1. Introduction of members and guests

Meeting called to order by the Chair, Rick Taylor at 12:45 PM CDT. See Appendix A for attendance roster.

2. Approval of agenda

Approved, but rearranged some to meet presenter needs.

3. Approval of minutes: Meeting 84 - Calgary and Meeting 85 - Lake Buena Vista

Minutes approved.

4. Updates for Technical Committee Rosters & Meeting Schedule

Please send updates to Jeff Nelson.

5. PES President and/or Executive Director Al Rotz/Pat Ryan

a) Al Rotz stated that he had received several comments on the scheduling of Joint Technical Committee Meetings (JTCM) and the Innovative Smart Grid Technologies Conference (ISGT) in back to back weeks. The week of Jan 17 was not the preferred week for ISGT, but because of other SG events or a lack of venue it fell to the week of Jan 17. He would like your feedback on the scheduling of the meetings

OPTIONS:

- Have adjacent meetings and schedule them in the same city or near each other (Commented that it would require a long time out of the office for attendees of both events)
- Separation between meetings, but too far beyond Jan will impact other conferences and meetings
- Both in one week in same city (Really no one perfect solution scheduling both groups in the week because of different meeting requirements. The JTCM required 30 parallel rooms for working group meetings. The ISGT has 3 rooms to handle 250-750 people.)

b) Suggestion to survey JTCM attendees on their thoughts about the scheduling of these events. Rick Taylor stated that Technical Committees need to interact with each other to blend things together into solutions.

c) Al Rotz encouraged Technical Committees to mentor young engineers. Rick Taylor talked about the possibility of Technical Committees preparing training material for engineers. Bill
Long stated that one way to attract younger people is to give them a little hand to work their way up.

d) A discussion on the availability of teleconferencing facilities in meeting rooms was held. Comments talked about voice-over-internet through a host for telecons.

6. “Affiliation - Understanding Your Disclosure Obligation” Michael Lindsay (IEEE-SA Legal)

Mr. Lindsay provides legal representation to IEEE-SA. He made a presentation on affiliation disclosure obligations of volunteers developing standards. See presentation in Appendix B.

One item to point out: Mr. Lindsay stated that sign-in lists for specific groups (WGs, TFs, etc) developing standards should request attendees to identify their employer and their affiliation. For most this will be the same. This can be accomplished by having two different columns or separating with a slash in one column, such as Employer/Affiliation.

7. Committee status of Marine Systems CC Rick Taylor / Paul Bishop

Rick discussed the desire to move the Marine System Coordinating Committee to a full technical committee status. Paul Bishop made a presentation on the Marine Systems CC and discussed potential scope and subcommittees for the committee (See Appendix C).

Lou Wozniak expressed concern about Coordinating Committees becoming a Technical Committee because they may take work away from other committees. For example, he thinks that areas such as wave energy are energy development topics and belong to EDPG. Also, river flow can include dams.

Noel Schulz provided some additional background information on why Marine Systems CC was created. The Office of Naval Research provided funding to faculty members to do ship power. These faculty members were submitting papers to PES and getting rejected because we didn’t have a group responsible for the material. The PES Gov Board discussed and agreed it was a power system on board a ship. As a result, the Marine Systems CC was created under Technical Council.

8. Review of 2010 GM Planning and Structure and Discussion of 2011 GM Rick Taylor

Rick reviewed the 2010 GM schedule and discussed plans for the 2011 GM.

It was commented that a complete schedule, including Admin meetings and EIC meetings, needs to be provided and included in the schedule. (Was noted that a list of Admin meetings was being prepared.)

A meeting will be held at the JTCM to start finalizing the 2011 GM schedule. A draft version of the schedule will be distributed and utilized. It was commented that the process needs to be documented somewhere, for example the Tech Council O&P manual.

9. Future PES General Meetings Bill Rosehart - PES VP of Meetings

- Over 2400 attendees for the 2010 GM
- The Detroit 2011 GM will be all under one roof, but not all rooms are adjacent. Doug Houseman, part of Detroit local committee, stated that the meeting will be at the Renaissance
Center. The Sunday welcome reception to be held at the Renaissance Wintergarden across from Greek Town. The local committee is looking at possible chaperoned children’s tours.

- 2012 GM will be in San Diego
- 2013 GM will be in Vancouver
- A Steering Committee for Meetings was created. Paula Traynor will be responsible for the General Meeting and will oversee overall operations and planning, general structure and siting of meetings.
- A Task Force was created to look at scheduling of fundamental things at the GM, such as welcome reception and other main events scheduling.

10. Technical Council web page  Mick Maytum

   No formal report. Please see Appendix D for survey of Technical Committee web sites conducted by Mr. Maytum.

11. Liaison Reports

   a) IEC Liaison - Jodi Haasz. See attached report in Appendix E.

   b) Fellow Nominations - Nagu Srinivas.

      Received 45 nominations for PES. PES is the only IEEE society which takes input from chapters and technical committees.

STANDING/COORDINATING COMMITTEES

12. Awards Committee (Awards presentation if required)  Rama Ramakumar

   No nominations and no awards for 2010. We need to reevaluate awards and nominations process.

13. Technical Council Planning Committee  - Paula Traynor

   Only four people attended the planning meeting. An initial matrix for Technical Council meetings at the General Meeting was started.

14. Meetings & Marketing Committee (Formerly Technical Sessions)  - Damir Novosel

   At the Technical Council meeting in Jan 2010, TC85, a motion was made an approved to realign the name and scope of the Technical Sessions Committee to the Meetings & Marketing Committee with appropriate adjustments in responsibilities. The Meetings & Marketing Committee was slated to have the responsibilities of the Technical Sessions Committee, plus additional responsibilities for meeting coordination between different technical committees and marketing of technical committee outputs. The membership of the Technical Sessions Committee had been the TCPCs from each Technical Committee. Feedback from some of the Technical Committees after the January 2010 meeting indicated that upon further consideration they didn’t want to add the additional responsibilities to the
TCPC position. Therefore, it was decided that the historical scope of the Technical Sessions Committee and the additional scope added to it to become the Meetings & Marketing Committee was sufficiently different to justify two different standing committees.

Technical Sessions Committee made a motion to reinstate the Technical Sessions Committee with its historical scope of responsibilities and that the Meetings & Marketing Committee would retain only the responsibilities for meeting coordination between different technical committees and marketing of technical committee outputs. (As a standing committee, the motion did not require a second). The motion passed unanimously.

Damir summarized charter of Coordinating Committees and summarized a charge given to Dan Nordell, EIC of Conference Papers, for paper reviews. Branislav Djokic commented that the paper review process needed to be improved, and that in changing from one TCPC to a new one the new TCPC couldn’t inherit the list of reviewers previously used.

Summary of Technical Sessions/Meetings & Marketing Committee meeting (See meeting minutes for further details)

a) Work with PES staff to publicize and market Technical Committee’s output
b) Share best practices between Technical Committees and try to organize some joint meetings
c) Reviewed Meetings & Marketing responsibilities
d) Reviewed the super session process
e) Discussed plans for 2011 GM super sessions. Super session chairs have been selected.
f) Reviewed process for GM session planning. A Technical Sessions meeting will be held at the 2011 JTCM to finalize plans for technical sessions schedule for 2011 GM and initiate discussion of 2012 GM super sessions and call for papers.
g) Need to improve quality and consistency of conference papers was discussed
h) Reviewed schedule for PSCE 2011.

15. Conference Papers EIC - Dan Nordell

Reviewed discussion on conference papers at Technical Sessions Committee meeting. Technical Committees to send comments to Dan Nordell ASAP and Dan will develop recommendations for updates to the Authors Guide.


A motion was made by Jeffrey Nelson, and modified by Om Malik, at the O&P Committee meeting to recommend to the Technical Council that the going forward the Chair of the O&P Committee would be the Technical Council Secretary, since the responsibility of the ballot collection and approval of the Technical Committee’s O&Ps lies with this position. The motion was seconded Bill Cassel and unanimously passed. At that point, the O&P Committee Chair, Harold Kirkham, relinquished control of the meeting to the new Chair, Jeff Nelson.
Several Technical Committee O&P Manuals were discussed and approved, and plans were made to review and approve several others by electronic ballot.

The following motion was made by the O&P Committee at the Technical Council meeting: (As a standing committee, the motion did not require a second).

“In the future, the Chair of the O&P Committee will be the Technical Council Secretary.” The motion passed unanimously.

17. Standards Coordinating Committee - Mike Wactor

Minutes Submitted.

Asked Technical Council about Working Group Process & Procedures. (This topic will be addressed by the O&P Committee.)

Standards Coordinating Committee 11 had orphaned documents which will be administratively withdrawn. Asked if any Technical Committees would take responsibility for them. Tom Prevost is the contact.

Bill Bartley was named the new Standards Coordinating Committee Chair.

18. Emerging Technologies Coordinating Committee - Branislav Djokic

Branislav Djokic of National Research Council of Canada (NRC) is the new ETCC Chair.

ETCC was co-sponsor of a PAR (P1679) with the Stationary Battery Committee. Jim McDowall reported that IEEE 1679-2010 was approved by the Standards Board in June and should be published later this year. The document title is *Recommended Practice for the Characterization and Evaluation of Emerging Energy Storage Technologies for Stationary Applications*. The plan is to produce a range of subsidiary documents; guides for the application of IEEE 1679 for particular technology segments.

Under the leadership of Dave Nichols (Altairnano Inc.) and Branislav Djokic (NRC Canada), the ETCC Technology Assessment Working Group produced a revised ET report. A condensed report is posted on the ETCC website, which has been periodically updated with new info as it becomes available. Converting it into a "wiki" style document is under consideration.

The ETCC website and Virtual Community were created to support activities of the ETCC.

The ETCC committee had a number of activities regarding T&D 2010 and GM 2010. Six T&D papers were reviewed and accepted, and 4 were presented. ETCC provided volunteers for manning PES booth at T&D. For GM 2010, ETCC received 25 papers and organized review for 24 papers (one paper was previously published in the Transactions). Out of 24 papers reviewed, 6 were rejected, 13 accepted as posters, and 6 accepted as papers. ETCC had a Poster Session on Monday, July 26, 5-7 p.m. with 13 poster papers presented, and a Combo Session on Tuesday, July 27, 8-10 a.m. with 6 oral papers presented.

ETCC would like to suggest to the Technical Council improving the PES conference review process either by providing access to the database of PES *journal* paper reviewers, or, if that is not possible, by forming a database in MIRA of PES *conference* paper reviewers, which would show the reviewers’
areas of expertise and their individual workload (i.e. a total number of papers assigned for review to each of the reviewers). This database should be accessible by all PES committees that receive papers for review, for both including the reviewers into the database and selecting the reviewers from the database for the review process.

On Monday, July 26, 1-5 p.m., ETCC held a Late Breaking News Session with 8 presentations, which was well attended and received. The slides from the presentations will be posted on the ETCC website. Meetings of the ETCC Committee and of Technology Assessment Working Group were also held. ETCC plans to have Poster Session, Combo Session, Late Breaking News Session, and other activities at the GM 2011. Use of PES and other channels for improving the ETCC visibility and increasing information flow between ETCC and PES Technical Committees, as well as between ETCC and non-PES entities, is needed. A possibility of having a Power & Energy Magazine special issue on emerging technologies will be explored.

19. Intelligent Grid Coordinating Committee - Don von Dollen

The IGCC was scheduled to meet on Thursday morning at 10:00 am.

Plan was to discuss the need for more coordination between committees. Rick Taylor stated he would like to see destinations of a smart grid road map, real world applications. Challenged Technical Committees to be involved and have some session at the GM.

The IEC has developed a Smart Grid Road Map. It was suggested that the Technical Committees review the IEC road map to see what is being done in their area.

Smart Grid tutorials are being planned for 2011.

We have a new Transactions of Smart Grid.

20. Marine Systems Coordinating Committee - Paul Bishop

See Appendix C and item 7 of the minutes.

21. Policy Development Coordinating Committee - Jim McConnach

Only 3 people attended, so the meeting was cancelled.

There was a discussion on reinstatement of the former PDCC Secretary who was a banned IEEE author for 3 years, and as such could not hold a PES office. It was pointed out that he had never attended a meeting. This issue will be addressed later by the Technical Council officers.

The PDCC will be sponsoring the Energy & Environment Super Session at the 2011 GM.

22. Wind Power Coordinating Committee - Richard Piwko

Coordinating with EM on needed standards for wind power applications.

23. Topics from Technical Committee Chairs (by Exception)

- Surge Protective Devices Committee reported it had created three new working groups on the surge protection of SG, PV and Wind Power.
Technical Committee Reports

<table>
<thead>
<tr>
<th>Committee</th>
<th>Status</th>
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<tbody>
<tr>
<td>Electric Machinery Committee</td>
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<tr>
<td>Energy Development &amp; Power Generation Committee</td>
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<tr>
<td>Insulated Conductors Committee</td>
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<td>Nuclear Power Engineering Committee</td>
<td>See Appendix F</td>
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<tr>
<td>Power System Analysis, Computing &amp; Economics Committee</td>
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<td>Power System Communications Committee</td>
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<tr>
<td>Power System Dynamic Performance Committee</td>
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<tr>
<td>Power System Instrumentation &amp; Measurements Committee</td>
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<td>Power System Operations Committee</td>
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<tr>
<td>Power System Planning &amp; Implementation Committee</td>
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<td>Power System Relaying Committee</td>
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<td>Substations Committee</td>
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<td>Surge Protective Devices Committee</td>
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<td>Switchgear Committee</td>
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<td>Transformers Committee</td>
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<tr>
<td>Transmission &amp; Distribution Committee</td>
<td>See Appendix F</td>
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</table>

24. Other Business

The Power System Planning & Implementation Committee requested Technical Council to consider making their Asset Management Working Group into a Coordinating Committee, Working Group, or Task Force under the Technical Council. Was discussed briefly. Anil Pahwa will email the information and request to the Technical Council Secretary with a list of potential chairs.

25. Future Technical Council Meetings

<table>
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<tr>
<th>Year</th>
<th>Event</th>
<th>Location, State (Month)</th>
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<tr>
<td>2011</td>
<td>JTCM</td>
<td>Atlanta, Georgia (Jan 2011)</td>
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<tr>
<td>2011</td>
<td>GM</td>
<td>Detroit, Michigan (July 2011)</td>
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Meeting adjourned by Chair, Rick Taylor.
APPENDIX A
Technical Council - Meeting Attendance

Technical Council Members Represented:    Present 28  Absent 2
Guests: 23

P - Present (Use T if present via telephone)
A - Absent

<table>
<thead>
<tr>
<th>P</th>
<th>A</th>
<th>Committee</th>
<th>Name</th>
<th>Represented by</th>
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<td>Technical Council</td>
<td>Rick Taylor - C</td>
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<td>Damir Novosel - VC</td>
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<td>Jeffrey Nelson - S</td>
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<td>Satish Aggarwal - VC</td>
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<td>Kevin Tomsovic - C</td>
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<td>Dan Nordell - C</td>
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<td>Branislav Djokic - C</td>
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<td>Dale Osborn - VC</td>
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**ADDITIONAL ATTENDEES:**

| P | Al Rotz - PES President |
| P | Noel Schulz - PES President-Elect |
| P | Pat Ryan - PES Exec. Director |
| P | Jodi Haasz - IEEE-SA |
| P | Matt Ceglia - IEEE-SA |
| P | Steiner Dale - MSCC (Guest) |
| P | Maria Proetto - PES |
| P | Cheryl Koster - PES |
| P | Randi Scholnick - PES |
| P | Roger Dugan - PSACE Past-chair |
| P | N. E. Nilsson - EMC Past-chair |
| P | Soo Kim - IEEE-SA |
| P | Michael Lindsay - D&W - SA Legal |
| P | Nagu Srinivas |
| P | Doug Houseman - IGCC |
APPENDIX B

Presentation by Michael Linsay
Dorsey & Whitney, LLC
Legal Council for IEEE-SA

“Affiliation: Understanding Your Disclosure Obligations”
Affiliation: Understanding Your Disclosure Obligations

A Presentation to the IEEE Power & Energy Society

Michael A. Lindsay
Dorsey & Whitney LLP
Legal Counsel for IEEE

July 28, 2010
IEEE develops high-quality standards intended for broad adoption

In general, the best standards are those that balance the needs and interests of all stakeholders.

IEEE standards development is open to all interested parties.
- Openness means not being restricted to a particular type or category of participants.

IEEE standards development processes must not be dominated by any single interest category, individual, or organization.
Dominance

- Potential dominance in Sponsor ballots as evidenced by an unduly high proportion of individuals employed by or affiliated with a single entity or from a particular balloting classification is unacceptable, counter to open and fair participation by all interested parties, and deprecated by the IEEE-SA Standards Board.

» IEEE-SA Standards Board Bylaws (Dec. 2009) § 5.2.2.3
IEEE Affiliation Policy Made Simple

• “Where you stand depends on where you sit.”
  » Nelson Mandela

• “Sunlight is . . . the best of disinfectants; electric light the most efficient policeman.”
  » Louis D. Brandeis, Other People’s Money (1914), available at http://www.law.louisville.edu/library/collections/brandeis/node/196
What Is Affiliation?

- **Basic definition:** “An individual is deemed “affiliated” with any individual or entity that has been, or will be, financially or materially supporting that individual’s participation in a particular IEEE standards activity.”

- **Employers and Others:** “This includes, but is not limited to, his or her employer and any individual or entity that has or will have, either directly or indirectly, requested, paid for, or otherwise sponsored his or her participation.”

  » IEEE-SA Standards Board Bylaws (Dec. 2009) § 5.2.1.5
Disclosure Is Mandatory

• “Every member and participant in a working group, Sponsor ballot, or other standards development activity shall disclose his or her affiliation.”
  » IEEE-SA Standards Board Bylaws (Dec. 2009) § 5.2.1.5

• “An individual’s status as representing an organization shall be based on self-disclosure of affiliation in compliance with the IEEE-SA policy on Disclosure of Affiliation and on other information that may be available to the IEEE-SA Standards Board and the Sponsor.”
  » IEEE-SA Standards Board Bylaws (Dec. 2009) § 5.2.1.3.1
Why Do We Have to Do This?

• From IEEE’s perspective: Compliance is important for preserving openness and preventing dominance
  – Tools for monitoring group activity and composition
  – Additional remedies

• From your perspective: more transparency in who you are dealing with and what their agenda might include
IEEE Member Pledge

• “We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct.”

IEEE Code of Ethics (available at http://www.ieee.org/portal/site/mainsite/menutem.818c0c39e85ef176fb2275875bac26c8/index.jsp?pName=corp_level1&path=about/whatis&file=code.xml&xsl=generic.xsl&
Ethics, Conflicts, and Disclosure

- “avoid real or perceived conflicts of interest whenever possible”
- “disclose [conflicts] to affected parties”
- “reject bribery in all its forms”
Ethical Behavior and the Law

• members of SDOs “often have economic incentives to restrain competition”

• “the product standards set by such associations have a serious potential for anticompetitive harm”

Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 US 492 (1988)
“[W]e look to see whether the process of standard-setting has been abused to seek an unfair competitive advantage and whether the proposed standard is the product of any anticompetitive conduct on the part of the organization or its members.”

Confidentiality, Non-Disclosure, and Consequences

• Failure to disclose affiliation(s) can result in complete or partial loss of rights to participate in IEEE-SA activities

• Confidentiality agreements
  – “An individual is not excused from compliance with this policy by reason of any claim of a conflicting obligation (whether contractual or otherwise) that prohibits disclosure of affiliation.”
  – Any other result would permit participants and those seeking to influence a group a “free pass” around IEEE rules
Questions and Discussion
Questions

• IEEE has prepared answers to some anticipated questions
  – Available at http://standards.ieee.org/faqs/affiliationFAQ.html#Q1
• What if I am a consultant - How do I determine my affiliation?
  – The general answer is in the definition.
  – It is the person or entity that is financially or materially supporting your participation.
  – Other questions in this set of FAQ address some possible cases in which a consultant might find him or herself.
Use of Information

• How will this information be used?
  – All standards development group employer and affiliation declarations will be considered if there is an appearance of dominance in the standards development project or governance body.
Use of Information

• Will this information be shared with anyone else other than IEEE-SA?
  – Yes, employer and affiliation of participants is to be included in the minutes of a standards development meeting. Because minutes are to be available to all participants, the declarations are considered public information.
APPENDIX C

Marine Systems Coordinating Committee
Presentation to Technical Council and Proposed Scope
By
Paul Bishop
Marine Systems Coordinating Committee

Presentation to the PES Technical Council
PES GM
July 28, 2010

Paul Bishop, P.E.
Chairman, Marine Systems Coordinating Committee
Topics

• Scope
• History
• Coordinating Committee Status
  – Plan
  – Results
• Transition to Technical Committee
  – Revised Scope
  – Organization & Procedures Manual
  – Other Challenges
Revised Scope builds on what we have learned so far.
Scope

• Simple words summarizing MARSYS
  – Marine (in the water including land to water)
  – Systems (a systems view and approach)
  – Coordination is the major role

• Subcommittees
  – Link to existing PES committees and industry need
Subcommittees

• Electric Ships and Marine Platforms
• Wind, Wave, and Tidal Systems
• Marine Transmission and Distribution
• Marine Grounding and Safety
• Environmental Impact
• Education and Symposia
• Organization and Procedures
How did this get started?

HISTORY
History

• 2004 - Governing Board Authorized Coordinating Committee
• 2005 – Mentioned at Electric Ship Technology Symposium
• 2007 – Announced at Electric Ship Technology Symposium
  – Interest and members sought
• 2008 – Marine Systems Coordinating Committee Formed
  – Scope prepared
  – Seven subcommittees
  – O&P submitted
• 2008 – Coordinating with Marine Industry Subcommittee at IAS PCIC
More History

• 2009 – JTCM
  – Coordinating meeting with WG I8 TF2 and IEEE P45.2 Automation and P45.3 Systems Integration groups
  – O&P Manual status discussed

• 2009 – Electric Ship Technology Symposium

• 2009 – Coordinating with Marine Industry Subcommittee at IAS PCIC

• 2009 - PES GM
  – First MARSYS Annual Meeting
  – Wave and Tidal interest
  – Vision and plan prepared
Still More History

• 2010 JTCM
• Begin transition to Technical Committee
• Revised Scope
• Revising O&P Manual
• Concerns expressed
• And here we are today . . .
Marine Systems Coordinating Committee

• Chairman
  – Paul Bishop
    • President and Chief Engineer, The Bishop Group

• Vice Chair
  – Dwight Alexander
    • Northrop Grumman Shipbuilding

• Secretary
  – Lyndsay Garrett
    • BAE Systems

• Standards Liaison
  – Yuri Khersonski
    • Consultant
Subcommittee Chairs

• Electric Ships and Marine Platforms
  – Tim McCoy
    • Director, NAVSEA Electric Ship Program Office

• Marine Wind, Wave, and Tidal
  – Steinar Dale
    • Director, Center for Advanced Power Systems, FSU

• Marine Transmission and Distribution
  – Nari Hingorani
    • Consultant
Subcommittees

- Marine Grounding and Safety
  - Mike Turner
    • Northrop Grumman Shipbuilding
- Environmental Impact
  - Vacant
- Education and Symposia
  - Herb Ginn
    • University of South Carolina
- Organization and Procedures
  - Jim Quirk
    • Senior Analyst, The Bishop Group
Use a visioning process to seek members needs and interests then develop annual increments to meet the vision.

THE PLAN
Process

• Set a vision 5 years out
• Develop annual goals to meet the vision
• Prepare a plan to meet the goals for the coming year
MARSYS 2014 Vision

• How are we serving our members?

  Vibrant committee of 1200+ members discussing the importance of marine energy systems.
  1. Focused panel & paper sessions
  2. MARSYS Conference & proceedings
  3. Transactions
  4. Other publications e.g. P&E Spectrum magazine

**Continuation of active marketing & recruiting**

**Continue to encourage and support standards**
2010 PLAN

• How are we serving our members?
  – Panel sessions (3)
    • PES GM – Panel session on Wave & Tidal
    • PES T&D
    • Ocean Engineering Conference or other conference – try for international conference
  – Publications
    • One article
  – Recruiting
    • Advertising in P&E & Spectrum
    • Presentation to GOLD & WIE, Invite to MARSYS meeting next year
    • E-mail
  – Co-sponsor a conference
    • ESTS 2011
    • Ocean Engineering Society Conference or other
  – Membership Target – 120
How did we do in 2009-2010?

2010 RESULTS
Committee Status

- **Coordinating Committee**
  - Transitioning

- **Interest and Membership**
  
<table>
<thead>
<tr>
<th>Year</th>
<th>Attendees</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Activities

• Standards
  – Active participation in 14 IEEE standards
  – Published: 1662 Power Electronics on Ships
  – Successful ballot: 1709 MVDC on ships
  – In ballot: 1676 Control Architecture
  – Tri Logo: 1713 Shore to Ship Electric Power
  – Multi-volumn: P45 Series Electric Power on Shipboard
    • Base Document plus 8 Dots
  – MV High Temp: 1810.1 Insulated Bus Pipe
Adjust scope, roles and structure to meet current needs and requirements.

TRANSITION
Transition

• Technical Council directed to look at committees
  — Transition Marine Systems to Technical Committee

• Transition process
  — Revise Scope
  — Revise O&P Manual
  — Obtain Approval
Revised Scope

• Simple words summarizing MARSYS
  – Further define roles and focus
  – Marine (in the water including land to water)
  – Systems (a systems view and approach)
  – Coordination remains a major role

• Subcommittees
  – Link to existing PES committees and industry need
  – Further define roles and focus
Organization and procedures Manual

• Increased involvement by IEEE-SA
  – SA requirements yield document which does not focus on PES committee needs
  – Obfuscation

• Concerns
  – Didn’t like the way it looked starting with 1.0 Introduction
  – Not a user-friendly document
  – Mix of PES and SA stuff all jumbled-up
Two-Part O&P Manual

• Part 1: Organization and Procedures
  – Not intended for AudCom
• Part 2: Policy and Procedures for Standards development
  – Specifically intended for AudCom review and approval
• Each Part stands by itself
• Requires duplication of some material
  – And identification of “Truth”
Other Challenges

• Inertia
  – Getting folks interested and keeping their interest is a challenge

• The Process
  – Long and boring to most
  – Marine Systems started well before and was approved by the Board of Governors in 2004
  – Play it again, Sam

• The Silence is deafening!
• Questions?
MARINE SYSTEMS COMMITTEE
(MARSYS)

1. SCOPE

The Marine Systems Committee scope includes all areas of power and energy systems in a marine environment. It interacts with other committees of the PES, other IEEE societies and committees, other technical organizations, and government agencies responsible for the application of power and energy at sea. The areas of interaction include Electric Ships and Marine Platforms, Marine Wind, Wave, and Tidal Systems, Marine Transmission and Distribution, Marine Grounding and Safety, and related Environmental Impact areas.

Committee activities include:

a) Treatment of matters in which the dominant factors are the design, construction, integration or operation of devices or equipment to operate as part of a system for power and energy generation, distribution, or use in a marine environment. This includes preparation of reports, policies, position papers, or other documents, on issues related to those matters.

b) Sponsorship and development (either alone or jointly with other technical committees and organizations) of standards, recommended practices, and guides in accordance with IEEE-SA policies and procedures and the Marine Systems Committee Policy and Procedures for Standards development.

c) Sponsorship of workshops, symposia, technical conferences or sessions (either alone or jointly with other technical committees or organizations) on matters related to the items above.

d) Liaison and cooperation with other technical committees, societies, groups, associations, and government agencies concerned with various aspects of the items above.

2. SUBCOMMITTEES

2.1 Electric Ships and Marine Platforms

The Electric Ships and Marine Platforms Subcommittee scope focuses on electric power and energy components and systems on ships and marine platforms. It interacts with other committees, societies, and agencies on technical issues relating to shipboard and marine platform electric power systems activities.

Activities include:
Marine Systems Committee Scope
July 2010

2.2 Marine Wind, Wave, and Tidal Systems

The Marine Wind, Wave, and Tidal Systems Subcommittee scope focuses on power and energy components and systems for the generation and use of renewable power in rivers, inland waters and at sea. It interacts with other committees, societies, and agencies on technical issues relating to renewable power generation at sea;

Activities include:

a) Engineering activities and related matters in which the dominant factors are the design, construction, integration or operation of devices and equipment used as part of a marine system of renewable power and energy generation and use. This includes preparation of reports, policies, position papers, or other documents, on issues related to those matters.

b) Sponsorship and development (either alone or jointly with other technical committees and organizations) of standards, recommended practices, and guides in accordance with IEEE-SA policies and procedures and the Marine Systems Committee Standards Development Policy and Procedures Manual.

c) Conducting workshops, symposia, technical conferences or sessions (either alone or jointly with other technical committees and/or organizations) on matters related to the items above.

d) Liaison, coordination and cooperation with other technical committees, societies, groups, associations, and government agencies concerned with various aspects of the items above.

2.3 Marine Transmission and Distribution

The Marine Transmission and Distribution Subcommittee scope focuses on power and energy components and systems for the transmission and distribution of electric power in a marine environment. It interacts with other committees, societies, and agencies on technical issues relating to marine transmission, distribution activities, and shore connection activities (sea-based and sea-to-shore);

Activities include:

a) Engineering activities and related matters in which the dominant factors are the design, construction, integration or operation of devices and equipment used as part of a marine transmission and distribution system. This includes preparation of reports, policies, position papers, or other documents, on issues related to those matters.
b) Sponsorship and development (either alone or jointly with other technical committees and organizations) of standards, recommended practices, and guides in accordance with IEEE-SA policies and procedures and the Marine Systems Committee Standards Development Policy and Procedures Manual.

c) Conducting workshops, symposia, technical conferences or sessions (either alone or jointly with other technical committees and/or organizations) on matters related to the items above.

d) Liaison, coordination and cooperation with other technical committees, societies, groups, associations, and government agencies concerned with various aspects of the items above.

2.4 Marine Grounding and Safety

The Marine Grounding and Safety Subcommittee scope focuses on power and energy components and systems for grounding and safe use of electric power in a marine environment. It interacts with other committees, societies, and agencies on issues relating to grounding and safety in the marine environment;

Activities include:

a) Engineering activities and related matters in which the dominant factors are the design, construction, integration or operation of devices and equipment used in a marine environment. This includes preparation of reports, policies, position papers, or other documents, on issues related to those matters.

b) Sponsorship and development (either alone or jointly with other technical committees and organizations) of standards, recommended practices, and guides in accordance with IEEE-SA policies and procedures and the Marine Systems Committee Standards Development Policy and Procedures Manual.

c) Conducting workshops, symposia, technical conferences or sessions (either alone or jointly with other technical committees and/or organizations) on matters related to the items above.

d) Liaison, coordination and cooperation with other technical committees, societies, groups, associations, and government agencies concerned with various aspects of the items above.

2.5 Environmental Impact

The Environmental Impact Subcommittee scope focuses on the interaction of power and energy components and systems with the environment at sea. It interacts with other committees, societies, and agencies on environmental issues relating to development, operations, maintenance, and decommissioning of marine electric power systems.

Activities include:

a) Engineering activities and related matters in which the dominant factors are the design, construction, integration, operation, maintenance, decommissioning and removal of marine electric power systems and components. This includes preparation of reports, policies, position papers, or other documents, on issues related to those matters.

b) Sponsorship and development (either alone or jointly with other technical committees and organizations) of standards, recommended practices, and guides in accordance with IEEE-SA policies and procedures and the Marine Systems Committee Standards Development Policy and Procedures Manual.

c) Conducting workshops, symposia, technical conferences or sessions (either alone or jointly with other technical committees and/or organizations) on matters related to the items above.
d) Liaison, coordination and cooperation with other technical committees, societies, groups, associations, and government agencies concerned with various aspects of the items above.

2.6 Education and Symposia

The Education and Symposia Subcommittee scope focuses on activities which educate the public and promote the value and advantages of power and energy at sea. It supports and assists other subcommittees in interacting with in the development of symposia and conferences including joint events with the purpose of spreading the word about marine systems.

Activities include:

a) Acting as the marketing arm of the Marine Systems Committee. Interfacing directly with the Technical Council Meetings and Marketing Committee.

b) Conducting and supporting workshops, symposia and conferences, both alone and in conjunction with other societies and organizations, to promote the interchange of ideas among the professionals in the communities.

c) Coordinating the review of papers and articles for publication.

d) Interfacing with industry and academia to encourage research and development activities and fostering development of academic marine power systems programs.

e) Participating in activities which educate the public and promote the value and advantages of power and energy at sea.

2.7 Organization and Procedures

The Organization and Procedures Subcommittee scope focuses on the conduct of activities necessary for the operation and support of the Marine Systems Committee and its subcommittees. It functions as the administrative arm of the Marine Systems Committee.

Activities include:

a) Acting as the secretariat of the Marine Systems Committee; including maintaining a repository for the Committee’s calendar and files including those of the Subcommittees.

b) Serving as the Marine Systems Committee representative to the Technical Council Organization and Procedures Committee.

c) Administration of the policy and general affairs of the Committee.

d) Providing guidance to ensure uniformity in the process of developing and revising Standards and coordinates cross-subcommittee activities.
APPENDIX D

Survey of Technical Committee Web Sites
By
Mick Maytum
1 Introduction

A comprehensive Web-site survey was done one year ago. This survey is just a snapshot collection to illustrate the conformity of Technical Committee Web sites.

1.1 Captures

Only the first 320 pixels of the home page were captured to show how much information was given in the banner area. Some websites are still using the “125” logo that finished in May 2010, others don’t have a PES logo and one still uses the old blue World PES logo. Some Websites don’t exist and the response to clicking on that committee is given.

2 PES

3 Standards Developing Technical Committees and their Subcommittees

3.1 Electric Machinery

Electric Machinery Committee

This is the Home Page for the IEEE Power & Energy Society, Electric Machinery Committee.

Scope: The Electric Machinery Committee is concerned with all matters related to the requirements, research, development, application, design, construction, operation, or supervision of electrical machinery associated with generation of electric energy, its conversion into other forms of electric energy or mechanical energy. The scope includes treatment of the following:
3.2 Emerging Technologies Coordinating Committee

IEEE Power and Energy Society
Emerging Technologies Coordinating Committee

Scope
The Emerging Technologies Coordinating Committee (ETCC) operates within the IEEE Power and Energy Society.

3.3 Energy Development & Power Generation

IEEE Power and Energy Society
Energy Development and Power Generation Committee

About the ED & PGC

3.4 Hydroelectric Power Subcommittee (EDPG)

WELCOME TO THE HYDROELECTRIC POWER SUBCOMMITTEE HOME PAGE

The Hydroelectric Power Subcommittee is a subcommittee of the Energy Development and Power Generation Committee of the IEEE Power Engineering Society. It is actively engaged in developing standards, guides, and technical presentations in the area of hydropower. To find out more about the activities select among the following topics:

3.5 International Practices Subcommittee (EDPG)

Sorry, the page cannot be found...
3.6 Insulated Conductors

3.7 Nuclear Power Engineering

3.8 Power System Analysis, Computing and Economics

3.9 Computing and Analytical Methods Subcommittee (PSACE)
3.10 Distribution System Analysis Subcommittee (PSACE)

IEEE Distribution System Analysis Subcommittee

- Chairperson: Tom McDermott, Emerex Corporation
- Vice Chairperson: Sukumar Brahma, New Mexico State University
- Secretary: Kevin Schneider, Pacific Northwest

3.11 Intelligent Systems Subcommittee (PSACE)

IEEE PES Intelligent Systems Subcommittee

- Chair: Stephen McArthur, University of Strathclyde, UK
- Vice Chair: Ganapati Kumar Varshney, University of Missouri-Rolla
- Secretary:

This subcommittee is a part of the Power Systems Analysis, Computing, and Economics Committee of the Power Engineering Society.

Scope of the Subcommittee:

3.12 Reliability, Risk and Probability Applications Subcommittee (PSACE)

RRPA Home

Reliability, Risk and Probability Applications Subcommittee

Main Committee:
- Power System Analysis, Computing and Economics (PSACE)
- Committee of the IEEE Power and Energy Society

Office Bearers
3.13 System Economics Subcommittee (PSACE)

IEEE PES System Economics Subcommittee
- Chair: Ross Baldick, University of Texas, Austin
- Vice Chair: Lawrence Jones, Areva T&D
- Secretary: Sandra Ellis, Pacific Gas & Electric

This Committee is a part of the Power Systems

3.14 Power System Communications

Power System Communications Committee (PSCC)

Welcome to the IEEE PES PSCC Web Site!

3.15 Power System Instrumentation and Measurements

3.16 Power System Relaying
3.17 Stationary Battery

Welcome to the Power & Energy Society Stationary Battery Technical Committee Home Page

The Stationary Battery Technical Committee is dedicated to the advancement of user knowledge in the application and operation of stationary battery equipment and systems.

3.18 Substations

IEEE POWER & ENERGY SOCIETY / SUBSTATIONS COMMITTEE

CHAIR
Herman J. Shut
Senior AG, ET&T
P.O. Box 1091
Palm Beach Gardens, Florida 33410
Phone: 561-622-3000
Fax: 561-622-7740
Email: hshut@ag.com

VICE CHAIR
John Randolph
Pacific Gas & Electric
1889 Webster St., Room 300
Oakland, CA 94612
Phone: 510-444-2304
Fax: 510-444-3303
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Phone: 602-375-4200
Fax: 602-785-4633
Email: mdriscoll@schneider.com

SUBCOMMITTEES

EIPO – A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V
PDAC – Data Acquisition, Processing, and Control Systems Subcommittee

3.19 Surge Protective Devices

Welcome to the Surge Protective Device Committee “Grouper” Web site, hosted by the IEEE Standards Association. This page gives an overview of the devices we deal with and our activities. More details are available by clicking the underlined text links or menu buttons.

3.20 Switchgear

Welcome to the Switchgear Committee’s Web site. The committee is dedicated to the advancement of user knowledge in the application and operation of switchgear equipment and systems.
3.21 Transformers

3.22 Transmission & Distribution

IEEE Power & Energy Society

Transmission and Distribution Committee

Scope: Treatment of all matters related to the design, theoretical and experimental performance, installation, and service operation of parts of electric power systems which serve to transmit electric energy between the generating sources and substations or customer points of common coupling through AC or DC lines.

Analysis and treatment of the following areas are included: Overhead and underground AC and DC transmission and distribution systems; Flexible AC transmission systems (FACTS); Overhead conductors; Environmental impact of transmission lines; Lighting phenomena; Static VAR systems; Insulated line conductors; Structural coordination and mechanical problems of transmission lines; Switching surges and overvoltage phenomena; Insulator coordination (jointly with other Committees); Inductive coordinating: Corona, Electric Fields, and Magnetic Fields; Towers, poles, Insulators, and hardware; Shunt and series capacitors; Engineering in the safety, maintenance, and operation of lines; Harmonics and power quality; Distributed resources and distributed generation; Superconductivity.

3.23 Capacitor Subcommittee (T&D)

IEEE Capacitor Subcommittee

Scope: Treatment of all shunt and series capacitor matters related to economics, technical design, theoretical and experimental performance, installation, application and service operation for use in power circuits of 60 Hertz and below for the purpose of affecting the performance or operating characteristics of the circuit.

Chairman: Mark May
Secretary: Clay Pullens

Distribution Subcommittee (T&D)

IEEE PES Distribution Subcommittee

The Distribution Subcommittee (IEEE PES) reports to the Ownership and Distribution Committee of the IEEE Power & Energy Society. The scope of the IEEE Distribution Subcommittee is treatment of all matters related to the design, performance, installation and operation of overhead and underground electric distribution systems.

Subcommittee Officers

<table>
<thead>
<tr>
<th>Chair</th>
<th>Vice-Chair</th>
<th>Secretary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawn Votier</td>
<td>Stephen R. Ginn</td>
<td>Richard B. Johnson</td>
</tr>
<tr>
<td>Distribution</td>
<td>National</td>
<td>HQ</td>
</tr>
<tr>
<td>Line</td>
<td>Division</td>
<td>300</td>
</tr>
<tr>
<td>North Broadway</td>
<td>Public</td>
<td>Address</td>
</tr>
<tr>
<td>Plant City, FL 13015</td>
<td>Public Service</td>
<td>3040 Surveyor Street</td>
</tr>
</tbody>
</table>
4 Technical Committees

4.1 Power Engineering Education

Power Engineering Education Committee

Contents:

New:

4.2 Power System Dynamic Performance

IEEE Power & Energy Society
Power System Dynamic Performance Committee

Scope

Investigate various aspects of the dynamic performance of power systems at the level of a

4.3 Power System Operations

IEEE Power & Energy Society
Power System Operations Committee

Scope

4.4 Power System Planning and Implementation

PSPI

IEEE PES Power System Planning & Implementation Committee

- Chair: Vic Osen, ABB, Power Consulting
- Co-Chairs: Greg West, Transpower Power Systems Consulting
- Secretary: Vincent Ramlal, Consultant

- Mission statement

  The Power System Planning & Implementation Committee investigates issues relating to forecasting, decision-making, finance, economics, and environment as applied to planning
5 Coordinating Committees

5.1 Emerging Technologies

IEEE Power and Energy Society
Emerging Technologies Coordinating Committee

Scope

The Emerging Technologies Coordinating Committee (ETCC) operates within the IEEE Power and Energy Society (PES) to follow development of technologies related

5.2 Intelligent Grid

5.3 Marine Systems

Marine Systems Coordinating Committee

The web site is under construction, but registered users can access a Microsoft SharePoint site.

To register, please send an email request to Committee Secretary Lyndsay Garrett at lngarrett@bishopgroup.net. Please contact Committee Chair, Paul Bishop, pcdbishop@bishopgroup.net, with any questions or expressions of interest.

Scope of the Committee

The scope of activity for the Committee is to coordinate with other Committees of the PES, other IEEE

5.4 Policy Development
5.5 Standards

5.6 Wind Power

Complied by Mick Maytum
m.j.maytum@ieee.org
IEC Liaison Report

28 July 2010

Jodi Haasz
Senior Program Manager
International Standards Programs
IEC/IEEE Dual Logo Program
Documents Undergoing Joint Development

- Nuclear Power Engineering Committee
  - IEC/IEEE 62582-1, Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 1: General
  - IEC/IEEE 62582-2, Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 2: Indenter modulus
    - IEEE – Working group review of comments – ballot recirculation
    - IEC – CDV issued – closes on 19-Nov-10
Documents Undergoing Joint Development (cont)

- Nuclear Power Engineering Committee (cont)
  - IEC/IEEE 62582-4, Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 4: Method descriptions - Oxidation induction temperature
    - IEEE – Working group review of comments – ballot recirculation
    - IEC – CDV issued – closes on 19-Nov-10
  - IEC/IEEE 62582-3, Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 3: Elongation at break
    - IEEE – Working group draft review
    - IEC – Committee Draft – closes on 10-Sep-10
Documents Undergoing Joint Development (cont)

- Nuclear Power Engineering Committee (cont)
  - IEC/IEEE 62582-5, Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 5: Method descriptions - Optical cables
  - IEC/IEEE 62646 - Nuclear Power Plants - Control rooms - Computer based procedures
    - IEEE – Draft Reviewed by the WG
    - IEC – Comments from CD to be discussed at the Oct-10 meeting
  - IEEE P323, Standard for Qualifying Class 1E Equipment for Nuclear Power Generating Stations and Nuclear Facilities
Documents Undergoing Joint Development (cont)

- **Switchgear Committee**
  - IEEE PC37.013, Standard for AC High-Voltage Generator Circuit Breakers Rated on a Symmetrical Current Basis
  - IEEE PC37.082, Standard Practice for the Measurement of Sound Pressure Levels of Outdoor Circuit-Breakers
    - IEEE Initial Sponsor Ballot closed on 9 April 2010
Transformers Committee

- IEC/IEEE 65700-19-03, Standard Requirements, Terminology, and Test Code for Bushings for DC Applications Rated 110 kV BIL and Above
Documents Undergoing Maintenance

- **Energy Development & Power Generation**
  - IEC 62270/IEEE P1249, Guide for Computer Based Controls for Hydroelectric Power Plant Automation

- **Switchgear Committee**
  - IEC 62271-111/IEEE PC37.60, High Voltage Switchgear and Controlgear — Part 111: Overhead, Pad-Mounted, Dry Vault, and Submersible Automatic Circuit Reclosers and Fault Interrupters for alternating current systems up to 38 kV

- **Transformers Committee**
  - IEC 62032/IEEE PC57.135, Guide for the Application, Specification and Testing of Phase-Shifting Transformers
    - Decision to be made by TC14 if they would like to actively participate
Potential Adoptions

- Nuclear Power Engineering Committee
  - IEEE Std 1082-1997
    - Comments were received by IEC SC45A
    - IEEE will revise the document and then submit for adoption

- Power System Relaying Committee
  - IEEE PC37.111, Standard for Common Format for Transient Data Exchange (COMTRADE) for Power Systems
    - Revision of IEC 60255-24
      - Previously “adopted” by IEC
Potential Adoptions (cont)

- Power System Relaying Committee (cont)
  - IEEE PC37.118.1, Standard for Synchrophasor Measurements for Power Systems
    - Intent is to submit to TC95 for adoption once complete
  - IEEE PC37.238, Standard Profile for Use of IEEE Std. 1588 Precision Time Protocol in Power System Applications
    - Intent is to submit for adoption once complete
Potential Joint Development Document

- Transformers Committee
    - Document was reconsidered by IEC TC14
Overall Program Statistics

- 24 approved standards
- 17 projects undergoing joint development
- 3 projects, previously adopted, undergoing maintenance
- 10 projects, previously adopted, undergoing revision by IEEE
- **Power & Energy Society**
  - **Switchgear Committee**
  - **Transformers Committee**
Category D Liaisons with IEC

- PE/ED&PG/Hydroelectric Subcommittee
  - IEC TC4
- PE/IC
  - IEC TC20/WG16 & WG19
- PE/NPE
  - IEC SC45A/WGA9
- PE/PSC/Security Subcommittee
  - IEC TC57/WG15
- PE/SUB/C0 Subcommittee
  - IEC SC17C/MT16
- PE/SUB/K0 Subcommittee
  - IEC SC17C/MT16
- PE/SUB/I0 Subcommittee
  - IEC SC22F/MT9
- PE/SPD/LV/WG3.6.1 & WG3.6.2
  - IEC SC37B/MT1 & MT2
Category D Liaisons with IEC (cont)

- PE/SPD/Bibliography & Definitions Subcommittee
  - IEC TC37/WG11
- PE/SPD/LV/WG3.6.4, WG3.6.6, WG3.6.7 & WG3.6.9
  - IEC SC37A/WG3, WG4 & WG5
- PE/SPD/LV/WG3.6.4
  - IEC TC81/MT3
- PE/SWG
  - IEC SC17A
  - IEC SC17C/MT14
Additional Item of Interest

- Mick Maytum appointed by PE/SPD as the IEEE Liaison to ITU-T/SG5/WP1 & WP2
  - Endorsed by EMC and SCC39
Contact

Jodi Haasz
Senior Program Manager
International Standards Programs
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Appendix F
Technical Committee Reports

NUCLEAR POWER ENGINEERING COMMITTEE

NPEC GOALS FOR 2011-2012

1. Concentrate efforts in revising and updating all NPEC standards.
2. Develop new standards in the instrumentation & control area, including digital.
3. Publish a minimum of eight joint-logo International Electrotechnical Commission/Institute of Electrical and Electronic Engineers standards.
4. Continue efforts in harmonizing nuclear safety standards, including close coordination with the International Atomic Energy Agency on safety Guides.
5. Solicit participation by technical experts in working groups and subcommittees from those with nuclear expertise outside the U.S. to make NPEC a truly international technical committee. Solicit participation from young engineers in working groups and/or subcommittees.

POWER SYSTEM RELAYING COMMITTEE

Significant Accomplishments in 2009: The PSRC continued its functions by holding three well-attended, successful meetings and by supporting presentations of our output documents at PES and other industry meetings. Even in the down economy, we continue to see record attendance at our meetings.

- In January we participated for the second time in a joint technical committee meeting with several other PES Technical Committees.
- We continued to host several subcommittees from both the Power System Communications Committee and the Substation Committee at our other two meetings.
- There were 21 papers presented at the Power System Conference and Exposition, all during poster sessions.
- At the PES General Meeting we sponsored 57 technical papers presented at one poster session, 3 paper forums and one paper presentation session.
- Presentations were made at the Texas A&M Protective Relay Conference, the Georgia Tech Protective Relay Conference and the Western Protective Relay Conference of the following work:
  - Cold Load Pick-up Issues
  - Justifying Pilot Protection on Transmission Lines
  - Revision of IEEE C37.2 (This was joint with Substations Committee)
  - Performance of Relaying during Wide-area Stressed Conditions
  - C37.230 – IEEE Guide for Protective Relay applications to Distribution Lines
  - Revision to C37.111 COMTRADE Standard
- These meetings allowed significant interaction between the PSRC and these other groups to share our interest, knowledge, and accomplishments.
- Smart Grid activities have accelerated, with several meetings from different industry participates, with several PSRC members in attendance. We continue to monitor these activities and provide input into the work.
- North American Synchrophasor Initiative has requested that we adopt their reports as IEEE standards and we have established a task force to look at this work.
Benefits to Industry and PES Members from our 2009 Work: These activities keep our industry up to date with technology, improve power system reliability, and help solve the most common protective relaying problems.

The following standards and guides were accepted by the IEEE Standards Board and published:
- Guide for Power System Protection Testing (C37.233)
- Guide for the Protective Relay Applications to Power Systems Buses (C37.234)

The following standards and guides were reaffirmed:
- Guide for Determining Fault Location AC Transmission and Distribution Lines (C37.114)
- Guide for Abnormal Frequency Protection for Power Generating Plants.

Dual Logo (IEEE and IEC) are still being pursued for two of our standards. For C37.94 IEEE Standard for N Times 64 Kilobit Per Second Optical Fiber Interfaces Between Teleprotection and Multiplexer Equipment, we will request adoption at the next IEC TC57 Plenary. For C37.118 Power Systems Synchronphasor Standard will pursue a joint revision.

The following Committee Reports were completed and posted on the PSRC web site:
- Understanding Micro Processor Based Technology Applied to Relaying.
- Adjustable Speed Drive Motor Protection Applications and Issues.

Benefits to Volunteer Participants from the 2009 Work: Approximately 70 Working Groups and task forces provide fertile ground for participants to increase their personal knowledge. Their companies enjoy more personal productivity from their employees, and contribute to the standards and practices of our industry.

Recognition of Outstanding Performance:
- IEEE Fellow: Alex Apostolov
- Distinguished Service Award went to Charlie Henville
- Career Service Award went to Moh Sachdev
- Certificates of Appreciation were awarded to the following Working Group Chair: Damir Novosel, C12; Kevin Stephan, K7.

Significant Plans for 2010: PSRC plans to meet jointly with Selected PES Technical Committees in Orlando during January. Additional joint meetings are planned throughout the year with the Power Systems Communication Committee, and Subcommittees of the Substations Committee. Additional meeting locations include Madison WI in May and Berkeley CA in September. This past year, we made a modification to our schedule to add a half day of working group activity so as to decrease the number of conflicts in scheduling and reducing the concurrent meeting room requirement space. The PSRC will also be participating with session sponsorships and paper presentations in the Transmission and Distribution Conference and Exposition in April and the PES General Meeting in July.

Submitted by: Miriam Sanders (Chair 2009-2010) January 10, 2010
TRANSMISSION & DISTRIBUTION COMMITTEE

The Administrative Subcommittee of the T&D Committee met July 29, 2010 as part of the 2010 IEEE/PES General Meeting in Minneapolis. A summary of pertinent information is provided below.

The T&D Committee approved a 4th draft of its new O&P Manual, which was also approved at the Tech Council O&P Manual Committee meeting and submitted to the IEEE PES Audit Committee (AudCom) for consideration at its September, 2010 meeting.

The T&D Committee officers will change on January 1, 2011. Satish Ranade will become the new Chair, Bill Chisholm will be the new Vice Chair, and John McDaniel will be the new Secretary. A new TCPC is being identified. Also, Tom Grebe as Past Chair will serve as the Vice Chair - Awards and Recognition.


A new working group Wind and Solar Power Plants: System Impacts and Interconnection Requirements was approved for the Integration of Renewable Energy into the T&D Grids Subcommittee.

A number of the T&D Subcommittees will meet at the next Joint Technical Committee Meeting to take place January 10-14, 2011 in Atlanta.

T&D Committee awards during the past year included:

**T&D Committee Distinguished Service:**
Charles Grose
Award: "For over thirty years of dedicated service to the IEEE Power & Energy Society and for his leadership in producing IEEE Std. 516 with the Engineering in the Safety, Maintenance and Operations of Lines (ESMOL) Subcommittee"

**Excellence in Power Distribution Engineering Award:**
Philip Barker

**Douglas M. Staszesky Distribution Automation Award:**
Robert Uluski

**IEEE Fellows:**
- Gary Chang
  National Chung Cheng University
  Award: "for contributions to power system harmonics and interharmonics"

- Farhad Rachidi
  Swiss Federal Institute of Technology
  Award: "for contributions to electromagnetic modeling of lightning and coupling to transmission lines"

- Aniruddha Gole
  University of Manitoba
  Award: "For contributions to the modeling of power electronic apparatus"

Submitted by,
Thomas Grebe, Electrotek Concepts, Inc.
T&D Committee Chairman