# **IEEE POWER & ENERGY SOCIETY / SUBSTATIONS COMMITTEE**



2011 - 2012 Officers

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C0 Subcommittee Meeting Notes

2012 JTCM Garden Grove, CA

Wednesday, 1/11/12 1:30 PM

#### C0: DATA ACQUISITION, PROCESSING, AND CONTROL SYSTEMS SUBCOMMITTEE Chair: C. Preuss Vice Chair: Vacant Secretary: E. William Jr.

Name	Company	E-mail	M/G
Dan Friedman			G
Marcus Steel	Powerlink		G
Greg Luri	GE		G
Craig Preuss	Black&Veatch		М
Edward J William Jr.	SPX Transformer		М
Jim Bougie	ABB		G
John Tengdin	Opus Consulting Group		М
Eric Thibodeau	Cooper Power Systems		G
Marc LaCroix	Hydro Quebec		М
Mike Dood	SEL		М
Tim Tibbals	SEL		М
Chris Huntley	SEL		G
Mason Clark	DAQ		М
Didier Gianatano	Schneider Electric		G
Herb Falk	SISCO		G
Sam Sciacca	SCS Global		М

# IEEE PES Substations Committee

### C0 Meeting Notes

Name	Company	E-mail	M/G
John Randolph	PG&E		G
Bob Yinger	So Cal Edison		G
Tien Van	Sequi Inc.		G
Theo Laughner	TVA		G
Matt Ceglia	IEEE		G
Krista Gluchaski	IEEE-SA		G
Soo Kim	IEEE-SA		G
Michael Jensen	Xcel Energy		G
Ron Farquharson	Enernex		СМ

# Agenda

### Call to order

Presentations

- Sequi: Tien Van Implementation of 1711. The presentation will be uploaded to the C0 website.
- Southern California Edison: Bob Yinger Presentation on Smart Grid Project. SCE indicated that the presentation can not be distributed because it is being updated.

Old Business

Working Group Reports

**New Business** 

Adjourned

### **Old Business**

- Future meetings
- Standards requiring PARs (1711)
- ICAP presentation

### Working Group Reports (See below)

# **New Business**

- Matt Ceglia Waiting to hear back from PSRC to get PAR into new System. All WG is worked through PSRC.
- Future meetings
  - May 20-24, 2012: PES Substations Annual Meeting in Raleigh, NC
  - September 10-12, 2012: PSRC September meeting in Portland, OR
  - January 2013: PES JTCM has not been announced yet

# IEEE PES Substations Committee

# C0 Meeting Notes

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- Future Meeting presentations.
  - Raleigh Michael Dood may know a few people in the area. ABB, Progress Energy
  - Portland Craig knows BPA, Portland General, Grant County PUD, Snohomish County PUD
- 1711 is a trial use standard published in 2010. To get to a full standard, there is no ballot. The chair needs to contact Erin at IEEE SA requesting the standard go from trial use to full use and IEEE SA will change the title.

# Notes

- The PSRC can not use 123SignUp but emails can be exported from 123Signup for PSRC's use to support joint working group emails
- Mike Dood will arrange online tutorial of 123SignUp for the C0 working group officers.

#### C1: <u>IEEE 1686 Standard For Substation IED Cyber Security</u> Chair: S. Sciacca Sub: C. Preuss Vice Chair: M. LaCroix Secretary: E. William Output: Standard Expected Completion Date:

The work is moving along and the chair will be starting writing meetings. The biggest issue is bringing in something for authentication. There is no problem getting to sponsor ballot by end of 2012, except that writers need to deliver their promised assignments. There is now joint sponsorship with T&D, PSRC, and PSCC; with SGIP involvement.

# C2: <u>IEEE 1613 Standard Environmental and Testing Requirements for Communications</u> <u>Networking Devices in Electric Power Substations</u>

Chair: J. Tengdin Vice Chair: L. Smith Secretary: Output: Standard update Expected Completion Date:

At the September meeting, the chair was advised that importing sections from other standards was not allowed. John created a skeleton document and the ballot failed in a working group vote. The IEEE SA requested a formal letter from the chair to the PSRC chair requesting PSRC approval. A meeting was held with PSRC ADCOM yesterday at JTCM. PSRC advised John today that the request failed to be approved by the PSRC. The C0 chair requested John to obtain a formal response back from PSRC. John Tengdin is on NIST EMI WG and 1613 is on their list of standards along with C37.90 series.

#### C3: <u>IEEE C37.1 Standard for SCADA and Automation Systems</u> Chair: C. Preuss Vice Chair: Secretary: E. William Output: Standard

The WG is under PAR to update the standard. The meeting talked about spaghetti diagram for smart grid. Much of the meeting was spent looking at the draft update to the NIST spaghetti diagram with much discussion at the meeting. The group will look at IEC 61850 interfaces for support. This will be coordinated with PC37.240 and NIST.

#### C0 Meeting Notes

# C4: IEEE XXXX Draft Standard for SOE Time Stamping Requirements for Substation IEDs Chair: M. LaCroix Vice Chair: Output: Standard

The standard has a new title. The WG will draft a new standard concerned with how to time tag something. The scope was discussed at the joint meeting. Next week the chair will contact members and keep discussion running by email. There is a meeting this afternoon to discuss matter further.

### C5: <u>IEEE C37.2 Draft Standard for Electrical Power System Device Function Numbers</u> <u>and Contact Designation</u> Chair: J. Tengdin Vice Chair: W. Ackerman Output: Standard

The C5 working group did not meet.

### C6 <u>Trial Use Standard for a Cryptographic Protocol for Cyber Security of Substation</u> <u>Serial Links (P1711)</u> Chair: D. Whitehead Vice-Chair: Andrew Wright Output: Standard

The C6 working group did not meet.

C7 <u>IEEE 1588 Profile for Power System Applications</u> Chair: T. Tibbals Vice Chair: M. Dood Output: Standard Established: 2009

Much of the meeting was spent discussing the summary paper along with future revision topics: time inaccuracy, security and wireless. The WG needs to understand how to meet specific requirements from the NIST SGIP cyber security, but these must be addressed in 1588. Ron Farquharson is on the NIST SGIP and will talk with Matt Ceglia to get in touch with the right person working on 1588 so security requirements can be provided.

C8 <u>IEEE 1615 Recommended Practice for Network Communications in Substations</u> Chair: J. Gould Vice Chair: Secretary: Output: Standard Established: 2011

Joe Gould could not attend, so meeting was chaired by Craig Preuss. Joe is still tentatively interested in being Chair. There still is no active PAR.

C9: <u>IEEE 1646 IEEE Standard Communication Delivery Time Performance</u> <u>Requirements for Electric Power Substation Automation</u> Chair: J. Tengdin Vice Chair: D. Holstein Output: Standard C0 Meeting Notes

#### Established: 2009 Expected Completion Date: 2010.

The C9 working group did not meet.

IEEE PES Substations Committee

#### C10: IEEE PC37.240 Standard for Cyber Security Requirements for Substation <u>Automation, Protection and Control Systems</u> Joint Chair: T. Tibbals Vice Chair: Output: Standard joint with PSRC H13 Established: 2008 Expected Completion Date: 12/2012

Sam represented C10, but Steve Kunsman had to resign from H13. Sam was accepted as the new chair from PSRC. However, PSRC was not happy with dual chair role with Substations. Sam recruited a replacement chair (Tim Tibbals). Sam will remain chair of H13. Tim Tibbals formally accepted the position of chair at the request of the C0 chair. The WG is on track with sponsor ballot for the year. Everything was covered during the meeting. Sam will start bi-weekly writing group meetings by teleconference.

- C11: <u>Not used</u> Chair: Vice Chair: Output: Established: Expected Completion Date:
- C12: <u>IEEE 1815 IEEE Standard for Electric Power Systems Communications -</u> <u>Distributed Network Protocol (DNP3)</u> Joint Chair: L. Smith Vice Chair: A. West Output: Standard Established: 2009 Expected Completion Date: 2012

The initial publication was in 2010. Work is progressing on update and clean-up. Security improvements include update for authentication from version 2 to 5. The WG changed PAR because DNP3 now has 4 levels and changed security. The WG voted to continue on to balloting process. There will be 60 days for balloting.

C13: IEEE C37.115 IEEE Standard Test Method for Use in the Evaluation of Message <u>Communications between Intelligent Electronic Devices in an Integrated</u> <u>Substation Protection, Control, and Data Acquisition System</u> Joint Chair: J. Tengdin Vice Chair: Output: Standard Established: Expected Completion Date:.

The C13 working group did not meet.

# C14: <u>IEEE P1815.1 Draft Standard for Exchanging Information between networks</u> <u>Implementing IEC 61850 and IEEE Std 1815 (DNP3)</u>

C0 Meeting Notes

IEEE PES Substations Committee

Joint Chair: L. Smith Vice Chair: R. Farquharson Output: Standard Established: 2010 Expected Completion Date: 2012

Title is now for mapping between 1815 to IEC 61850. WG had to add in cyber security requirements based upon SGIP CSWG feedback. The PAR now has cyber security requirement.