

ICC Newsletter

From the ICC Chair

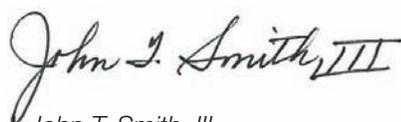
Welcome to the first issue of ICC Newsletter, a periodic publication from the Insulated Conductor Committee (ICC) of the Institute of Electrical and Electronic Engineers (IEEE) Power and Energy Society (PES). The ICC has existed as a technical committee of IEEE since 1947 and focuses on developing IEEE standards for energy cables and accessories used to transmit and distribute electrical energy to homes, businesses and even the growing industry segments of electric vehicles and renewable energy. In fact, ICC happens to be the only committee in North America that is focused solely on “insulated conductors” or “cables.” Other IEEE technical documents, such as Guides, Recommended Practices and White Papers also are developed by the ICC. These documents address subjects that cover the scope of materials performance, cable and accessory installation practices, cables and cable systems maintenance – including field diagnostics testing – cable condition assessment and reliability issues.

Most importantly, the ICC provides a forum for engineers and scientists to learn new technologies and concepts that enhance, maintain and improve electrical power grids and their infrastructure. It also provides an opportunity for education and cross-fertilization of ideas and concepts



between engineers and scientists whose work and experience help support, maintain and improve the reliability of the electrical power grids that we all use.

This newsletter has been created to highlight and communicate some of the beneficial activities that the ICC provides to the electrical utility power and energy industry. It is our hope that it motivates your attendance and participation in the ICC, making it an even better professional and technical committee of the IEEE PES. The ICC meets twice each year in the spring and fall and is about to convene its 131st meeting in Seattle, WA, March 25-28, 2012. Hope to see you there!



John T. Smith, III
General Cable Corporation
ICC Chair, 2012-2013



Message from Outgoing Chair Rachel Mosier

The past three-and-a-half years were more than I bargained for. The typical term of an ICC Chair is two years, four meetings. Due to the very unfortunate passing of our last chair, Shan Nandi, the ICC procedures kicked in and I took on the role of Acting Chair for one-and-a-half years, or three meetings. After that, my time as Chair began for the next four meetings. As much work as this was, it was incredibly rewarding. There were so many changes I had the privilege of witnessing. For example, a new mobile app with the ICC meeting schedule, a task force that professionally developed an ICC brochure, introduction of on-line

meeting capabilities, and the issuance of a copyright of the ICC logo. Even some of the minor changes had an impact – adding “one-liners” to the agenda to help attendees plan their schedules, standardizing ICC presentation formats, setting up a system and schedule of e-mails to notify attendees of various official ICC information - including a brand new Call for Presentations, offering CEUs for the Education session and PDH paperwork for the conference, recycling lanyards to save money and the environment, and the introduction of the Comment Box.

But it wasn't all business. One of the more fun changes was to offer a variety of lunch choices at the Transnational Lunch on Tuesday afternoons. There is nothing more rewarding than the smiles of 150 engineers, choosing fish, beef, or chicken! But why stop at 150? We also introduced new snacks, including healthy options like fresh fruit, and ice cream on one afternoon in the week. Happiness is the sight, sounds and energy of 300 engineers eating ice cream and talking with their colleagues!

Running the ICC is a huge team effort. None of this could have been accomplished without the Executive Committee, the Administrative Committee, the Advisory Committee, the Chairs and Vice Chairs of the Discussion and Working Groups, and especially you – the attendee. Many of the changes listed above were a direct result of comments received in the Comment Box. We read

every comment, and shared each one with the Administrative Committee. If a suggestion was feasible, we acted on it. And that's the best part about ICC – that each person who attends has an opportunity to make a difference.

Going forward, I envision more and more communication. This inaugural newsletter is just one example.

The improvements being made in the Networking Lunch are a second example. And I especially believe that

ICC's online meetings will catch on more and more as the Working Groups see the progress of the one or two groups using the software now.

In closing, I would like to thank each and every one of you for your tremendous support, and for all of your hard work on the Standards and Guides. After all, that is ICC's primary function! My job was simply to help you be more effective.

Thank you.

Wind Farm Design and Cable Accessories

One of the presentations given at the 2011 Fall ICC in Denver dealt with the design of wind farm collector systems and their performance as it relates to cables and cable accessories. Presented by Neal Parker of Puget Sound Energy, the presentation contrasts the difference between a wind farm collector system and underground transmission and utility distribution systems. It explains the unique load character-

istics of wind energy that place high stresses on cable and cable systems. He further notes how Puget Sound Energy monitors system performance, investigates failures and preemptively addresses failure mechanisms. For a full copy of the presentation please go to http://www.pesicc.org/iccWebSite/subcommittees/subcom_b/Presentations/2011Fall/B1-WindfarmDesignandCableAccessories.pdf



ICC Subcommittees

For those who join ICC, finding an area of interest in which to contribute is a snap! ICC has a number of subcommittees that are considered the backbone of the organization. Within these subcommittees (with the exception of Subcommittee E), knowledge and experience is exchanged through presentations by experts and related discussions between participants. A broad range of issues are covered – from solid constructions in the past to innovative concepts for the future. A brief synopsis of each Subcommittee (A through G), including a link to find out more information online, is covered below.

- **Subcommittee A** – *Cable Construction and Design* – covers issues related to materials, construction, design and manufacturing of insulated cables. http://www.pesicc.org/iccWebSite/subcommittees/subcom_a/SubAMain.htm
- **Subcommittee B** – *Accessories* – covers issues related to testing, construction and design of cable terminations and joints to achieve understanding of practical and safe use of all kinds of accessories. http://www.pesicc.org/iccWebSite/subcommittees/subcom_b/SubBMain.htm
- **Subcommittee C** – *Cable Systems* – covers all issues related to installation and operation of cable systems including information on failures and recommendations for reliable operation. http://www.pesicc.org/iccWebSite/subcommittees/subcom_c/SubCMain.htm
- **Subcommittee D** – *Generating Station and Industrial Cables* – covers issues related to testing, assembly, operation and construction of cable systems not normally employed on transmission and distribution systems. This includes station, control and fiber optic cables, etc. http://www.pesicc.org/iccWebSite/subcommittees/subcom_d/SubDMain.htm
- **Subcommittee E** – *Administrative* – covers all issues related to the effective, efficient operation of the ICC and for the development and presentation of special ICC-related activities. http://www.pesicc.org/iccWebSite/subcommittees/subcom_e/SubEMain.htm
- **Subcommittee F** – *Field Testing and Diagnostics* – covers all issues related to testing and diagnostics of cables and cable systems in order to understand aging processes, promote maintenance actions and ensure reliable use of cables. http://www.pesicc.org/iccWebSite/subcommittees/subcom_f/SubFMain.htm
- **Subcommittee G** – *Transnational* – covers exchange of summarized information on international projects to involve the international scientific community in the ICC and to enhance the exchange of technical information between countries. http://www.pesicc.org/iccWebSite/subcommittees/subcom_g/SubGMain.htm

Upcoming ICC Events

Spring ICC - Seattle, WA March 25-28, 2012

Presentations at the upcoming Spring ICC will include:

- *“Limitations of the Lubricant Test Method Defined in IEEE 386,”*
by Thomas Champion III
- *“Preparation of Corroded Conductor Strands,”* by Corey Torgerson of Novinium
- *“High Voltage Fluidic Interface to Mitigate the Risk of Voltage Transfer,”* by Norman Keitges of Novinium
- *“Preliminary Evaluation of Nuclear Plant EPR Cable Tan Delta Test Results,”* by Drew Mantey of EPRI
- *“Update of UL Standard Revisions and Proposals,”* by Tom H. Cybula and Susan L. Stene of UL.
- *“Global Product Environmental Regulations in Wire and Cable,”*
by Eric Wall of Anixter
- *“Effectiveness of On-line Testing for MV Cable Assessment,”* by Luca Fornasari, Marco Tozzi and Alfred Mendelsohn of Techimp
- *“Withstand Testing Using PD as the Monitoring Technology,”*
by Craig Goodwin of HV Diagnostics
- *“Phase Resolved Spectrum in Frequency Domain Partial Discharge Diagnosis for Power Cables,”* by Jun (Jim) Guo of Utilx Corp.



- *“Diagnostic Tests for Metallic Sheaths of Submarine Cables,”*
by Harry Orton of OCEI
- *“Case Study of VLF/Tan Delta and Partial Discharge Acceptance Testing of New 23kV Cables,”*
by Tim Hayden of National Grid
- *“Remarks on the Relation between Quality Testing and Diagnostic Testing of HV/EHV Cables, Cable Accessories and Cable Systems,”*
by Wolfgang Hauschild and Steffen Fuchs of HIGHVOLT.
- *“Why the ‘Apparent Charge’ According to IEC 60270 is in Reality the ‘True Charge’ of PD Events in Power Cables,”*
by Eberhard Lemke of Doble LemkeGmbH

For a full list of all Spring ICC presentations and activities and to register, please visit http://www.pesicc.org/iccwebsite/meetings/2012Spring/Spring_2012.htm.

Fall ICC – St. Peterburg, FL November 11-14, 2012

Please return frequently to http://www.pesicc.org/iccwebsite/meetings/2012Fall/Fall_2012.htm for updates on presentations, event registration and other information.

Tell Us What You Think!

ICC welcomes your feedback. If you'd like to suggest topics for upcoming issues of the ICC newsletter or add a colleague to our email database, please contact Harry Orton: heorton@msn.com.

ICC Newsletter Team

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