

IEEE-PES-PSACE Committee Main Meeting

General Meeting 2016

Wednesday, July 27th, 2016 9:00 – 12:00
Sheraton – Beacon F
Boston Massachusetts

1) Welcome and member introductions

PSACE Chair Joydeep Mitra opened the meeting at 9:00 AM. The attendance is shown in Attachment A; 43 persons being present for part or all of the meeting. Introductions were made.

2) Adopt agenda

The agenda was adopted, with the addition of a 5-minute talk by Alan Rotz.

3) Approval of 2015 meeting minutes

The 2015 meeting minutes were approved unanimously.

4) Talk by Alan Rotz

There are resources available for activities outside of North America. Additionally, the Resource Center is looking for material.

5) PSACE to AMPS Reorganization

PSACE is part of the larger reorganization effort that is occurring in the PES technical committees. The proposed reorganization will go into effect the week after the General Meeting.

- The SES Subcommittee moves to the new Power System Operations Planning and Economics Committee
- AMPS adds the General Systems Subcommittee from T&D
- AMPS establishes a new Big Data Analytics Subcommittee

The old PSACE structure is being used for the 2016 PES General Meeting, but the AMPS structure will be used after. The new O&P manual for AMPS has been approved.

The website has been updated to reflect the transition from PSACE to AMPS. Additionally, the PSACE website has begun the transition to the new website at <http://sites.ieee.org/amps>. Dagmar has agreed to be the webmaster, instead of having the Committee Secretary perform this role.

6) AMPS Membership

With the reorganization the issue of AMPS membership arose. Past PSACE members will automatically become AMPS members, but there are many people listed who have not met membership requirements; specifically, attending at least 1 out of the last 3 meetings. But there are cases of

members with an extensive history of service who support without attending, so perhaps they should not be expunged.

Options for moving forward:

- 1) Currently have non-voting emeritus membership in the O&P Manual
- 2) Voting membership vs. non-voting membership 3 years (concerns that this is not consistent with the O&P Manual)
- 3) Send e-mail prior to removing after 5 years
- 4) The idea of an associate members
- 5) Perhaps just leave it as it is in the O&P

Final Decision: Keep with the current O&P manual, and inform people of the changes, and part of the AMPS reorganization. Will not remove members, but you must meet the requirements of the O&P Manual to vote.

7) Subcommittee Reports

Kevin will send out a template for the SC chairs to complete.

Big Data Analytics

Chair: Le Xie

Vice Chair: Wen Jun and Christopher DeMarco

Secretary: TBD

Past Chair: N/A

Website: <http://ewh.ieee.org/cmte/psace/CAMS.html>

List of active WGs, and the Chairs:

- 1: Data access working group, Chair: Ning Zhou, Co-Chair: Hamed Mohsenian-Rad

List of active TFs, and the Chairs:

- 1: Big Data Applications in Power Distribution Systems, Chair: Reza Arghandeh, Vice Chair: Ram Rajagopal, Secretary: Nanpeng Yu
- 2: Big Data Webinar Series, Chair: Bo Yang, Vice chair: Yang Weng

Panels sponsored at 2016 PES GM

- Big Data Era in Power Distribution
- Big Data Empirical Assessment of Demand Response

Panels proposed for 2017 PES GM

- “ Big Data Access and Big Data Research Integration in Power Systems”
- “ Big Data Applications in Power Systems”
- “ Big data for integrated energy system”
- “Big Data Analytics for Electricity Markets”

Computing and Analytic Methods (CAMS) Subcommittee Report

Chair: Manimaran Govindarasu

Vice Chair: Zhenyu (Henry) Huang

Secretary: Mallikarjuna Vallem

Past Chair: Ivana Kockar

Website: <http://ewh.ieee.org/cmte/psace/CAMS.html>

List of active WGs, and the Chairs:

- Understanding, Prediction, Prevention and Restoration of Cascading Failures Chair: Milorad Papic
- High Performance Computing for Grid Analysis **Chairs:** Henry Huang & Zeb Tate

List of active TFs, and the Chairs:

- Cyber Security in Power Systems **Chair:** Manimaran Govindarasu
- Power System Modeling and Integration Using CIM Standards **Chair:** Enamul Haq
- New Tools for the operation of future Power System with very high penetration of renewable resources **Chair:** Enamul Haq

Panels sponsored at 2016 PES GM

- “Cascading - dynamics, protection, validation and data”
- “High Performance Computing for Grid Operations – What Can be Learned from Other Fields?”
- “The Benefits of CIM Standards in Managing BIG Data of Transmission & Distribution Systems”
- “Cyber Physical System (CPS) Security Metrics and Methodologies”
- “Power System Restoration”

Panels proposed for 2017 PES GM

- “Lessons Learned from Cyber Attack Incidents and How to Mitigate them?”
- “Panel: Renewable Resources and Demand Response Integration Using the CIM Standard”
- “Tools for Managing Electricity Markets and Reliability for Grid with Very High Renewable Resources”

Distribution System Analysis (DSA) Subcommittee Report

Chair: Sarika Khushalani Solanki

Vice Chair: Jason Fuller

Secretary: Barry Mather

Past Chair: Greg Shirek

Website: <http://ewh.ieee.org/soc/pes/dsacom/>

List of active WGs, and the Chairs:

- Test Feeder **Chair:** Jason Fuller
- Distribution State Estimation **Chair:** Bikash Pal

List of active TFs, and the Chairs:

- None

Panels sponsored at 2016 PES GM

- “Measurements and Their Integration Challenges for Distribution State Estimation”
- “Distribution Simulations at Varying Time Scales”
- “Stochastic Modeling and Analysis of Distribution Systems”

Panels proposed for 2017 PES GM

- “Advances in Accelerated Distribution System Time-Series Analysis”

- “Modeling Tools for DER Integration”
- “Distribution system state estimation: Algorithm, metering and data exchange: advances and challenges”

Intelligent System (ISS) Subcommittee Report

Chair: Zita A. Vale

Vice Chair: Sukumar Mishra

Secretary: Hiroyuki Mori

Past Chair: Alexandre P. Alves Da Silva

Website: <http://sites.ieee.org/pes-iss/>

List of active WGs, and the Chairs:

- Intelligent Control Systems: Ganesh Kumar Venayagamoorthy
- Intelligent Data Mining and Analysis: Zita Vale
- Multi-Agent Systems: Koen Kok
- Modern Heuristic Optimization: Kwang Y. Lee

List of active TFs, and the Chairs:

- Open Data Sets **Chair:** Ivana Kockar
- Micro-Grid Control System **Chair:** Jignesh Solanki

Panels sponsored at 2016 PES GM

- “Impact of communication systems on advanced control systems”
- “Using smart metering and PMU data to enable intelligent smart grid operation”
- “Modern Heuristic Optimization Techniques for Renewable Energy Sources Integration with Energy Storage Devices: Optimization under Uncertainty”

Panels proposed for 2017 PES GM

- “Multi-agent Field Deployment Platforms”
- “Modern Heuristic Optimization Techniques for Renewable Energy Sources Integration with Energy Storage Devices: Optimization under Uncertainty”
- “Resilient Control Systems for Cyber Physical Power and Energy Systems”
- “Multi-Agent Technology Applied to Power Systems Operation and Analysis”
- “Smart grid monitoring and control”
- “Evaluating the Performance of Modern Heuristic Optimizers on Smart Grid Operation Problems”

General Systems (To be renamed Transient Analysis and Simulation)

Chair: Yanfeng (YG) Gong

Vice Chair: Luis Marti

Secretary: TBD

Past Chair: Juan Martinez-Velasco

Website: <http://grouper.ieee.org/groups/td/gensys/>

List of active WGs, and the Chairs:

- 1) Modeling and Analysis of Distributed Energy Resources **Chair:** Amirnaser Yazdani
- 2) Practical Aspects of Ferroresonance **Chair:** Bruce Mork
- 3) Field Measured Overvoltage and Their Analysis **Chair:** Reynaldo Ramos

- 4) Modeling and Analysis of System Transient using Digital Programs **Chair:** Albert Keri
- 5) Lightning Performance of Overhead Lines **Chair:** Emanuel Petrache
- 6) Geomagnetic Induced currents Modeling and Analysis **Chair:** Luis Matri

List of active TFs, and the Chairs:

- 1) Interfacing Techniques for Simulation Tools **Chair:** Xiaoya Wang
- 2) Real-Time Simulation of Power & Energy Systems **Chair:** Omar Faruque & George Lauss
- 3) EMT-type Modeling of Wind Turbine Generators and Parks **Chair:** Jean Mahseredjian **Reports to:** 4
- 4) Electromagnetic Transients Modeling and Analysis of FACTS and HVDC VSC Converters **Chair:** Sebastien Denetiere
- 5) Dynamic Average Modeling Techniques **Chair:** Juri Jatskevich
- 6) Dynamic System Equivalents (for transient studies) **Chair:** Ali Mehrizi-Sani
- 7) Portable Data & Modeling for Electromagnetic Transient Analysis Programs **Chair:** Jean Mahseredjian
- 8) Modeling of Induction Machines **Chair:** Shaahin Filizadeh **Reports to:** 4
- 9) Frequency Domain Methods for Transient Studies **Chair:** Pablo Gomez

Panels sponsored at 2016 PES GM

- N/A

Panels proposed for 2017 PES GM

- “Modeling, Simulation, and Control of Distributed Energy Resources”

Reliability Risk and Probability Application (RPPA) Subcommittee Report

Chair: Milorad Papic

Vice Chair: Chris Dent

Secretary: Masood Parvania

Past Chair: Andrew Ford

Website: <http://ewh.ieee.org/cmte/pes/rrpa/>

List of active WGs, and the Chairs:

- Loss of Load Expectation Best Practices **Chair:** Chris Dent
- Probability Applications for Common Mode Events in Electric Power Systems **Chair:** Milorad Papic
- Renewal of Standard 762 **Chair:** Alex Schneider
- Renewal of Standard 859 **Chair:** TBD

List of active TFs, and the Chairs:

- Reliability Impacts of Demand-Side Resource **Chair:** Masood Parvania
- History of RPPA SC **Chair:** Murty Bhavaraju
- Reliability Consideration in Emerging Cyber-Physical Electrical Energy Systems **Chair:** Aravinthan Visvakumar
- RPPA Awards **Chair:** Douglas Logan
- RTS-96 Update to include Variable Resources **Chair:** Gene Preston

Panels sponsored at 2016 PES GM

- “Reliability Modeling for Cyber-Physical Power Systems”
- “Non-uniform reliability in developing power systems”
- “Analytical Research Foundations for the Next-Generation Electric Grid”,”

Panels proposed for 2017 PES GM

- “Dependencies and Reliability Issues in Cyber-Physical Systems”
- “Decision analysis for capital planning under uncertainty”
- “Probabilistic Reliability Assessment for Grid with Increasing Uncertainty from Renewable”
- “Impact of Ramping Scarcity on Reliable Operation of Power Systems”

8) Officer Reports

Past Chair:

- Awards WG did not meet.
- Roy Billinton Award: Bob Ringlee (RPPA)
- Fellows: Alexandre Alves da Silva, Federico Milano, Lamine Mili, Joao Abel Pecas Lopes, Noel Schulz, and Rabih Jabr
- Distinguished Service Award: Kwok Cheung
- PSACE Price Paper: Joydeep Mitra and Mallikarjuana R. Vallem, “Determination of Storage Required to Meet Reliability Guarantees on Island-capable Microgrids with Intermittent Sources,” IEEE PES Trans. On Power Systems, Vol. 27, No. 4, November 2012.
- Fellow: (Roger filling in) 1 of 4 or 5 TCs that reviewed the applications. There is a desire for a standing committee in AMPS to review nominations. The chair cannot nominate or act as reference for applications. (3 areas: contribution, supported with evidence, and impact)
- More award nominations are needed, at all levels.

Chair:

- O&P Manual is completed
- Update the member roster
- Annual reports are requested by the February deadline
- The annual report for last year was not submitted
- SCs need to send accomplishments to the marketing individual twice a year
- Looking to increase the international participation at the committee level
- Reiterate the talk of Alan Rotz
- Chicago is the next GM, then Portland. T&D 18 is Denver. JTCM 2017 is New Orleans

Vice-Chair:

- The JTCM process for determining the super sessions is a process that starts 18 months in advance. Dialing in does not appear to have the same weight as attending in person.
- 60-80 prize paper are a traditional paper presentation. 10%
- 30% are in paper forum
- The remaining papers are in the poster session
- 50% acceptance will continue in the future
- Panel papers can be submitted as full papers, with the same review process in MIRA
- Tutorials will now be Sunday or Thursday, to prevent overlap with conference
- TC Awards: there are guidelines for the Technical Council awards. It is not clear how much influence the Technical Committees have on this process.

Secretary:

- O&P Manual is completed, and approved. (May need to revise if we rename any of the subcommittees)

- Dagmar agreed to take the role of AMPS webmaster

During the 2016 PES GM the Chair is Joydeep Mitra. Officer rotation occurred this year so this is the first year with Joydeep as the chair. As part of his role last year as the awards chair, he listed the awards:

- PES level:
- New fellows:
- PSACE Distinguished Service Award:
- PSACE Prize Paper Award:
- PSACE Outstanding WG award for report/standard/guide:
- PSACE Outstanding WG award :

During the 2016 PES GM the Vice Chair is Alex Schneider. In this position he is also the chair of the new awards Working Group. It was noted that each committee can give one service, and multiple WG/TF awards, as well as prize paper awards. As with the majority of the PES, there is a need for more awards nominations.

During the 2015 PES GM the Secretary is Kevin Schneider. A Survey Monkey site has been sent to all persons in attendance at the meeting to vote on preference for the new Committee name. Specially, is the AMPS acronym acceptable? If not, what do you suggest?

Kevin suggested that as part of the change from PSACE to AMPS that the website should be transitioned to the new ieeesite location. This was agreed on and will commence.

9) TCPC Report on the GM2016 papers and sessions

For the 2016 IEEE PES General Meeting Kwok Cheung was the TCPC. 264 conference papers were submitted to the PSACE area, 138 accepted 122 rejected; 53% acceptance. The breakdown by subcommittee is shown below.

	Accepted	Rejected	Total
CAMS	30	19	49
DSAS	50	44	94
ISS	13	15	28
RRPAS	22	28	50
SES	20	14	34
MISC	3	2	5
PSACE	138	122	260

3 paper forums and 2 papers sessions

PSACE also had 22 panel sessions. (54 Hours total)

	Panel
CAMS	6
DSAS	3
ISS	5
RRPAS	3
SES	5
PSACE	22

For the T&D Conference and Exposition

	Accepted	Rejected	Total
CAMS	6	2	8
DSAS	7	12	19
ISS	2	4	6
RRPAS	4	2	6
SES	5	6	11
MISC	2	2	4
PSACE	26	28	54

29 accepted

26 conference, 3 transactions

28 conference rejected

Panels

	Total
CAMS	0
DSAS	0
ISS	0
RRPAS	0
SES	1
PSACE	1

The idea was proposed to have T&D TCPC be the GM TCPC in training.
Steve Miller is the new TCPC for the GM.

10) Liaison Report

None of the liaisons were present.

11) AMPS Standards Coordination

Coordinated with Tom McDermott (2 active and 1 approved)

1729 is approved

859 has an active PAR (Transmission reliability)

762 is missing a PAR (Alex will provide the title)

12) Officer Rotation on 1/1/2017

Joydeep will rotate to Past-Chair

Alex Schneider will rotate to Chair

Kevin Schneider will rotate to Vice-Chair

Kwok Cheung accepted the position of AMPS Secretary

Steve Miller will be the GM TCPC for 2017

13) Miscellaneous Items

Items:

- A new panel on IOT was submitted to Dagmar, possibly at the committee level. A scope needs to be sent.
- Joydeep: some committee officers are not familiar with O&P manual. DSA and RPPA should know PMP manual.
- Recognition should be given to outgoing subcommittee and committee chairs.
- TF on resilience with Kevin T.
- The need to better distribute big data sets.

Kevin P. Schneider
Secretary