Optimize Your Operation

Explore the positive impact of a great resource.

Manhole explosions. Aging infrastructure. Mother Nature. Extending asset life. Aging workforce.

Power transmission and distribution can be challenging day to day let alone under extraordinary circumstances. Especially for utility engineers, a helpful and responsive resource for all aspects of insulated power cables and accessory equipment could have a positive impact on your business.

The ICC is that resource.

A Technical Committee of the Institute of Electrical and Electronics Engineers (IEEE) within the Power and Energy Society (PES), the Insulated Conductors Committee (ICC) has world-class experts within its ranks that not only develop standards and guides, but also provide opportunities to learn about new innovations, share technical knowledge and find solutions to vexing problems.

Standards

The ICC develops and maintains the standards that are used to design, specify and purchase much of the cable and cable accessories used in underground distribution and transmission systems, within generating plants and industrial facilities. These standards represent a consensus of industry practice and inform the user of best practices and other important considerations that reduce design time and risk of error. Working with suppliers that adhere to these standards ensures that the insulated cables and accessories you purchase are more reliable with a longer service life. Your participation also is vital to ensure standards address issues most important to you.

Guides

If your company owns or operates any of the equipment or materials covered in ICC-sponsored standards, we recommend referring to our guides that cover the selection, installation, application, operation and maintenance of cable and cable-related accessories. The ICC helps develop and maintain approximately 90 standards that are currently active, with corresponding guides that are critical to utility operations and management. Our guides cover a diverse number of important topics including:

- Safety
- Reliability/Customer Satisfaction
- Product Design & Testing
- Product Interchangeability
- Asset Management/Risk Avoidance
- Field Acceptance Testing
- Diagnostics & Lifecycle Evaluation

The ICC welcomes contributions from your engineers for standard development – their practical knowledge is invaluable.

Other learning opportunities

ICC meetings are held twice a year at locations intended to ensure that the investment in time and travel does not become a burden. These meetings provide an opportunity to network with peers, shape standards, encounter experts in the field, contribute knowledge, and learn about solutions to known problems or brainstorm unsolved issues. A broad range of perspectives, including international developments, are exchanged among colleagues, participants and experts in an open, professional environment.

In addition, a four-hour educational session or technical tour is always held on the afternoon of the last day of the conference. Topics are chosen based on the interest of attendees. Those attending typically represent electric utilities, industrials, material / equipment manufacturers, consultants and academia.

Give ICC a Try!

While we do welcome new members, membership in the ICC is not necessary to attend ICC or IEEE PES related events or to take advantage of and shape ICC's body of knowledge, including standards, guides or other services.

The ICC is conveniently organized into subcommittees so that you can access experts and information that is most related to the challenges you face in:

- Cable construction and design
- Accessories
- Cable systems
- Generating station and industrial cables
- Field testing and diagnostics
- Transnational Committee - international developments

We invite you to learn more about us. For further information about ICC, its goals, services, meetings/events and membership, please visit **www.pesicc.org,** or contact any of the ICC officers.

Duke Energy cable diagnostics project

Project details were provided during the 2011 Spring ICC meeting to exhibit how ICC provides a high-value forum for utility *engineers to network and gain* knowledge to apply to day-to-day asset management.

Replacing aging cable can be a large expense for utilities, and could mean down time for customers. As part of NEETRAC's* DOE-sponsored Cable Diagnostics-focused Initiative, Duke Energy recently used very low-frequency stability tests, tan delta measurements and time domain reflectometry to evaluate 50-year-old cables. These techniques enabled Duke Energy to precisely identify which cables needed to be replaced and which could remain in ground for further service. Performing these tests improved reliability for Duke Energy and saved the utility the expense of unnecessary cable replacement.

*National Electric Energy Testing, Research and Applications Center, a center of Georgia Tech