# U.S. National Committee of the International Electrotechnical Commission, A Committee of the American National Standards Institute

# **Technical Advisory Group for IEC TC 14**

#### **TAG Administrator:**

National Electrical Manufacturers Association

1300 North 17<sup>th</sup> Street, Suite 1847, Rosslyn, VA 22209

Tel: 703-841-3253, fax: 703-841-3253

\_\_\_\_\_

# **MINUTES**

PLACE OF MEETING: SHERATON STATION SQUARE HOTEL

7 Station Square Dr. Pittsburgh, PA15219

DATE AND TIME: Wednesday, October 8, 2003

3:00 PM

PRESIDING OFFICER: P. Hopkinson, Technical Advisor

Members Present:

J. Corkran Cooper Power Systems

D. Foster Olsun Electronics Corporation

P. Hopkinson Hvolt, Inc.

S. Kennedy Niagara Transformer Corporation
J. Lackey Lackey Transformer Services

P. Payne PEPCO

H.J. Sim Waukesha Electric Systems

Members Absent:

C. Colopy Cooper Power Systems

J. Foldi Consultant R. Girgis ABB

C. Ko Lapp Insulator Company

R. Marek Dupont Advanced Fibers Systems
G. Morehart ACME Electric Corporation

W. Patterson ABB

Others present:

J. Arteaga Howard Industries

S. Choinski NEMA Staff, TAG Administrator

R. DelVecchio Consultant D. Fallon PSE&G

J. Kelly S.D. Myers, Inc., TC10 TAG

T.V. Oommen

J. Puri

P. Riffon

B. Simpson

ABB

Hvolt, Inc.

Hydro-Quebec

Quin-T Corp.

R. Thompson R. Wicks

Duke Energy – Energy Delivery Services DuPont

### 1. <u>CALL TO ORDER</u>

The meeting was called to order, attendance recorded.

#### 2. <u>APPROVAL OF THE AGENDA</u>

The agenda was approved as written

#### 3. APPROVAL OF THE PREVIOUS MINUTES

Minutes of the meeting held March 19, 2003, were approved as written.

## 4. REVIEW AND UPDATE OF USNC ROSTERS FOR TC 14

Members reviewed the TAG roster and made necessary corrections. It is in the industry's best interest to have as much support in developing the US position within the IEC. Official members are required to pay the TAG participation fee, and are eligible to participate on IEC working groups. TAG meetings are open to all interested parties.

## 5. REPORT FROM TAG ADMINISTRATOR

Two documents circulated since last meeting:

14/469/DC: IEC 60599: Mineral oil-impregnated electrical equipment in service - Guide to the interpretation of dissolved and free gases analysis - IEC/TC 10 Comments due to IEC January 16, 2004

14/468/DTS: IEC TS 60076-14: Guide for the design and application of liquid-immersed power transformers using high-temperature insulation materials Comments due to IEC November 7, 2003

USNC will be identifying those not paying the annual fee for TAG Administrator follow-up.

#### 6. REPORT FROM TECHNICAL ADVISOR

TC 14 leadership changed with Jim Fyvie replacing Dennis Allen as Chairman. Nick Bradfield is the Secretary; both are from the UK.

Obtaining financial support for IEC activities was discussed. NEMA and EEI had provided funding for IEC delegates in the past up to \$2000 per trip. This spread the costs as not to burden one company. Expect any Working Group to have two meetings per year and the Plenary meeting is held every two years.

**Current Circulated Documents:** 

14/469/DC: Gas in Oil Analysis and maximum allowable concentrations

Gas ppm levels too high, recommend C57.104 values used. US position will be to reject and add an "in some countries" clause.

14/468/DTS – A letter from Rick Marek was presented reminding members to provide comments and determine the US position.

Review of Working Groups and Maintenance Teams It was noted that some WG's were changed to MT's per IEC guidelines. WG's are for new projects, MT's conduct work on existing documents.

## **Current Working Groups**

| WG 21 Convertor Transformers | Sheldon Kennedy | Work Completed            |
|------------------------------|-----------------|---------------------------|
| WG 2 Short Circuit           | Jerry Corkran   | WG Abandoned – now MT     |
| WG 24 Dielectric Tests       | Loren Wagenaar  | No recent activity        |
| WG 25 Audible Sound          | Jeewan Puri     | Measurement Techniques    |
| WG 26 Tapchangers            | Craig Colopy    | Application Guide         |
| WG 27 Dry Type Transformers  | Wes Patterson   | Document Dormant – now MT |
| WG 28 Internal Protection    |                 | CSP Transformers          |
| WIG 20 W 1 T                 | D: 1 M 1 G      |                           |

WG 29 High Temperature Rick Marek, Convenor

Liquid Filled Transformer (14/468/DTS): US comment sent in on 2/28/03 to indicate concern for electrical contact heating and thermal runaway at elevated temperatures. Contact oxidation conforms to 10 C half-life rule

WG 30 Gas Insulated Transformers No US Interest Japanese Initiative

(14/461/NP): Technology not currently used in the US. What benefit is there for US suppliers? Program passed within IEC despite US opposition.

#### Maintenance Teams

MT 1 Revision of IEC 60354 Loading Guide for Oil Immersed Power Transformers

MT 2 Ability to Withstand Short Circuit Revision of IEC 60076-5

Committee draft document (14/464A/MCR) produced with special attention to radial and axial stresses for core type and shell type constructions, respectively. Follows Cigre initiative: CD 2003, CDV 2004, FDIS 2005.

#### MT 3 Revision of IEC 60289 Reactors

MT 27 Dry Type Transformers

(14/460/RDV): Controversial Fire Test where transformer coil is burned on a large bunson burner. This test is not used in the US but is favored by at least one European Country. The test has questionable practicality.

## 6. <u>TC 14 MEETING PLANS</u>

The next TC-14 Plenary meeting is planned for March 2004 in Frankfurt, Germany.

# 7. <u>OTHER BUSINESS</u>

There was no new business.

## 8. <u>TIME AND PLACE OF NEXT MEETING</u>

The next meeting will be held in conjunction with the Spring IEEE PES Transformer Committee meetings March 2004 in San Diego, CA.

## 9. <u>ADJOURNMENT</u>

The meeting adjourned at 4:20 PM EST.

**Reported By:** S. Choinski October 8, 2003