribution Analysis" is the tentative title for the DSA sponsored Panel Session at 2012 General Meeting.
10. Paper Reviews: Kevin sent out many requests to PSACE members to ask them to review IEEE papers. Many did not get reviewed by the deadline (lack of interest of email got caught in spam filter). So the question is should these people be contacted first to simply ask them if they are willing and able to review a paper. If they accept, then send out paper to be reviewed.
11. Roger brought up the possibility of a panel session at PES T&D 2012 aimed at the various AEP Smart-Grid grant studies underway by EPRI, GE, West Virginia, etc. However, since the meeting, Roger found enough interest for there to be an EPRI panel to present Green Circuit progress, so AEP project can be tabled until



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another conference. The title for the Green Circuit Panel will be *Modeling for Distribution Efficiency* with four papers already committed.

12. Task Force on Load Modeling: There used to be other committees who had done work with load modeling, but they are no more. This is a very important part of distribution system analysis modeling as there are new models that could be incorporated according to some research and testing underway. Many vendors and utilities have tested various appliances with lab results that would tie into this effort. Schneider to work on a scope for this new Task Force.
13. Test Feeders still need to have fault current results posted. No structured format is needed; simply create spreadsheet or .csv with fault type columns and values. No conclusions were drawn regarding if pre-fault voltages should be used, or if regulators should have tap impedances modeled, etc., so make sure for those that complete this work to note what assumptions were used during the fault current analysis. Test Feeder WG meeting minutes may explain this in more detail on how this should be carried out. Kersting, Shirek will present RDAP and WindMil results for a few IEEE test feeders at the 2012 T&D Show, tentatively others will contribute.
14. PAR for the WG on Recommended Practices for Electric Power Distribution needs to be extended by October 17, 2011. Tom McDermott will address this issue.
15. Close the general DSASC meeting and move on to the Test Feeder Working Group Meeting and the WG P1729 on Recommended Practices.