



# INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Opening Session



# INSULATED CONDUCTORS COMMITTEE

*Established 1947*

**Fall 2010 Meeting, Fountain Hills, AZ**

Please turn cell phone ringers off



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Advisory Committee – Survey Summary

Wim Boone and Serge Pelissou



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

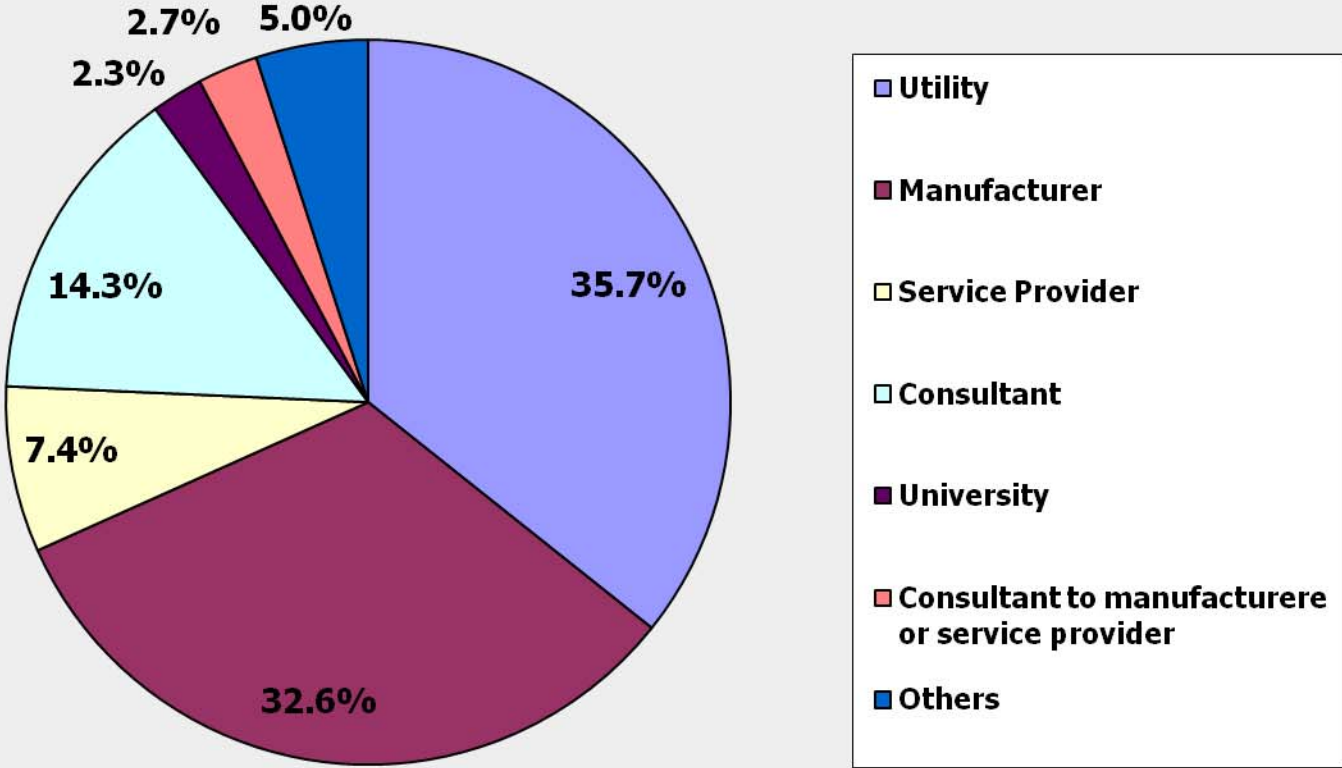
Fall 2010 Meeting, Fountain Hills, AZ

# Survey Summary

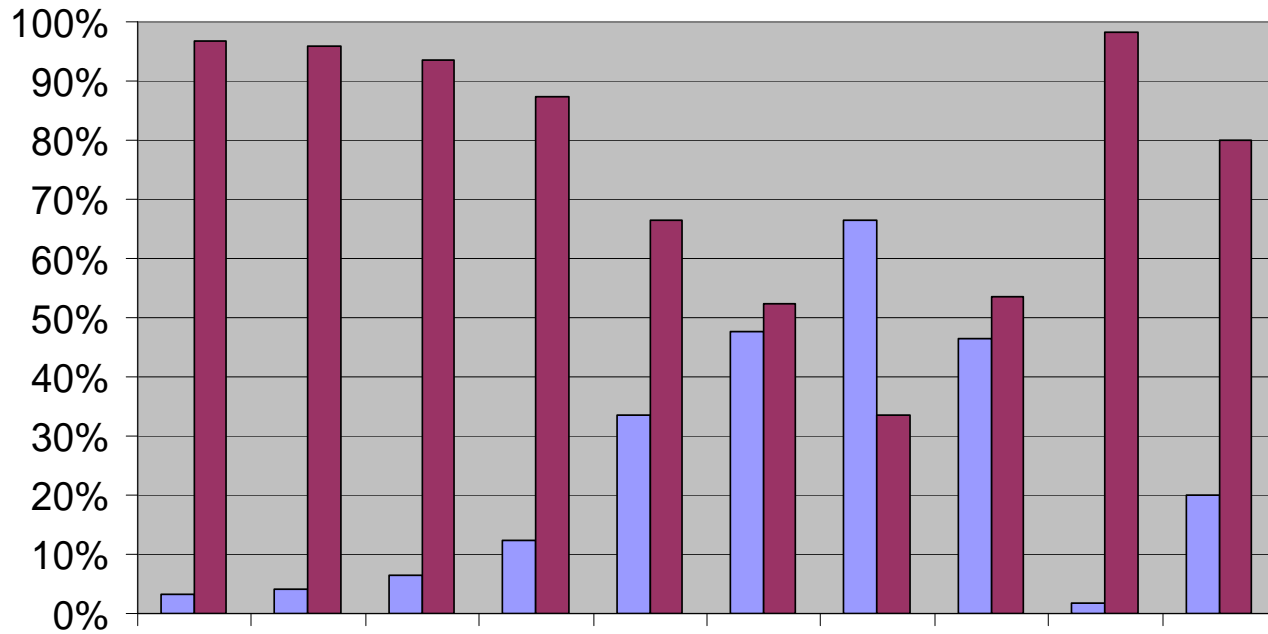
- Neetrac monkey survey software (thanks to Nigel and Rachel)
- Survey had 9 questions: 258 persons replied over 600
- More than 500 additional comments
- Summary and main conclusions

# Distribution of respondents (258)

Q1 - Which description best describes your interaction with the ICC?



## Q2 - What do you like at the ICC?



Presentations at Subcommittee sessions

Presentations at WG/DG meetings

Discussions at the subcommittee sessions

Working on Guides or Standards

Educational program

Trans National lunch

Network lunch

Table Top Displays

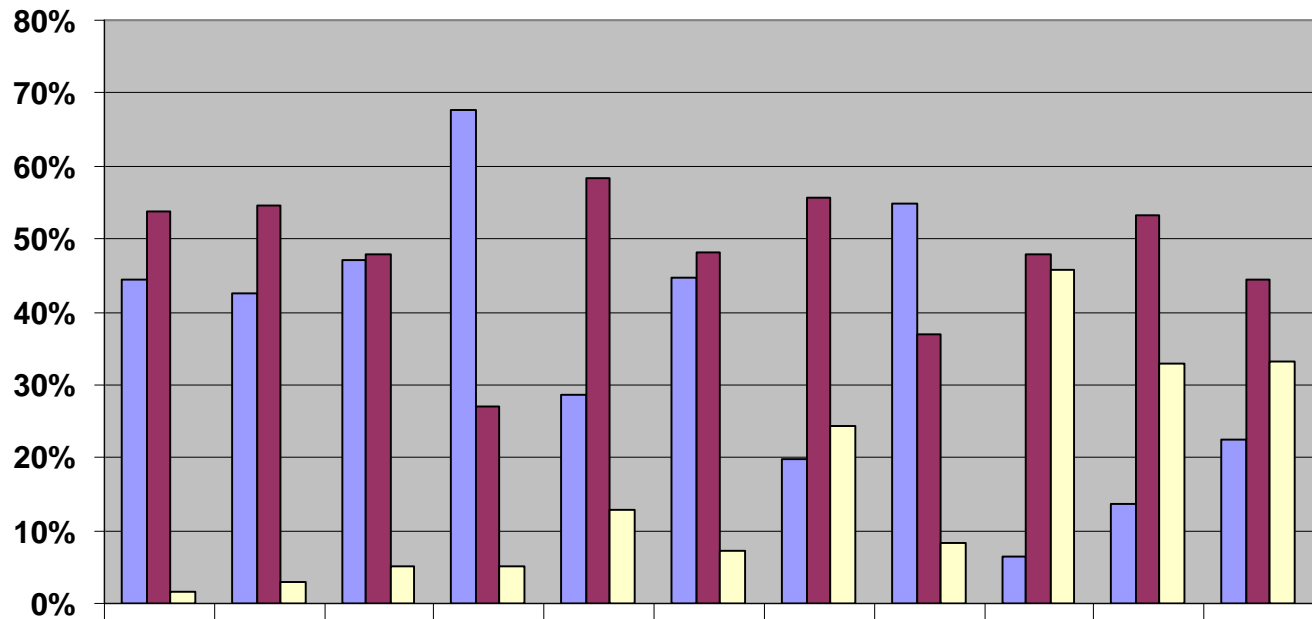
Informal communication/discussion with oth..

International focus and participation

No and Marginal Interest

Interested+Some and Highly Interested

### Q3 - What would you like to see improved at ICC?



Quality of presentations at Sub-co...

Subjects of presentations at Sub...

Quality of discussions at the Sub ...

Presentations are too technical for ...

Involvement of participants to selec...

Productivity of working groups

Level of International participation

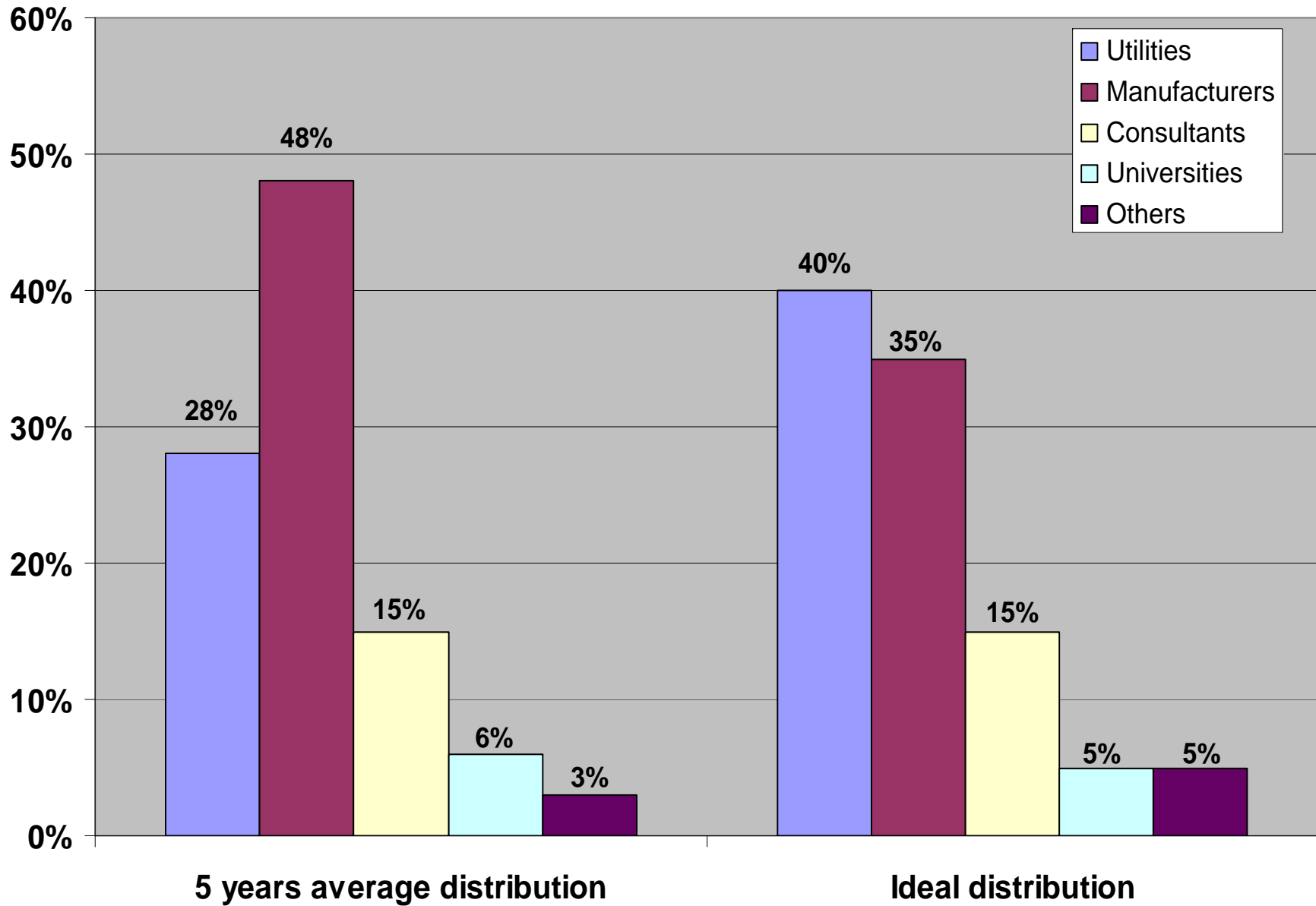
Would you encourage utilities to m...

Would you encourage utilities to ...

There should be more contact with u...



## Q4 - What would be an ideal distribution of ICC participation?





## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

### Q5 – How do you convince utility management (UM) that utility participation is important? (158 comments)

- **Approach UM** and explain general cost/benefit ratio of ICC
- **Make clear to the UM** that utility participation to the preparation of standards is in their interest, and their involvement is necessary and show them that engineers can learn from the ICC
- **Maintain/Invite/Facilitate contact with UM** while promoting ICC accomplishments and create channel for their requirements (Topics of interest) to be heard.
- **Circulate Newsletters**



## INSULATED CONDUCTORS COMMITTEE

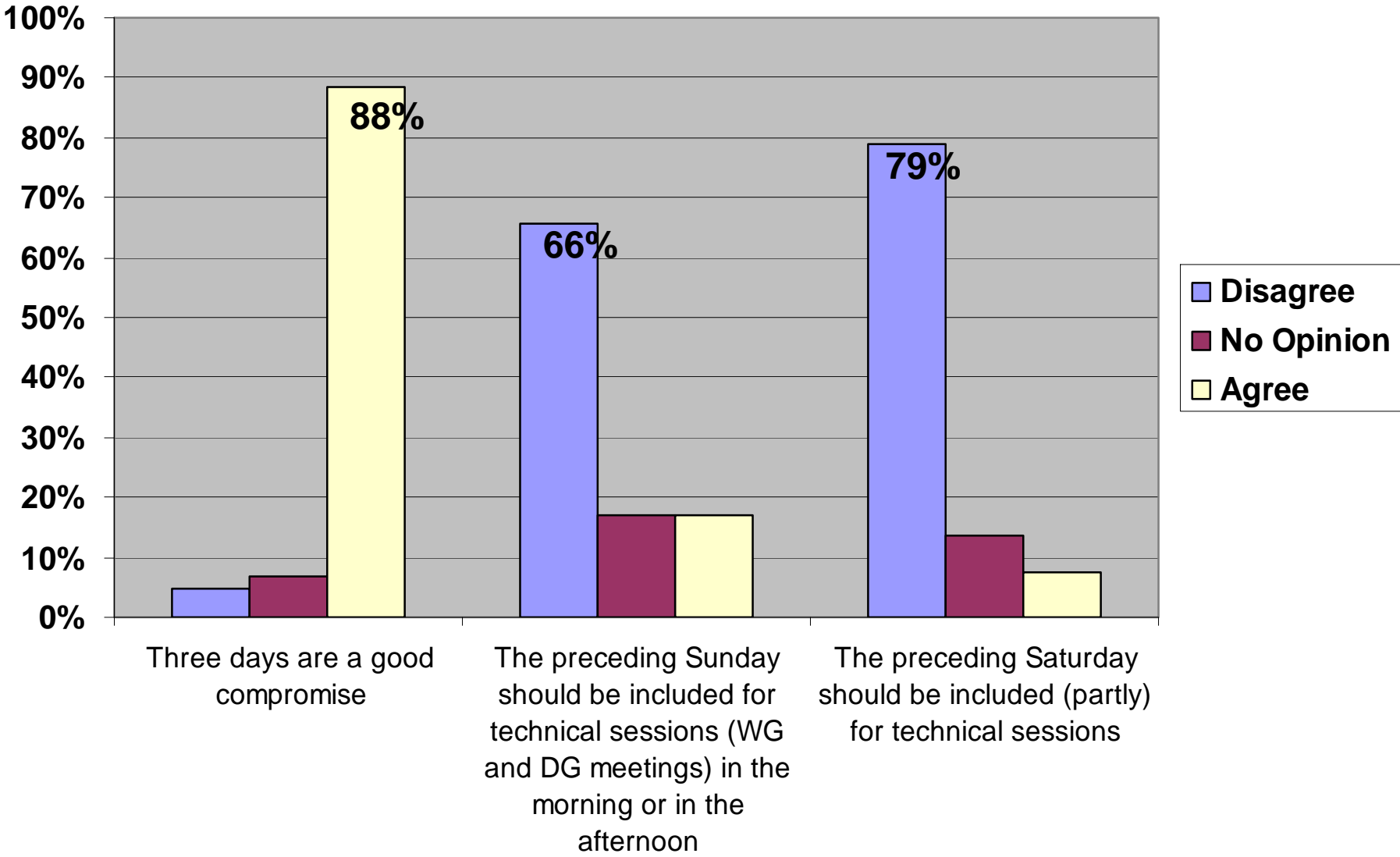
Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

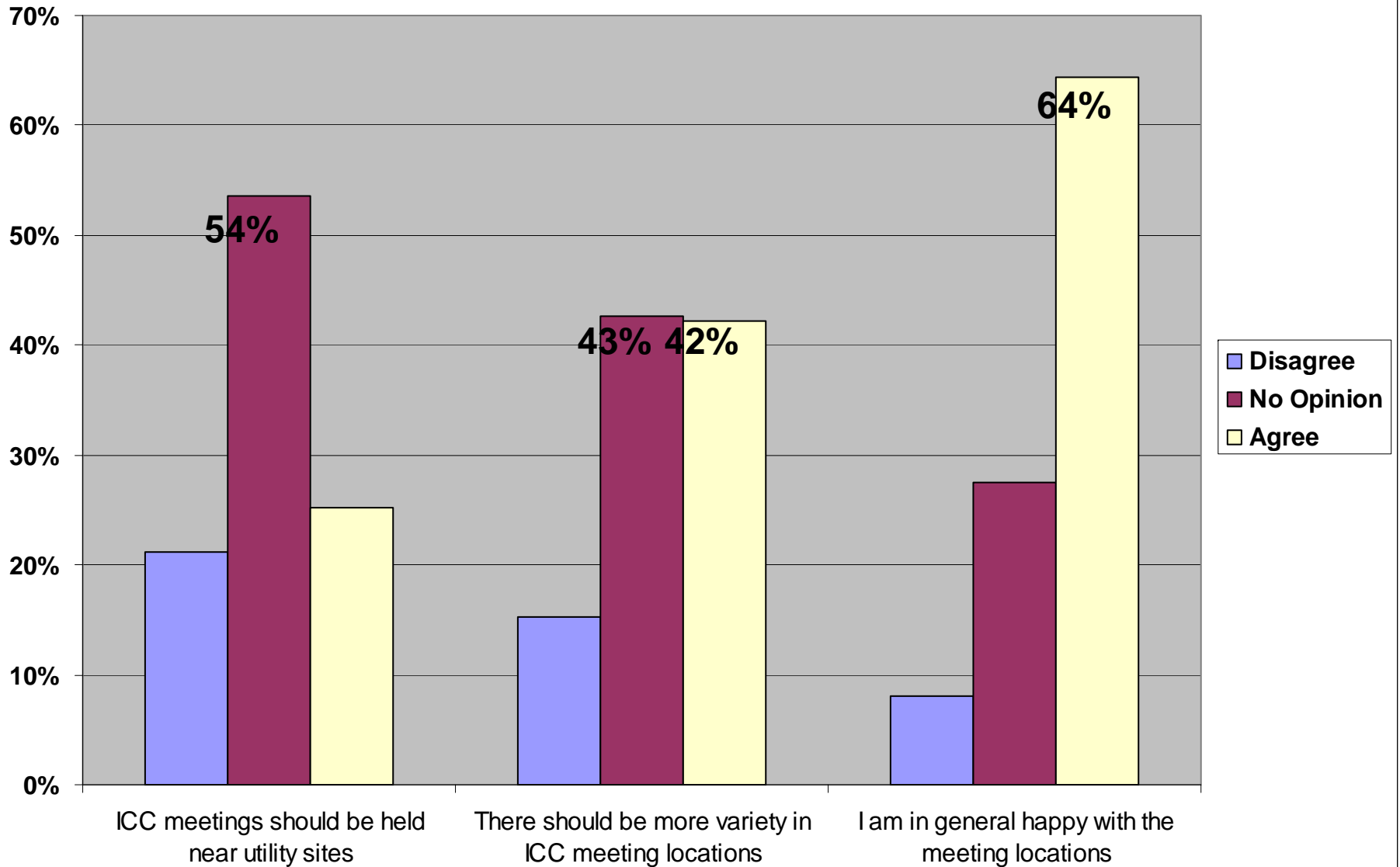
### Q6 – What kinds of information can ICC disseminate to Utility Management? (135 comments)

- **List of successes** (brochure, summary, paper, dvd, newsletter).
- **Benefits of ICC membership:** standard/guide development, networking with mfrs and utilities, safer, more efficient and reliable products and procedures, training opportunities.
- **Utility participation is necessary** to develop balanced and unbiased specifications and knowledge their impact on utility practices.

# Q7 - What is your opinion on the duration of an ICC meeting?



## Q8 - What is your opinion on ICC meeting locations?





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Main Conclusions

## ICC activities in order of popularity:

1. Informal contacts
2. Presentations/ discussions in SC and WG/DG
3. Additional activities, like EP, TNL, TT and NL



## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# Other Main Conclusions

- Utilities are invited to become more active in presentations and discussions (**94%**)
- Productivity of WG should be significantly improved (**80%**)
- Utility participation to ICC should increase by **12 %**
- EP, TNL, TT and NL are less popular than the SC and WG/DG meetings
- Keep duration of ICC on 3 days, as it is now
- Keep present location selection, as it is now



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Main Areas of Attention

- Utility participation to the ICC
- Productivity of WG 's
- Evaluation of additional activities (EP, TNL, TT and NL)



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Enhanced Utility Participation, ICC Task Force

October 18, 2010

Scottsdale, AZ

Wim Boone and Serge Pélissou



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### How to proceed?

- After evaluating conclusions of the survey in the AC and the AdCom, the following was decided at the Spring meeting 2010:
  - Strong follow up
  - Focus on utility participation, as the most important issue to ensure continuity for the ICC
  - Special TF Enhanced Utility participation



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Task Force Team

- Ram Ramachandran, Dow Chemical, Chair
- Tom Champion, NEETRAC
- Patrick Gorman, General Cable
- Brent Richardson, Dow Chemical
- Mike Smalley, WE Energies
- Matt Spalding, Tyco Electronics
- Bill Taylor, 3M



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Task force terms of Reference

- To draw up from the survey the reasons for reduced participation
- To propose actions/solutions in an action plan
- To discuss the action plan with the AC
- To coordinate the action plan



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Objective

- Evaluate:
  - Current attendance by Utility personnel
  - Active participation by utility engineers at ICC
- Develop / propose action plan for:
  - Enhancing utility participation
  - Means to encourage more active participation & contribution by utility engineers



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Items Explored

- Engaging Utility Management to highlight ICC value
  - Issues highlighted at the October AEIC Annual meeting
- A few in depth interviews with UM
- A few in depth interviews for additional learning
  - With regular attendees
  - With a few who do not attend today



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Communication

- The chair will report to the AC
- The TF will be coordinated by the AC chairs (Wim Boone and Serge Pelissou)
- The AC will inform the ICC audience



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Time schedule

- Draft action plan Fall 2010
- Action plan Spring 2011
- The TF will be active for a period of 3 years



# INSULATED CONDUCTORS COMMITTEE

*Established 1947*

**Fall 2010 Meeting, Fountain Hills, AZ**

- Thank you for your attention!



[www.pesicc.org](http://www.pesicc.org)



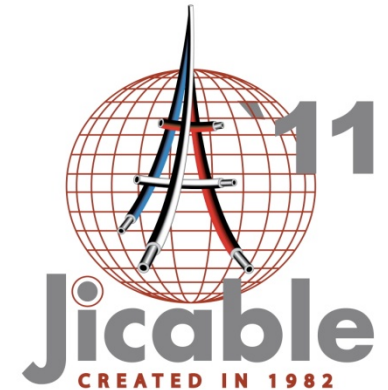


## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# ICC – Technical Sponsor of Jicable 2011



- JICABLE is an international forum for the exchange of information in the fields of research, industrial development, installation, operation and diagnoses relating to insulated power cables and their accessories from low voltage and special cables up to ultra high voltage cables and new technology cables.



[www.pesicc.org](http://www.pesicc.org)



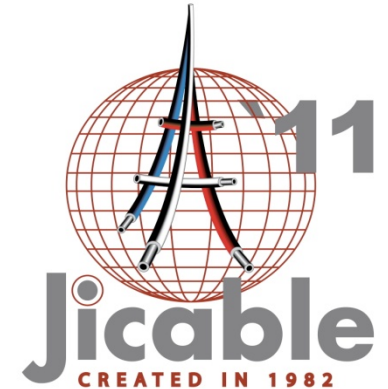


## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# ICC – Technical Sponsor of Jicable 2011



- ***8<sup>th</sup> International Conference on Insulated Power Cables***
- Versailles, France, June 19-23, 2011
- Submission of abstracts: Nov 15, 2010
- Submission of full texts: Apr 15, 2011



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Meeting Minutes CDs

- Minutes were available for download
- Only 21% participated – much lower than expected
- Overwhelming positive response from those who did download
- For those who didn't, please provide feedback in comment box



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Call for Patents

- Patent slides are required by IEEE



[www.pesicc.org](http://www.pesicc.org)





# INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

## Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

Participants:

- **“Shall inform the IEEE (or cause the IEEE to be informed)”** of the identity of **each “holder of any potential Essential Patent Claims** of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
  - “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims
- “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group

Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2

- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search



## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

### Patent Related Links

**All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.**

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

*<http://standards.ieee.org/guides/bylaws/sect6-7.html#6>*

IEEE-SA Standards Board Operations Manual

*<http://standards.ieee.org/guides/opman/sect6.html#6.3>*

Material about the patent policy is available at

*<http://standards.ieee.org/board/pat/pat-material.html>*

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at [patcom@ieee.org](mailto:patcom@ieee.org) or visit <http://standards.ieee.org/board/pat/index.html>

This slide set is available at <http://standards.ieee.org/board/pat/pat-slideset.ppt>



## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

### Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted



# INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

## Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
      - Technical considerations remain primary focus
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed ... do formally object.**

-----  
See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# ICC Minutes re: Patent Slides

“IEEE Patent Slides 1 through 4 were shown at the Opening Session.

Each WG chair or designee was instructed at the All Chairs meeting to provide an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard.”



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Call for Presentations!

- We're always looking for new presentations.
- Please volunteer!



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Presentations – a Pop Quiz

- What's okay regarding commercialism?
- What's not okay?
- These things are not always clear-cut

# 138-kV Cable Installation Through a Wildlife Sanctuary



- Presented by: B. Williams, NBC AE Firm

# 138-kV Cable Installation Through a Wildlife Sanctuary

## The Team –

- Utility: Central Public Service, Co.
- Consultant: NBC Consulting, LLC
- Installer: John's Backhoe Services
- Manufacturer: Elite Cable, Corp.
- Testing Firm: Sparky's Testing Services
- Lion Tamers: Siegfried & Roy
- Presented by: B. Williams, NBC AE Firm

Borderline,  
but accepted on  
one slide only

## Background: John's Backhoe Services

- Size: 15 employees
- Equipment: (10) 9500-kg backhoe loaders
- Profits in 2009: \$3.7M
- Service Territory: North America
- Size of Projects: \$100K - \$500K

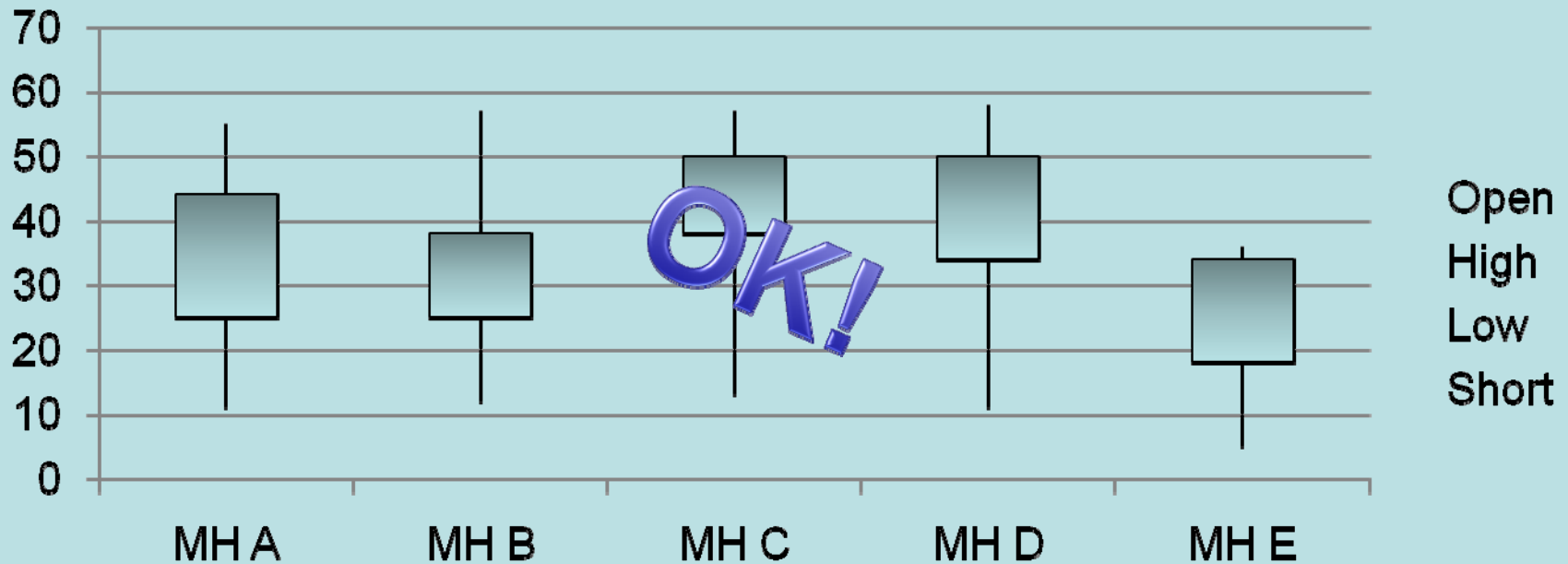
**Never Okay.  
Ever.**

# Cable Testing Results

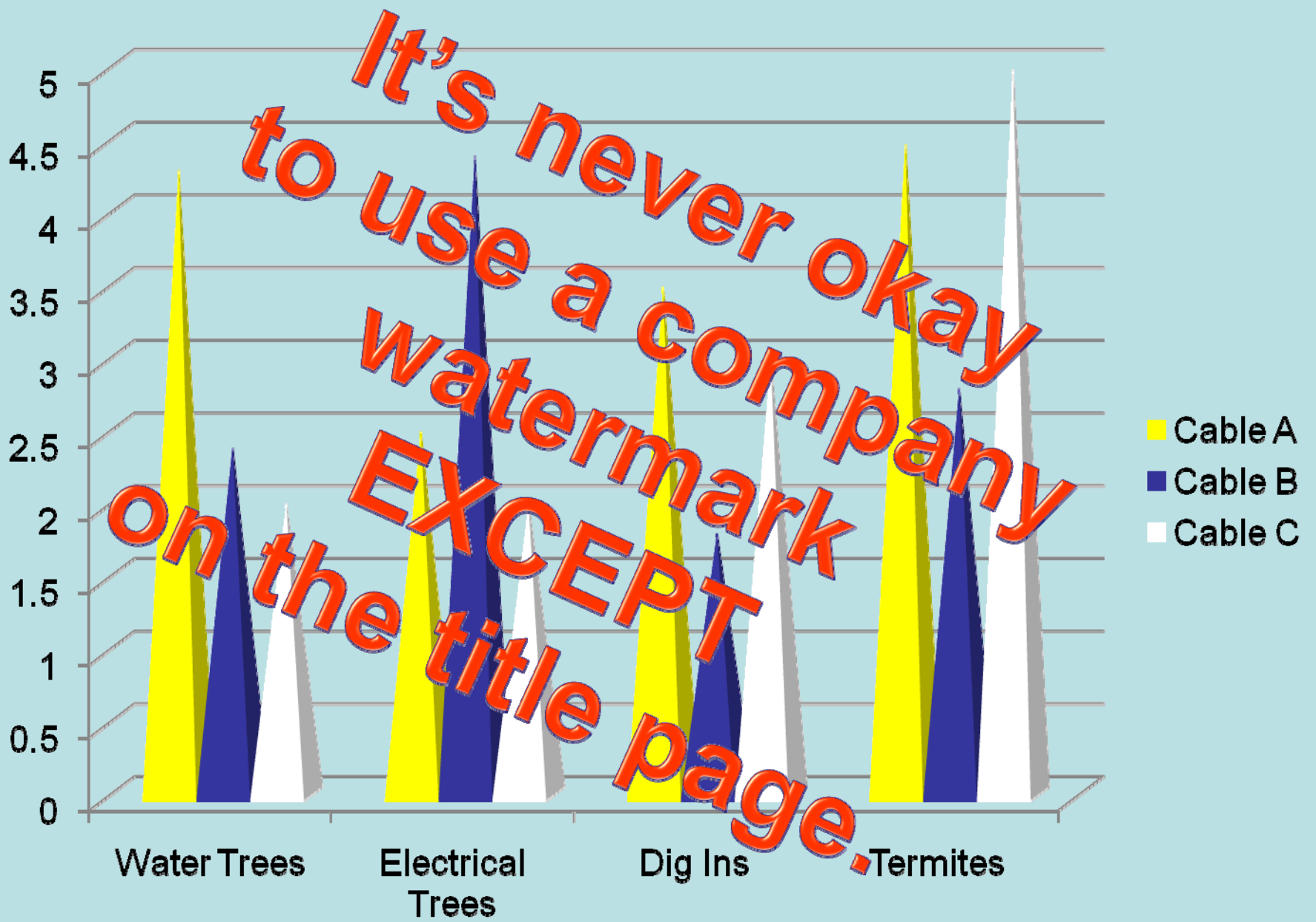


- **SuperTronic 340**, which took the measurements, is accurate to 0.01%

# Cable Testing Results



- The ohmmeter, which took the measurements, is accurate to 0.01%





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Speaking of Commercialism...

- Commercialism applies to the Spoken Word as well as the Written Word.
- You should not be leading your company's marketing efforts during ICC presentations, even if the slides "pass the test".



## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

**“We wouldn’t come to ICC if it didn’t improve our business. Commercialism is required to sustain this committee.”**

- Right. But let your good reputation and your professionalism be your best advertisement.
- If you are visible and contributing actively, then you are doing a far more effective job at promoting yourself and your company than any marketing campaign.



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

### To Wrap Up...

- Blatant commercialism:
  - Dilutes the potential impact of your message
  - Turns people off - the information is viewed as simply a “sales presentation”
  - Reflects negatively on you and on the ICC
  - *Please resist the temptation!*



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### Finally...

- ICC's new initiative - presenters will be interrupted to point out offenses and asked to stop if the offenses continue.
- Every attendee, not just the chair, is encouraged to raise a point of order if offenses are observed.



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Fall 2010 Insulated Conductors Committee Awards

**Lauri J. Hiivala**



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Fall 2010 Insulated Conductors Committee Awards

- ICC Certificates of Appreciation
- IEEE/PES Technical Committee Certificates of Appreciation
- IEEE Fellow Class of 2012



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Fall 2010 Insulated Conductors Committee Awards

- 2011 IEEE Herman Halperin Electric Transmission and Distribution Award
- Dr. George H. Bahder Memorial Award
- 2010 IEEE/PES Technical Committee Distinguished Service Award



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# ICC Certificates of Appreciation

- Best Presentations at the Spring 2010 Subcommittee Meetings



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# IEEE/PES Technical Committee Certificates of Appreciation

**Thomas C. Champion**  
for Services Rendered as  
Chair, Subcommittee B  
Cable Accessories  
2007 – 2009



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# Rob Schlesinger

for Services Rendered as

Vice-Chair, Working Group F03

*Guide for Field Testing of Shielded Power  
Cable Systems Using Very Low  
Frequency (VLF)*



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Vern Buchholz

for Services Rendered as

Chair, Discussion Group F06

*DC Field Testing of Extruded Cable  
Systems*



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# Ralph Patterson

for Services Rendered as

Vice-Chair, Discussion Group F06

*DC Field Testing of Extruded Cable  
Systems*



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

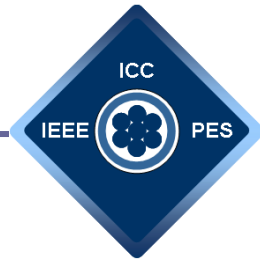
### **Mark Walton**

for Services Rendered as  
Chair, Discussion Group F09  
*Accelerated Electrical Aging*



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# IEEE Fellow Class of 2012

- The Institute of Electronic and Electrical Engineers (IEEE) highest grade of Fellow recognizes excellence for notable achievements in power engineering and industrial applications.
- The Fellow grade is conferred upon people of outstanding and extraordinary qualifications and experience in the various fields of the IEEE for their important individual contributions to one or more technical fields.



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# IEEE Fellow Class of 2012

- Nominations are now being accepted for the IEEE Fellows class of 2012. The deadline for nominations is March 1, 2011.
- Senior Members can be nominated in one of four categories: application engineer/practitioner, educator, research engineer/scientist or technical leader.
- Full particulars are available at <http://www.ieee.org/web/membership/fellows/index.html>



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# IEEE Herman Halperin Electric Transmission and Distribution Award

- Herman was the second Chair of ICC, 1949-50
- Each award needs at least two new nominations each year in order for the award to continue
- \$10,000 award
- Deadline: January 31, 2011



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# IEEE Herman Halperin Electric Transmission and Distribution Award

- Criteria: technological importance, successful application, originality, leadership, publications, and the quality of the nomination
- Full particulars are available at <http://www.ieee.org/about/awards/tfas/halperin.html>



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### **Dr. George H. Bahder Memorial Award**

- The funds must be presented in the form of a scholarship or similar award to a student whose studies are in the electric power engineering area.
- The student must be informed that the IEEE Insulated Conductors Committee provided the stipend/scholarship.
- The funds must be used to assist the student in the study of a topic related to the power engineering transmission or distribution field and should preferably deal with issues related to underground power cable systems.





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

### **Dr. George H. Bahder Memorial Award**

- The ICC must be told the student's name and the topic studied.
- The ICC must be provided with a report, thesis or paper that describes the work conducted with the Bahder award funds.
- To be presented at Spring 2011 meeting at St. Pete Beach.



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# 2010 IEEE/PES Technical Committee Distinguished Service Award

IEEE Power Engineering Society  
Insulated Conductors Committee  
Technical Committee  
Distinguished Service Award  
Presented to

# Jim Fitzgerald



[www.pesicc.org](http://www.pesicc.org)



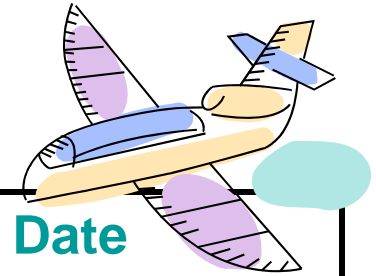


# INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

## Future Meetings



Meeting	Location	Date
Spring '11	Tradewinds St. Pete Beach, FL	5/22/11 – 5/25/11
Fall '11	Renaissance Denver Hotel Denver, CO	10/23/11 – 10/26/11



## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

# Reduce, Reuse, Recycle

- Lanyards cost us \$1600 every other meeting
- Lanyards collection box
- It's making a difference
- Thank you





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Fort McDowell Hotel Perks

- Free Wireless Internet
- Complimentary valet parking for all attendees (tip not included)
- Local and toll-free telephone calls
- Use of fitness center
- Shoe shine



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Education Session

- Wednesday afternoon
- “Design Principles for Cable Accessories (Separable Connectors, Joints and Terminations)”



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Education Session

- 0.4 CEUs are available
- Cost: \$15 (charged to us by IEEE)
- If this is towards a Florida PE license, you **MUST** provide your FL PE license number to THOMAS by Wednesday!



[www.pesicc.org](http://www.pesicc.org)





## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Professional Development Hours (PDHs)

- Forms are at Registration
- Attendee's responsibility to fill out form
- Education Session will no longer provide these forms at the session – you must pick up the form at the Registration Desk

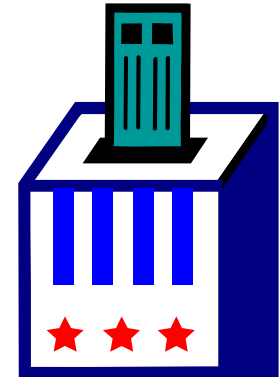


## INSULATED CONDUCTORS COMMITTEE

Established 1947

Fall 2010 Meeting, Fountain Hills, AZ

### Comment Box



- Continuing to receive great suggestions!
- All comments and suggestions are considered
- Located at the Registration Desk
- E-mails between meetings are welcome and appreciated, as well



## INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

# Spring Registration Update

- 301 Pre-registered
- 36 Networking Lunch
- 130 Transnational Lunch
- 75 Education Program
- 27 CEUs
- 13 Exhibitors



[www.pesicc.org](http://www.pesicc.org)





# INSULATED CONDUCTORS COMMITTEE

*Established 1947*

Fall 2010 Meeting, Fountain Hills, AZ

Thank you!  
Enjoy the Meeting!



[www.pesicc.org](http://www.pesicc.org)

