

PSCC MEETING MINUTES (Draft)

Joint PSCC/PSRC Meeting

Thursday, 12 January 2006

8:00 AM -11:59 AM

Hotel Monteleone

New Orleans

1. INTRODUCTION OF MEMBERS and GUESTS
2. APPROVAL OF MINUTES OF 2005 General Meeting
3. TOPICS TO BE ADDED UNDER 8. "OTHER BUSINESS":
4. CHAIRMAN'S COMMENTS F. Cleveland
5. TECHNICAL SESSION REPORTS
6. SUBCOMMITTEE REPORTS
 - A. Bibliography, Education & Recognition G.L. Nissen
 - B. Power Line Carrier R.E. Ray
 - C. Radio D.J. Marihart
 - D. Fiber Optics R. Bratton
 - E. Wire Line P.E. Pool
 - F. New Concepts M. Chaturvedi
 - G. Communications Standards M. Sanders
 - H. Security Risk Assessment F. Cleveland
 - I. Broadband Power-line Carrier T. Burns
7. LIAISON REPORTS
 - A. Technical Sessions Committee T.M. Burns
 - B. PES Awards Committee D.J. Marihart
 - C. Power Engineering Education Committee J. E. Newbury
 - D. Power System Relaying Committee R.E. Ray
 - E. Standards Coordinating Committee M. Sanders
 - F. PSEC Demand Side Management Subcommittee D.E. Nordell
 - G. EPRI Joe Hughes
 - H. UTC D.J. Marihart
 - I. ANSI C93 G. Morgan
 - J. CIGRE Göran Ericsson
 - K. IEC TC 57 (Power System Control/Comm)
 - L. IEC TC 77 (EMC & EMI)
 - M. IEEE/USA Communications & Information Policy S.A. Klein
 - N. SCC36 and UCA User's Group D.E. Nordell
 - O. CENELEC J. E. Newbury

8. Other Business :
9. Future Meetings
 - A. T&D Exhibition and Conference May 21-24, 2006, Dallas, Texas
 - B. PES General *Meeting* 18-22 June 2006, Montreal, Quebec
 - C. 2007 Joint PSRC / PSCC Meeting January 2007, TBD
 - C. 2007 General meeting – 24 - 28 Jun., 2007, Tampa, Florida, USA

Attendance:

Frances Cleveland

Manish Chaturvedi

Stan Klein

Bob Bratten

Roger Ray

(List may be incomplete)

1) Bibliography, Education & Recognition - Gary Nissen: No report

Frances will ask Gary Nissen whether he wants to continue with the Bibliography, Education & Recognition S/C.

2) Powerline Carrier: Roger Ray: No report

3) Don Marihart – Radio: No report

4) Robert Bratton: Fiber Optics: No report. However, see discussion in meeting business.

5) Wireline Subcommittee - Percy Pool (Report: Attachment 1)

6) New Concepts – Manish Chaturvedi (Attachment 2: New Concepts)

7) Standards – Miriam Sanders: No report, However, see discussion in meeting business.

8) Security – Frances (Attachment 3: Security Subcommittee Report)

9) Terry Burns – BPL:: No report (Subcommittee met in Las Vegas with other BPL activities)

10) Liaison Reports Received

A) IEEE/USA Communications & Information Policy S.A. Klein

Briefly discussed IEEE-USA CCIP white paper, “Providing Ubiquitous Gigabit Networks in the

United States,” (<http://www.ieeeusa.org/volunteers/committees/ccip/docs/Gigabit-WP.pdf>). This white paper was adopted March 2005.

11) Frances Cleveland – Chairman’s Comments

Upcoming meetings:

9-13 January 2006, New Orleans

Montreal 19 June 2006 (one week later than this year)

Summer 2007 – possibly in Tampa, FL

January 2007 – Scottsdale

PSCC will meet with PSRC jointly in 2007. PES is discussing a winter technical committee meeting for 2008.

12) Meeting business

Minutes of 2005 General meeting: Were approved.

Standards Coordination:

Miriam Sanders is turning over standards coordination. Manish is considering, but did not answer during the meeting. [He later accepted.] He will confirm with Miriam whether there are additional meetings that he might need to attend which could be a problem. [*No additional meetings are needed.*] The job also might expand slightly to include review of other committee PARs

PSCC has 9 active standards and 12 projects.

Fiber Optics:

Bob Bratten is retiring, and will not attend future meetings. He will try to find someone to replace him as Fiber Optics Subcommittee Chairman. He will also try to see if some of the Fiber Optics WGs could meet in conjunction with the PSCC.

Attendance at PSCC meetings and (combined discussion) additional activities to increase participation:

Roger Ray raised the issue of subcommittees and WG's not attending PSCC general meetings. Bob Bratten explained that for fiber optic SC they don't come to PSCC meetings but because of geographic location of companies tend to meet in Atlanta. There was discussion of the need for fiber optic SC members/leadership to attend PSCC meetings. WG members need 2 day meetings, because they work on standards.

Frances proposed setting up a group joint with ISA to work on standard for wireless in the substation. Would be joint working group between PSCC and Substations. Need to find a chair. Could home in New Concepts and then spin off.

The main committee attendance is subset of Adcom attendance

Discussion of how to get more attendance at PSCC. Related to utility organization (IT versus real-time). Telcos want to get out of multidrop 1200 bps dedicated line business.

Possible solutions:

- **Frances:** Pursue the wireless activities with joint working groups with Substations and ISA
- **Stan:** Use NERC standards as a source to see what communications requirements these have, and what recommendations and/or guidelines are needed for these NERC standards.
- **Frances:** Expand Sam Sciacca's work scope to a joint WG with PSCC, to include communications, and then participate?
- **Frances:** Find out what other PES groups are doing that involves communications, and ask if we can assist. This should be taken to the Technical Committee and stated that we want to implement this scope. PSCC has a (revised) scope from 2002. Frances will send this to John McDonald and urge that Committees respond to a short questionnaire:
 - What projects have communication aspects
 - Would like review by communications experts to determine if any communication issues are involved
 - Could benefit from liaison
 - Should have active participation from communications expert, possibly through email/phone review and comment
 - Would like a joint working group
- **Frances:** Ask Jodi Haasz whether the IEEE standards require PARs to identify whether communications are involved. *No – this must be done by the Standards Coordinator*

Manish: Raised the issue of other PES groups doing communications.

Stan: Raised old issue of PSCC being central focus of comm.

Frances will revive 2002 action item to present the PSCC revised scope of 2002 to Technical Council and seek proactive implementation. Example: questionnaire to other PES committees.

Stan agreed to look at NERC requirements and develop a list of comm implications

Frances will suggest Joint WG with Sam Sciacca on comm aspects.

Issue of fragmented meeting structure of PES committees.

SC6 - WIRELINE SUBCOMMITTEE (WLS) REPORT

January 12, 2006

The Wireline Subcommittee (SC6) met on Monday January 9 and on Tuesday January 10 at the Hotel Monteleone in New Orleans, LA. There were 11 members in attendance on both days.

The current WLS activity is as follows:

- **IEEE 820-1984 (R1999)** *IEEE Standard Telephone Loop Performance Characteristics*

The IEEE-SA Standards Board approved the latest draft as a revision standard on 22 September 2005 and it is currently awaiting publication.

- **IEEE 1590-2003** *IEEE Recommended Practice for the Electrical Protection of Optical Fiber Communication Facilities Serving, or Connected to, Electrical Supply Locations*

The IEEE-SA Standards Board approved on 22 September 2005 the PAR for the revision of this standard with a new title - Recommended Practice for the Electrical Protection of Communication Facilities Serving Electric Supply Locations Using Optical Fiber Systems.

The SC had unanimously approved to open the document for revision upon completion of the final draft for the review of P487, which is currently underway.

- **IEEE 487-2000** *IEEE Recommended Practice for the Protection of Wire-Line Communication Facilities Serving Electric Supply Locations*

A PAR for the revision of this RP was submitted on July 20, 2004. IEEE-SA NesCom approved the PAR on August 12, 2004.

Six (6) contributions with proposed changes were received. All were reviewed in their entirety at this meeting. The approved portions of these contributions will be added to the working draft of P487. The review will continue at the June meeting.

The SC consensus is that the draft will be ready for balloting shortly after the June meeting.

The SC accepted a new project proposal. The Chair will submit a PAR for the development of a document titled "A Guide for the Protection of Communication Installations from Lightning Effects". The schedule for this work will be determined after the PAR is approved by IEEE-SA.

The Wireline Subcommittee (SC6) will **not** meet at the 2006 PES General Meeting in Montreal due to schedule conflicts of several members. The SC will instead meet in Irving, TX on June 6-7, 2006.

1.Future PSCC Meetings

2006 PES General Meeting – 18-22 June 2006 – Montreal, Quebec.

2007 PSCC - PSRC Joint Meeting – Scottsdale, AZ

2007 PES General Meeting – 24-28 June 2007 – Tampa, FL

2.

Respectfully submitted,

Percy E. Pool, SC-6 Chair

Report on the New Concepts Subcommittee Meeting on January 11, 2006 at New Orleans

The New Concepts Subcommittee met on January 11th, 2005 between 1:30 pm and 4:15pm in the Bienville Room. The following six members and guests were present for the meeting:

<u>Name</u>	<u>Affiliation</u>
1. Stan Klein	Stan Klein Associates
2. Frances Cleveland	UCI
3. George Gresko	PECO Energy
4. Robert Bratton	TVA
5. Chris Huntley	GE Lentrionics
6. Manish Chaturvedi	Entergy

The Agenda of the meeting was as follows:

- 1. Introductions and Opening Remarks**
- 2. Items to be Added to Agenda**
- 3. Presentation on Process Control Communications & System Integration**
- 4. Discussion on Papers to be included in the Combo Session at the next Subcommittee Meeting at the PES General Meeting in Montreal**
- 5. Other Items/ General Discussion**
- 6. Adjourn**

Since more guests were expected at 2:30pm, Manish decided to postpone the presentation on Process Control. The meeting began with introductions followed by Stan adding an item to the agenda pertaining to reviving the creation and maintenance of a list of New Concepts. Some of these topics lead to the formation of working groups or new subcommittees under PSCC. Others are developed as Panel Sessions at subsequent meetings. Manish accepted the proposal and will include this item in the agenda from the next subcommittee meeting onwards.

An example of a topic from an earlier meeting is reproduced below:

- Communication protocols, object modeling, interfaces between communication and computing technologies

Object modeling
Protocols
NERC/OASIS 2/Electric Grease
Distributed Resources
Languages

Manish made a brief presentation on the background, scope, structure, and officers of the PSCC for the benefit of the guest at the meeting. This was followed by a discussion on the following 7 papers submitted to PSCC:

1. *06GM0390 Resiliency Assessment of the Power System Network to Cyber and Physical Attacks*
2. 06GM0492 Object Registration Overview and Status. Final Report of the Object Registration Working Group
3. 06GM0537 Ethernet in the Substation
4. 06GM0910 Web-Services Infrastructure for Information Integration in Power Systems
5. 06GM1109 Considerations on Maintenance Strategies for Data Communication Assets in Power Distribution Utilities
6. 06GM1131 Telecommunications Assessment for a Consumer Portal
7. 06GM1274 Distribution Automation Using CDMA

After reviewing the abstracts of each of the papers, the attendees recommended that the 1st paper be included in the Panel Session on Security Risk Assessment. Papers 2, 5 and 6 received strong support to be included in the Combo Session. Papers 4 & 7 received mixed reviews as there was insufficient information in the abstracts to make a strong determination. The Chair promised to request Dan (TCPC) to provide a copy of these papers to the subcommittee. Depending on the level of interest these papers could either be included in the Combo Session or be presented as a part of the Poster Session. It is the subcommittee's recommendation that Paper 3 be presented in the Poster Session.

Manish made a presentation on behalf of Mark Bruckner (Entergy Transmission – System Engineering) on **Process Control Communications and System Integration**. This presentation covered the present state of Entergy's Communication System for Process Control, its architecture & management, and the steps planned or implemented to enhance system reliability.

Frances provided the background on her proposal to create a working group on a standard for utility-grade Wireless Communications inside the substation. Manish stated that if the Radio Subcommittee is not able to support this initiative, then the New Concept Subcommittee will sponsor the working group.

The meeting adjourned with an announcement that the next meeting of the subcommittee shall be held at the PES general Meeting at Montreal between June 18 and 22, 2006.



**Minutes of IEEE PES PSCC Working Group on
Recommended Practice on Information Security Risk
Assessment in Power System Operations**

January 10, 2006

Attendees

Name	Company	Email
Frances Cleveland	Xanthus Consulting International	fcleve@xanthus-consulting.com
Stan Klein	Open Secure Energy Control Systems, LLC	sklein@cpcug.org
Manish Chaturvedi	Entergy	mchatur@entergy.com
Chris Huntley		
Herb Falk	Sisco	herb@sisconet.com

Agenda

1. Introductions
2. Schedule for the week – conflicts, overlaps, etc.
3. Involving people in developing this document
4. Review of Draft 2 of P1649 document
 - Section 1.2: Purpose of document
 - Section 2: Information Security Concepts
 - Section 3: Common Security Measures
 - Section 4: Security Standards, Services, and Best Practices
 - Section 5: Information Security Risk Assessment Methodology
 - Remaining Sections?
5. Panel Session for Montreal
 - This panel session would be called: *Information Security Risk Assessment for Power System Operations*
 - Introduction: Background, Terminology, and Purpose

- Government Perspective on Security Risk Assessment
- Security Risk Assessment Methodology
- Examples of Applying the Security Risk Assessment Methodology:
- Speakers will be approached later

Minutes

Frances presented draft 2 of the document after sending out draft 1 in October 2005

“Recommended Practice on Information Security Risk Assessment in Power System Operations”.

This draft was not reviewed during the meeting because no-one had reviewed it.

The general consensus was that some sections promised by Jason Stamp need to be included, and possibly additional use of metrics for risk assessment need to be enhanced.

Action Items

Frances will request the additional sections from Jason. The next draft will then be circulated to all participants and other people who could be interested in this document, including IEC TC57 WG15 and Cigre JWG D2/B3/C2-01 Security for Information Systems and Intranets in Electric Power Systems.

Frances will solicit speakers for a “combo panel and technical committee” session on security. Interested participants include Frances, Stan, and Essam Al-Ammar, *student member, IEEE*, and Joseph Fisher on *Resiliency Assessment of the Power System Network to Cyber and Physical Attacks*.