

## IEEE Power and Energy Society Entity Annual Report

2020

**Entity:** IEEE Insulated Conductors Committee

**Website:** <https://pesicc.org/ICCWP/>

**Chair:** Henk Geene

**Vice-Chair:** Yingli Wen

**Secretary:** N.A.

**Immediate Past Chair:** Earle C. (Rusty) Bascom, III

### 1. Significant Accomplishments:

Past year 2020 is the first year in the history of ICC in which we were unable to have an onsite meeting, due to the COVID-19 pandemic. We organized our administrative meetings online, as the majority of the working groups did, continuing the work on their PAR's.

The following documents were completed:

- IEEE 1637-2020: IEEE Draft Guide for Selection and Application of Terminations for Shielded Alternating-Current Power Cable Rated 5 kV - 46 kV
- IEEE 2740-2020: IEEE Draft Guide for the Selection and Installation of Electrical Cables and Cable Systems in Hazardous (Classified) Locations on Oil and Gas Land Drilling Rigs

### 2. Benefits to Industry and PES Members from the Committee Work:

The documents above will be beneficial to the respective groups, generally in the area of utility power systems, industrial / petroleum plants, and nuclear facilities.

### 3. Benefits to Volunteer Participants from the Committee Work:

Volunteers involved in ICC work have the ability to influence the standards and guides used in the industry in which they work. ICC participation also provides opportunities to hear interesting and often educational presentations on relevant industry activities.

### 4. Recognition of Outstanding Performance:

#### *Insulated Conductors Committee Certificates of Appreciation*

At each ICC meeting, Certificates of Appreciation are presented for the best presentation at a Subcommittee, Working Group, Discussion Group or Educational Program meeting.

Unfortunately, in 2020 we were not able to have onsite meetings due to COVID-19; therefore, no certificates were issued. However, the following will be presented at our next in-person meeting:



<b>Recipient</b>	<b>Citation</b>
James Steele	for Best Presentation at the Fall 2019 Subcommittee A Meeting <i>Extending the Life of Secondary Service Cables with Silicone-Gel Injection</i>
Dave Busby	for Best Presentation at the Fall 2019 Subcommittee A Meeting <i>Extending the Life of Secondary Service Cables with Silicone-Gel Injection</i>
Rodrigue Tonfack	for Best Presentation at the Fall 2019 Subcommittee A Meeting <i>Extending the Life of Secondary Service Cables with Silicone-Gel Injection</i>
Nathan Laurie	for Best Presentation at the Fall 2019 Subcommittee A Meeting <i>Extending the Life of Secondary Service Cables with Silicone-Gel Injection</i>
David Hughes	for Best Presentation at the Fall 2019 Subcommittee B Meeting <i>Update on Deadfront Separable Arrester Activity in IEEE Standard C62.11 and IEC 60099-4</i>
Brian Korves	for Best Presentation at the Fall 2019 Subcommittee B Meeting <i>Update on Deadfront Separable Arrester Activity in IEEE Standard C62.11 and IEC 60099-4</i>
David Campilii	for Best Presentation at the Fall 2019 Subcommittee C Meeting <i>Implementation of SCFF/HVED Transition Joints for Partial Replacement of 115 kV SCFF Cable System</i>
Milan Uzelac	for Best Presentation at the Fall 2019 Subcommittee C Meeting <i>Implementation of SCFF/HVED Transition Joints for Partial Replacement of 115 kV SCFF Cable System</i>
Sarajit Banerjee	for Best Presentation at the Fall 2019 Subcommittee F Meeting <i>Overview and Illustration of Technical Factors Influencing Medium Voltage Cable PD Assessment Outcomes</i>

***IEEE PES Technical Committee Certificates of Appreciation***

Likewise, the following IEEE PES Technical Committee Certificates of Appreciation will be presented at our next in-person meeting to all outgoing Subcommittee, Working Group and Discussion Group Chairs and Vice Chairs, or upon publication of their IEEE standard or guide:

<b>Recipient</b>	<b>Citation</b>
Earle C. (Rusty) Bascom, III	for Services Rendered as Chair, Insulated Conductors Committee Spring 2018 – Fall 2019
Yingli Wen	for Services Rendered as Chair, Subcommittee A <i>Cable Construction and Design</i> Spring 2017 – Fall 2019
Michael Mueller	for Services Rendered as



	<p>Chair, Subcommittee C <i>Cable Systems</i> Fall 2016 – Fall 2019</p>
Detlef Wald	<p>for Services Rendered as Chair, Discussion Group A06 <i>Accelerated Electrical Aging</i></p>
Brent Richardson	<p>for Services Rendered as Chair, Discussion Group A14 <i>Power Cable Standards</i></p>
Bill Taylor	<p>for Services Rendered as Chair, Working Group B1 <i>IEEE 48-2020 Standard for Test Procedures and Requirements for Alternating-Current Cable Terminations Used on Shielded Cables Having Laminated Insulation Rated 2.5 kV through 765 kV or Extruded Insulation Rated 2.5 kV through 500 kV</i></p>
Aaron Norris	<p>for Services Rendered as Vice-Chair, Working Group B1 <i>IEEE 48-2020 Standard for Test Procedures and Requirements for Alternating-Current Cable Terminations Used on Shielded Cables Having Laminated Insulation Rated 2.5 kV through 765 kV or Extruded Insulation Rated 2.5 kV through 500 kV</i></p>
Michael Lauxman	<p>for Services Rendered as Chair, Working Group B9 <i>IEEE 1493-2006 Guide for the Evaluation of Solvents Used for Cleaning Electrical Cables and Accessories</i></p>
Jason Fosse	<p>for Services Rendered as Vice-Chair, Working Group B9 <i>IEEE 1493-2006 Guide for the Evaluation of Solvents Used for Cleaning Electrical Cables and Accessories</i></p>
Eugene Weaver	<p>for Services Rendered as Chair, Working Group B24 <i>IEEE 495-2007 Guide for Testing Faulted Circuit Indicators</i></p>
Briana Reed-Harmel	<p>for Services Rendered as Vice-Chair, Working Group B24 <i>IEEE 495-2007 Guide for Testing Faulted Circuit Indicators</i></p>
Dave Purnhagen	<p>for Services Rendered as Chair, Working Group C5 <i>IEEE 1406-2020 Guide for the Use of Gas-in-Fluid Analysis for Paper and Laminated Paper-Polypropylene Insulated Cable Systems</i></p>
Dennis Johnson	<p>for Services Rendered as Vice-Chair, Working Group C5 <i>IEEE 1406-2020 Guide for the Use of Gas-in-Fluid Analysis for Paper and Laminated Paper-Polypropylene Insulated Cable Systems</i></p>
Dennis Johnson	<p>for Services Rendered as Chair, Working Group C23</p>



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	<i>IEEE 1793-2012 Guide for Planning and Designing Transition Facilities between Overhead and Underground Transmission Lines</i>
John E. Merando, Jr.	for Services Rendered as Chair, Working Group D5 <i>IEEE 1185-2019 Recommended Practice for Cable Installation in Generating Stations and Industrial Facilities</i>
William G. Bloethe	for Services Rendered as Vice-Chair, Working Group D5 <i>IEEE 1185-2019 Recommended Practice for Cable Installation in Generating Stations and Industrial Facilities</i>
Herb Stansberry	for Services Rendered as Vice-Chair, Working Group D8 <i>IEEE 634-2005 Standard for Cable-Penetration Fire Stop Qualification Test</i>
John E. Merando, Jr.	for Services Rendered as Chair, Working Group D14 <i>IEEE 422-2012 Guide for the Design of Cable Raceway Systems for Electric Generating Facilities</i>
William G. Bloethe	for Services Rendered as Vice-Chair, Working Group D14 <i>IEEE 422-2012 Guide for the Design of Cable Raceway Systems for Electric Generating Facilities</i>
Herb Stansberry	for Services Rendered as Chair, Working Group D15 <i>IEEE 1202-2006 Standard for Flame-Propagation Testing of Wire &amp; Cable</i>
Herb Stansberry	for Services Rendered as Vice-Chair, Working Group D21 <i>Standard Test for Determining Circuit Integrity Performance of Fire Resistive Cable Systems in Passenger Rail and Road Tunnels</i>

**5. Coordination with Other Entities (PES Committees, CIGRE, standards, etc.):**

IAS/PCIC, PES/NPEC, and PES/PGC. In addition, coordination with CSA, Mexico, and UL takes place on a working group level for some selected standards for which there is mutual interest. We also have a liaison with CIGRE Group B1 that also focuses on insulated conductors. Also, the involvement of ICC in the Entity Proposal Management and coordination with Satellite Committees, mainly in China, has become significant part of our coordination activities.

**6. New Technologies of Interest to the Committee:**

**Subjects of specific interest:**

- HVDC cable systems and the impact of renewables on the cable network.
- HVAC submarine cable to connecting off-shore windfarms to the main grid

**7. Global Involvement**



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There are many guides and standards coming up for revision within the ICC. The group plans to work toward revisions to these documents as required.

The global involvement can be demonstrated by the attendance of our meetings as tabled below for our 2019 meetings (no onsite meeting in 2020).

	North America	Europe	Asia	Africa	South/Central America	Total
Spring 2019	494	27	3	0	0	524
Fall 2019	462	25	8	0	0	495

The global involvement will be increase further due to the involvement of ICC in the Entity Proposal Management and coordination with Satellite Committees, around the world (mainly China).

### **8. Problems and Concerns:**

As all events in 2020, the ICC suffered most from that fact that we couldn't have an onsite meeting. Although it is expected that 2021 will allow us to meet again, traveling budgets for utility engineers will be restricted.

The participation of utility engineers is vital for the quality of our work of ICC, as the utilities are still the driving force behind the business of Insulated Conductors.

For this reason, IEEE and ICC should work together, reaching out to the utility managers to advertise the need for good standards and the importance of knowledge exchange.

### **9. Significant Plans for the Next Period:**

To increase the involvement of the utilities as they are the driving force behind our work.

**Submitted by: \_\_Henk Geene, ICC Chair**

**Date: 18-Jan-2020**