

# ***MINUTES***

## **USNC TAG SC17A: High-voltage Switchgear & Controlgear USNC TAG SC17C: High-voltage Enclosed Switchgear & Controlgear**

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Place of Meeting:	San Luis Resort 5222 Seawall Boulevard Galveston, TX 77551
Dates & Times	Monday, 8 May 2006 6:00 PM - 9:00 PM
Presiding Officer:	Larry Farr, TA [USNC TAG SC17A] Ted Burse, TA [USNC TAG SC17C]
NEMA Staff:	Ken Gettman 703-841-3254 <a href="mailto:ken_Gettman@NEMA.org">ken_Gettman@NEMA.org</a>

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### **ATTENDEES**

Paul Barnhart	Underwriters Laboratories
Ted Burse	Powell Electrical
Dennis Dufournet	Areva T&D
Pete Dwyer	General Electric
Larry Farr	Eaton Electrical
Ken Gettman	NEMA
Dave Gohil	Central Electric Mfg.
Bill Long	Eaton
Deepak Mazumdar	Central Electric Mfg.
Peter Meyer	S&C Electric
Ted Olsen	Siemens Power Transmission & Distribution
Mike Orosz	Schneider Electric
Carl Schneider	Square D
Kirk Smith	Eaton Electrical
Mel Smith	Siemens Power Transmission & Distribution
Alan Storms	Storms Advisory Services
Tom Tobin	S&C Electric

## GUESTS

Anne Bosma	ABB
Leslie Falkingham	VIL
Steven Meiners	General Electric
Georges Montillet	Areva T&D
John Webb	ABB

### 1. CONDUCT OF MEETING

The meeting was conducted in accordance with NEMA *Guidelines for Conducting Meetings*.

### 2. APPROVAL OF PREVIOUS MINUTES

The minutes of the 3 October 2005 meeting of SC17A and SC17C TAG meeting were approved by correspondence.

The minutes are approved by the absence of any comments submitted.

### 3. ROSTER AND ATTENDANCE RECORD

The roster was circulated among the attendees and changes were noted.

### 4. APPROVAL OF THE AGENDA

The agenda was approved without change.

### 5. REVIEW OF ANY ISSUES / COMMENT DEVELOPMENT ON IEC DOCUMENTS:

**Highlighted documents will be reviewed for development of US vote and comments.** The remainder of the documents are identified for information only. All are posted on the NEMA Forum.

#### IEC - Working documents for SC 17A

**17A/754/FDIS** [Open for voting until 6/16/06] Amendment 2 to IEC 62271-100, Ed. 1: High-voltage switchgear and controlgear - Part 100: Alternating current circuit-breakers

- It was suggested and approved to submit a vote to approve the document.

17A/753/FDIS IEC 62271-101, Ed. 1: High-voltage switchgear and controlgear - Part 101: Synthetic testing

-It was noted that the document was approved and is being published.

**17A/752/CDV** [Open for voting until 7/14/06] IEC 62271-1, Ed. 1: High-voltage switchgear and controlgear - Part 1: Common specifications

- during a review of comments on the CD, the following items were noted for comment:

- 2.1.1 – it was agreed to submit that there should be a reference to the terminology used in IEC 60815. It was suggested that the term “light” be used in reference to pollution.
- Table 2 – it was noted that there are some discrepancies that have been published in the draft. In particular, lightning impulse values for 8.25 kV were questioned. A draft revision to the table will be circulated when available. The table will be submitted as a revision after TAG consensus.
- 6.2.4 – item a) should explicitly state that only one additional test may be conducted and at least one of the maximum of two tests may have a disruptive discharge.
- It was noted that most of the significant concerns from the US have been addressed satisfactorily. While some proposals on the CD were not accepted, it was suggested that a favorable vote could be submitted on the CD. However, given the need to significantly revise Table 2, it will be necessary to submit a “negative” vote stating that revision of the table would result in US approval of the document.

17A/751/RM Unconfirmed minutes of the joint SC 17A/SC 17C meeting held in Cape Town (ZA), on October 17, 2005

17A/750/RM Unconfirmed minutes of the SC 17A meeting held in Cape Town (ZA), on October 18, 2005

17A/748/MTG SC 17A meeting documents, Cape Town 2005-10-18

17A/749/RVD Report of Voting on 17A/742/FDIS: IEC 62271-108, Ed. 1.0: High-voltage switchgear and controlgear - Part 108: High-voltage alternating current disconnecting circuit-breakers for rated voltages of 72,5 kV and above

### **IEC - Working documents for SC 17C**

**17C/374/FDIS** [Open for voting until 5/26/06] IEC 62271-201, Ed. 1: High-voltage switchgear and controlgear - Part 201: AC insulation-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

- The US vote is to approve this document.

**17C/373/CD** [Open for voting until 6/16/06] IEC 62271-304, Ed. 1: Additional requirements for enclosed switchgear and controlgear from 1 kV to 72,5 kV to be used in severe climatic conditions

- it was noted that the US has been participating in the development of this document. Members should review the draft to determine whether any comments are appropriate.

**17C/372/CDV** [Open for voting until 8/11/06] IEC 62271-209, Ed. 1: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages of 52 kV and above - Fluid-filled and extruded insulation cables - Fluid-filled and dry type cable-terminations [17C/361/CC]

- it was noted that there seems to be no interest in this subject within the US. If any members do have an interest, they should contact Ken Gettman or Ted Burse.

17C/371/FDIS IEC 62271-202, Ed. 1: High-voltage switchgear and controlgear - Part 202: High voltage/low voltage prefabricated substation



- 17C/370/DC IEC 61958: High-voltage prefabricated switchgear and controlgear assemblies - Voltage presence indicating systems
- 17C/369/FDIS IEC 62271-3, Ed.1: High-voltage switchgear and controlgear - Part 3: Digital interfaces based on IEC 61850
- 17C/368/INF Common numbering of IEC 62271 publications falling under the responsibility of subcommittees SC 17A and SC 17C
- 17C/367/DC IEC 61639: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages of 72.5 kV and above
- 17C/366/RVN Result of voting on 17C/344/NP: Measurement or Calculation of EMF in High Voltage Switchgear and Controlgear Assemblies
- 17C/357A/RVC Revised result of voting on 17C/349/CDV: IEC 62271-202, Ed. 1: High voltage/low voltage prefabricated substation
- 17C/350A/CC Revised compilation of comments on 17C/336/CD: IEC 62271-205, Ed.1: High-voltage switchgear and controlgear - Part 205: Assemblies of high voltage devices
- 17C/365/RM Unconfirmed Minutes of the SC 17C Meeting held in Cape Town, Republic of South Africa, on October 19, 2005
- 17C/364/MTG SC 17C meeting documents, Cape Town 2005-10-19
- 17C/363/AC Request for experts to the Maintenance Team 22 for IEC 62271-207 (old IEC 62271-2): High voltage enclosed switchgear and controlgear - Part 207: Seismic qualification for gas-insulated metal enclosed switchgear for rated voltage above 52 kV
- 17C/361A/CC Revised compilation of comments on 17C/351/CD: IEC 62271-305, Ed. 1: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages of 72,5 kV and above - Fluid-filled and extruded insulation cables - Fluid-filled and dry type cable-terminations

**OTHER SC17A AND SC17C ACTIVITIES**

**US Experts to SC17A and SC17C**

TC17/SC17A/MT28	Kenneth E.	GETTMAN	TC17/SC17A/MT36	R.W.	LONG
TC17/SC17A/MT28	H. Mel	SMITH	TC17/SC17A/MT37	Carl D.	REIGART
TC17/SC17A/MT32	Kenneth E.	GETTMAN	TC17/SC17A/MT39	H. Mel	SMITH
TC17/SC17A/MT32	R.K.	SMITH	TC17/SC17A/MT40	Kenneth E.	GETTMAN
TC17/SC17A/MT33	R.R.	FRONK	TC17/SC17A/MT41	Carl A.	SCHNEIDER
TC17/SC17A/MT33	Eric	FUJISAKI	TC17/SC17A/PT62271-302	Frank	BLALOCK
TC17/SC17A/MT33	Kenneth E.	GETTMAN	TC17/SC17A/WG30	Kenneth E.	GETTMAN
TC17/SC17A/MT34	Larry	FARR	TC17/SC17A/WG30	B.T.	STEINBRECHER
TC17/SC17A/MT34	Kenneth E.	GETTMAN	TC17/SC17A/WG31	Kenneth E.	GETTMAN
TC17/SC17A/MT34	Hugh	ROSS	TC17/SC17A/WG31	Thomas J.	TOBIN
TC17/SC17A/MT34	Carl A.	SCHNEIDER	TC17/SC17A/WG35	Kenneth E.	GETTMAN
TC17/SC17A/MT34	David	STONE	TC17/SC17A/WG35	R.K.	SMITH
TC17/SC17A/MT34	Alan D.	STORMS	TC17/SC17A/WG35	Thomas J.	TOBIN
TC17/SC17A/MT36	Kenneth E.	GETTMAN			

TC17/SC17C/MT14	Ted A.	BURSE	TC17/SC17C/MT16	Phil	BOLIN
TC17/SC17C/MT14	Peter W.	DWYER	TC17/SC17C/MT16	Peter W.	DWYER
TC17/SC17C/MT14	Larry	FARR	TC17/SC17C/MT16	Kenneth E.	GETTMAN
TC17/SC17C/MT14	Kenneth E.	GETTMAN	TC17/SC17C/MT19	Kenneth E.	GETTMAN
TC17/SC17C/MT14	Anthony	HANSEN	TC17/SC17C/WG11	William	ACKERMAN
TC17/SC17C/MT14	Alan D.	STORMS	TC17/SC17C/WG11	Peter W.	DWYER
TC17/SC17C/MT15	Peter W.	DWYER	TC17/SC17C/WG11	Kenneth E.	GETTMAN
TC17/SC17C/MT15	Kenneth E.	GETTMAN	TC17/SC17C/WG17	Kenneth E.	GETTMAN
			TC17/SC17C/WG17	Joseph L.	KOEPFINGER

ACTIVITIES OF IEC SC17A/WG30

This document has been published

ACTIVITIES OF IEC SC17A/WG31

This document has been published.

ACTIVITIES OF IEC SC17A/MT32

This document has been published.

ACTIVITIES OF IEC SC17A/MT33

Eric Fujisaki – Maintenance of 61166 – Seismic

There has been a proposal for harmonization of IEC 62271-300 with IEEE 693, where Rulon Fronk would lead the effort. The committee has been invited to meet with IEEE in Vancouver.

ACTIVITIES OF IEC SC17A/MT34

Noted in the distribution of 17A/752/CDV.

ACTIVITIES OF IEC SC17A/WG35

No activity reported.

ACTIVITIES OF IEC SC17A/MT36

62271-100 is at FDIS stage.

ACTIVITIES OF IEC SC17A/MT37

There has been little progress and the SC17A officers will pursue the issue with the convenor.

### ACTIVITIES OF IEC SC17A/MT38

The US has submitted a draft document, based on a NEMA standard, for consideration as a replacement to the current IEC document.

### ACTIVITIES OF IEC SC17A/MT40

There have been three meetings and the draft is making progress.

### ACTIVITIES OF IEC SC17A/PROJECT TEAM 62271-302

Frank Blalock - New Part 302: High voltage alternating current circuit-breakers with intentionally non-simultaneous pole operation

### ACTIVITIES OF IEC SC17C/WG11

There is a need for US experts to participate in this activity.

### ACTIVITIES OF IEC SC17C/MT14

Ted Burse, Pete Dwyer, Larry Farr, Anthony Hansen, Alan Storms - Revision of IEC 60298, IEC 61330 and related standards

### ACTIVITIES OF IEC SC17C/MT15 & 16

Phil Bolin, Pete Dwyer – revision of IEC 60517

### ACTIVITIES OF IEC SC17C/WG17

The first CD has been distributed [17C/369/CD] for >52 kV Compact Switchgear Assemblies.

### ACTIVITIES OF IEC SC17C/MT19

See above.

## 6. TAG OPERATING PROCEDURE

As a reminder, voting members of the TAG must submit responses where notification has been transmitted that voting is required and should submit responses to documents with comments requested. The usefulness of the TAG is dependent on participation in the development of US proposals and US positions, comments and voting on IEC draft documents. As these documents are being considered with increasing frequency for adoption in the US as National Standard, it is important that US concerns, from general interest, users and manufacturers, be identified and efforts expended to address those concerns.

## 7. OTHER

Metric Only Directive – Implementation is currently scheduled for January 1, 2010. Responding to our inquiries, European counterparts indicated they are broadly in agreement with us and will be developing a position paper that may either call for permanent withdrawal or a further delay. Commission officials, who earlier rebuffed U.S. officials on the matter, have responded to quite



differently to ORGALIME, indicating a desire to not hurt European industry. **NEMA** supports dual labeling.

8. TIME AND PLACE OF NEXT MEETING

The next meeting is scheduled to be in October 2006 and should be in conjunction with IEEE PES Switchgear Committee in Milwaukee, WI. The Spring 2007 meeting is anticipated to be in Clearwater Beach, FL.

9. ADJOURNMENT

Reported by:

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Reviewed by Counsel:

cc:     J. Collins  
       E. Gray