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



2011 - 2012 Officers

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#### PSRC September 2013 Meeting Albuquerque, NM

#### DATA ACQUISITION, PROCESSING, AND CONTROL SYSTEMS SUBCOMMITTEE C0:

Chair: C. Preuss Vice Chair: Vacant Secretary: H. Pinto

#### **Working Group Reports (See below)**

- A. New working groups
  - a. C18 P1613.2 AC surges on phone lines (TBD)
    - i. Chair: Marc LaCroix
  - b. C19 PC37.xxxx Cyber Security of files related to Substation Automation, Protection and Control Systems (TBD)
    - i. Joint WG with PSRC H22 WG that wants to expand the H18 report to cover everything in a substation
    - ii. Looking for Chair volunteers
- B. New baseline WG P&Ps will impact how C0 conducts meetings

#### IEEE 1686 Standard For Substation IED Cyber Security C1:

Chair: S. Sciacca Vice Chair: M. LaCroix

Secretary:

**Output: Standard** 

**Expected Completion Date:** 

C. Did not meet

#### C2: **IEEE 1613 Standard Environmental and Testing Requirements for Communications**

**Networking Devices in Electric Power Substations** 

Chair: J. Tengdin Vice Chair: L. Smith

Secretary:

**Output: Standard update Expected Completion Date:** 

Did not meet.

#### **IEEE 1613.1 Environmental and Testing Requirements for Communications**

Networking Devices Installed in Transmission and Distribution Facilities

Chair: J. Tengdin Vice Chair: J. Ramie

Secretary:

Output: New Standard Expected Completion Date:

Did not meet

#### C3: <u>IEEE C37.1 Standard for SCADA and Automation Systems</u>

Chair: C. Preuss Vice Chair: Secretary: Vacan

Secretary: Vacant Output: Standard

- 1. We are looking at splitting out IED requirements to a separate, future C37.1.1
  - a. That look resulted in the discovery that the low voltage levels for port powered devices (serial, USB, and Ethernet) are not covered under C37.1-2008 and the latest revision of 1613.

#### C4: IEEE PC37.237 Time Tagging for Intelligent Electronic Devices (IEDs) – COMTAG

Joint with PSRC Chair: M. LaCroix Vice Chair: Output: Standard

Output: Standard

C4 met jointly with PSRC H3. See the PSRC report.

#### C5: <u>IEEE C37.2 Draft Standard for Electrical Power System Device Function Numbers</u>

and Contact Designation

Chair: M. Dood

Vice Chair: B. Ackerman Output: Standard update

- Reviewed merging unit and will rework definition of it from 61850 so that it can not be confused with other devices
- 2. Edition 2 of 61850-5 has broken apart the single table into may tables and references C37-2008, but excludes the acronyms without any reason stated.

### C6 <u>Trial Use Standard for a Cryptographic Protocol for Cyber Security of Substation</u>

Serial Links (P1711) Chair: D. Whitehead Vice-Chair: TBD Output: Standard

- Discussed whether 1711 went from trial-use to full use when PAR was taken out to modify it.
- 2. Modifications are being undertaken to address comments received.
- 3. Will work with IEEE-SA to determine if renaming to 1711.2 can be accomplished at this time

#### C7 IEEE 1588 Profile for Power System Applications

Chair: T. Tibbals Vice Chair: M. Dood

Output: Standard Established: 2013

Subs C7 met jointly with PSRC H24. Please see PSRC report.

#### C8 <u>IEEE 1615 Recommended Practice for Network Communications in Substations</u>

Chair: Open Vice Chair: Secretary: Output: Stand

Output: Standard Established: 2011

- 1. Looking for new chair
- 2. Reviewed present draft
- 3. PAR may need extension due to change in WG officers

### C9: <u>IEEE 1646 IEEE Standard Communication Delivery Time Performance</u>

Requirements for Electric Power Substation Automation

Chair: J. Tengdin Vice Chair: D. Holstein Output: Standard Established: 2009

**Expected Completion Date: 2010.** 

The C9 working group did not meet.

#### C10: IEEE PC37.240 Standard for Cyber Security Requirements for Substation

**Automation, Protection and Control Systems** 

Joint Chair: T. Tibbals

Vice Chair:

**Output: Standard joint with PSRC H13** 

Established: 2008

**Expected Completion Date: TBD** 

Met joint with PSRC H13. See PSRC report.

#### C11: PC2030.101 IEEE Recommended Practice for the Design and Implementation of

<u>Time Synchronization Distribution Systems for Substation Automation</u>

Chair: J. Bougie Vice Chair: Output: Standard Established: 2012

**Expected Completion Date:** 

- 1. Reviewed approach and made the following decisions:
  - a. Need to add PPS method to scope.

- Consensus was to complete all guide work as one standard including IRIG,
   NTP/SNTP, Power Profile, and PPS. Future work for GPS clock requirements and
   IED clock requirements could follow next.
- c. PSRC I11 report could be helpful as a starting point for standard
- d. Writing needs to be done Sept 2014 to meet PAR schedule
- e. Writers for time distribution methods in scope

### C12: <u>IEEE 1815 IEEE Standard for Electric Power Systems Communications -</u> Distributed Network Protocol (DNP3)

Chair: L. Smith

Vice Chair: R. Farquharson

Output: Standard Established: TBD

**Expected Completion Date: TBD** 

- 1. Reviewed DNP3 technical committee work
  - a. technical bulletins and application notes published to date
  - b. response was reviewed to cyber security fuzz testing
- 2. WG may look at formalizing in the WG P&Ps when an update to 1815 is triggered outside of the normal update period
- 3. The 1615 standard update needs an update from the WG on DNP3 to put in the new 1615

# C13: <u>IEEE C37.115 IEEE Standard Test Method for Use in the Evaluation of Message Communications between Intelligent Electronic Devices in an Integrated Substation Protection, Control, and Data Acquisition System</u>

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> Implementing IEC 61850 and IEEE Std 1815 (DNP3)

Chair: L. Smith

Vice Chair: R. Farquharson

Output: Standard Established: 2010

**Expected Completion Date: 2013** 

Continued work with review of comments from ballot.

# C15: PC2030.100 Recommended Practice for Implementing IEC 61850 Substation Automation Systems

Chair: R. Liposchak

Vice Chair: Output: Standard Established: 2012

**Expected Completion Date:** 

The WG reviewed the present draft and discussed when writing needs to be complete to meet or beat the PAR schedule.

#### C16: PC2030.102.1 Interoperability of IPSEC Utilized within Utility Control Systems

Chair: J. McQuire Vice Chair: Output: Standard

Established: 2013

**Expected Completion Date: 2014** 

The WG reviewed the present draft and need to consider explaining why only certain settings are being selected and also why their settings are being selected.

### C17: P1711.3 Standard for Secure SCADA Communications Protocol (SSCP)

Chair: M. Hadley Vice Chair:

Output: Standard Established: 2013

**Expected Completion Date: 2014** 

The WG reviewed the present draft developed from the source files. Language harmonization with 1711 is needed.