

SUBCOMMITTEE A

Cable Construction and Design

Chair: John T. Smith, III, General Cable Corp.

Vice-Chair: Albert Kong, Pacific Gas & Electric

**Monday, March 10, 2008
St. Petersburg Beach, FL**



Sub A: *Cable Construction and Design*

Scope:

All issues related to materials, construction, design and manufacturing of insulated cables



SC A Working Groups and Discussion Groups

Group	Chair	Vice Chair	Title
A1DI	Vacant	Vacant	Characteristics of Insulating Materials
A2D	Flenniken	Liu	Characteristics of Semi-conductive Shields
A3DI	Densley	Vacant	Performance of Extruded Dielectrics
A4D	Pelissou	Harp	Definition of Tree Retardant Cross-linked Polyethylene
A5I	Szaniszlo	Walcott	Properties of Identifiable Jackets
A6D	Walton	Vacant	Accelerated Electrical Aging
A7W	Caronia	Pelissou	Guide for Selecting and Testing Jackets for Underground Cables
A8W	Fee	McAuliffe	Compatibility of Cable Pulling Lubricants and Cables
A9I			Guide for Moisture Measurement in SF ₆
A10D	Joy	Witt	Conductors
A11W	Snow	Hiranandani	Guide for Moisture Impervious Power Cables Using Metal/Plastic Laminate Sheaths
A12I	Steiner	Walker	Cable Designs Impervious to Moisture
A13W	Densley	Walton	Water Tank Test Procedures
A14D	Ramachandran	Hartlein	Power Cable Standards
A15W	Bow	Vacant	Guide for Selection and Design of Aluminum Sheaths for Power Cables
A16D	Cinquemani	Hayes	Characteristics of EPR Cables
A17W	Person	Pelissou	Guide for the Use of Extruded Shields
A18/B 12W	Jazowski	Jasek	Guide for Investigating and Analyzing Shielded Power Cable Failure on Systems Rated 5 kV through 46 kV
A19D	Campbell	Nuckles	Covered Conductors

(D = Discussion, W = Working, I = Inactive)

Announcements

- Thanks to **Albert Kong** of Pacific Gas & Electric Co. for agreeing to serve as Vice-Chair of Subcommittee A.
- Thanks to **Austin Tingley** for his recent contributions as Chair of A10D, *Conductors*, a Discussion Group which he helped to Re-activate at the Spring 2007 meeting.
- Thanks to **Jeff Joy and David Witt** for agreeing to Chair and Vice-Chair, respectively, A10D, *Conductors*.
- Thanks to **Serge Pelissou** for taking the Chair of A4D, *Definition of Tree-Retardant Crosslinked Polyethylene*.
- Certificate of Appreciation for Best Sub A presentation at Fall 2007



Voting for Best Sub A Presentation Fall 2007 Meeting

Fall 2007 ICC Sub A Best Presentation

Sent to 105

Presentation #	Votes	% Votes	% Responding
1	6	19%	
2	4	13%	
3	2	6%	
4	2	6%	
5	13	42%	
6	1	3%	
7	3	10%	
Total	31	100%	30%

#6 - Accelerated Cable Life Test (ACLT) Results with Reduced Insulation Wall Thicknesses - 13

#1 - The Chemistry of Water Tree Rejuvenation – 6

#2 - Performance of Modern Cables in Central Europe - 4

Certificate of Appreciation for Best Sub A presentation at Fall 2007:

“Accelerated Cable Life Test (ACLT) Results with Reduced Insulation Wall Thickness Specimens”

John T. Smith, III



Agenda

2:00 – 2:10

Subcommittee Business and Announcements

John T. Smith, III, General Cable Corp.
Albert Kong, Pacific Gas & Electric

2:10 – 2:38

Willem Boone and Fred Steennis, KEMA
Presentation on the subject: PD On-line, a Modern Diagnostic Tool for Underground Power Cables

2:38 – 3:06

Thomas Campbell, Consolidated Edison Company
Three Decades of Cable Failure Data

3:00 – 3:30

Break

3:30 – 3:58

Dr. George Anders, F. IEEE, Kinectrics Inc.
Statistical and Mathematical Models for Life Prediction

3:58 – 4:26

Dennis Wedam and Brihana Reed-Harmel, PacifiCorp
Applying AIEC CG 12--Adapting Strategies to Reduce the Ownership Cost of Medium Voltage Cable Systems

Agenda (continued)

- 4:26 – 4:54 Sverre Hvidsten, Sintef Energy Research (Norway), Stine Kvande, Norwegian University of Science and Technology (Norway), Karl-Michael Jäger, Borealis AB, Sweden
Severe Degradation of the Conductor Screen of Service and Laboratory Aged Medium Voltage XLPE Insulated Cables and Cable Models
- 4:54 – 5:22 Timothy J Person, The Dow Chemical Company
Shorter Duration Accelerated Cable Tests for High-Performance TR-XLPE Insulations
- 5:30 Meeting Adjourn