STLNA

1300 North 17th Street, Suite 1752, Rosslyn, VA 22209

Minutes

MEETING: SHORT-CIRCUIT TESTING LIAISON OF THE

NATIONS OF THE AMERICAS (STLNA)

PLACE OF MEETING: IEEE/PES Switchgear Committee Spring Meeting

Disney Contemporary Resort, Lake Buena Vista, FL

DATE AND TIME: Tuesday, May 6, 2014

6:00 PM - 8:00 PM Central

PRESIDING OFFICER: Mr. Paul Leufkens standing in for Mr. Kirkland Smith,

Management Chairman

Mr. Frank DeCesaro, Technical Liaison Director

SECRETARY: Ken Gettman for Gary MacFadden

MEMBERS PRESENT

Christopher Borck Eaton Corporation
Stephen Cary Eaton Corporation
Frank DeCesaro Eaton Corporation
Victor Hermosillo Alstom Grid, Inc.
Frank Lambert NEETRAC

Paul Leufkens DNV GL KEMA Labs

Tom Stefanski Powertech Laboratories, Inc. Thomas Tobin S&C Electric Company

MEMBERS ABSENT

Jose Luis Acosta LAPEM
Henrique Burd CEPEL Brazil

Patrick Chavez Powertech Laboratories, Inc.

Fernando Lagos Alstom Grid, Inc.

Chris Lettow S&C Electric Company

Juan Carlos Martinez LAPEM Ricardo Martinez LAPEM

Marcelo Guimaraes Rodrigues CEPEL Electric Power Research Center

Kirk Smith Eaton Corporation
Kresimir Starcevic KEMA Powertest, LLC
Kamran Tabarraee Powertech Laboratories, Inc.
Robert Warren KEMA Powertest, LLC

OTHERS PRESENT

Harm Bannink DNV KEMA

Paul Barnhart UL

Bob Behl ABB Inc.

Neil McCord Southern States Jim Ruebensam S&C Electric

1 CALL TO ORDER AND OPENING COMMENTS

Chairman Leufkens called the meeting to order at 6:00 p.m. and *a quorum was present*.

2 REVIEW OF GUIDELINES FOR CONDUCTING NEMA MEETINGS

NEMA Guidelines for Conducting Meetings were reviewed.
[See http://www.nema.org/About/Documents/Guidelines%20for%20Conducting.pdf]

3 REVIEW AND APPROVAL OF AGENDA

The agenda was approved as submitted. Subsequent to that approval, a request from Paul Barnhart to include a document discussion was approved for addition under other business.

4 REVIEW AND APPROVAL OF MINUTES

The minutes of the September 17, 2013 meeting were approved.



5 MEMBERSHIP

The membership of the STLNA committee was asked to review the roster to verify that all membership information (inclusive of committee voting status) was current, complete and accurate. It was noted that "Cooper Power Systems by Eaton" should be "Eaton's Cooper Power Systems".

6 CHAIRMAN'S REPORT

Mr. Leufkens provided a report. He noted that STL will be meeting in India, and there was a question as to which STLNA members could attend. It was noted that the agenda will include the following:

- Review of continued China membership
- Discussion of assessments
- Discussion of a change to the Czech Republic application (Zku on its own)

7 STLNA OFFICERS

- Tom Stefanski confirmed support from Powertech management, thus he is considered to be approved to serve as the Technical liaison.
- Frank DeCesaro confirmed Tokyo would be his last meeting.
- Both Frank DeCesaro and Tom Stefanski will be attending the Tokyo meeting.
- It was acknowledged that a new chair will be needed for the committee and Paul Leufkens indicated his interest in that position.

8 STL MEETINGS

No report was provided.

8.1 STL TC Scheduled meetings

Frank DeCesaro could not attend the meeting. Kirk Smith represented the STLNA. There was no report from the STL Technical Committee Meeting held in Rugby, UK.

- It was noted that the guide to the recloser standard has not been addressed and work is still needed to complete the document.
 - A discussion at a related IEEE meeting suggested that many of the STL comments would not likely be accepted for the IEC/IEEE document but they could still be used in the STL document as laboratory questions.
 - Tom Stefanski, Frank DeCesaro, and Harm Bannick will begin work on the guide this summer with the KERI representative to the STL-TC.

9 <u>DISCUSSION TOPICS FROM LAST MEETING</u>

9.1 Specification of Peak Multiplication Factor in Place of X/R

- There was considered that there is a need for a technical decision list related to this subject and others as a database reference resource. A motion was made but the decision on the subject was postponed until the next meeting.
 - o It was suggested to use the STL TC format for a template.
 - The list could serve as a record and mechanism for paper submission to STI
 - While much of the list could/would address IEEE issues, they could also facilitate submission to IEC.
 - Members agreed that a review of the constitution was needed to determine the acceptability of developing a decision list.
- Document 57.12.00 was indicated to contain a formula for the PM factor, alleged to be at least 1% accurate. However, the standard has no tolerance even though customers want the specified value of 17 to be exact. Members suggested it was a question of factor tolerance or a peak value. The problem was indicated to be that test houses may not have the capability to have an X/R of precisely 17.

9.2 Load Switching

 The concern to be addressed was identified to be whether to include a resistor under certain conditions, where the resistor can cause the DUT to have a DC component applied to the test points.

Action: a proposal was to be prepared to address this consideration. Does anyone have the wording of the proposal?

9.3 <u>Line Dropping</u>

- Members were notified that volunteers were needed to address this item.
- There is concern for specifying capacitances and tolerances.
- It was indicated that circuits need to be added but specified with sufficient tolerance to permit matching of laboratory capabilities with the requirements in the standard.

Action: further discussion is to take place during a web conference to be arranged.

9.4 <u>Line and cable dropping – series resistance</u>

Not addressed due to time limitations.

9.5 <u>Line and cable dropping – source capacitance/TRV</u>

Not addressed due to time limitations.

9.6 Reignition inrush current – fault interruption

Not addressed due to time limitations.

9.7 Ungrounded Neutral in Internal Arc Fault Testing

Not addressed due to time limitations.

10 SHUNT CALIBRATION PROJECT

Frank DeCesaro reported that Powertech, Eaton's Cooper Power Systems, and S&C laboratories have all finished using the STL shunt. KEMA Powertest is in the process of coordinating with the STL for shipping the STL shunt to KEMA Powertest.

Frank DeCesaro has been unsuccessful in getting the STL to contact LAPEM to also get the STL shunt scheduled for them. He will forward emails he has sent during the past year to Kirk Smith. Kirk Smith will contact the STL Secretary to determine how and why emails have not been responded to and to determine the steps to get LAPEM into the rotation for the STL Japanese shunt.

Frank DeCesaro reminded everyone that the labs are all to provide a record of the tests performed using the STL shunt. They should review Appendix H of the document Shun-Guide2012r.pdf which had been emailed to them.

4

11 FINANCIAL REPORT

The report for financial year 2014 to date was provided in a report.

It was noted that increased travel costs would be expected due to the location of the next STL meeting in Tokyo. Designated attendees were authorized to purchase their tickets and to add travel insurance.

12 NEW BUSINESS

Paul Barnhart queried the members as to whether interrupting devices behave differently with respect to an arc fault versus a bolted fault?

- It was suggested that an arc fault has a different and increased resistance inherent to the event and therefore would be easier to interrupt.
- Members agreed that a bolted fault would generally be the worst case except where the arc fault EMI could impact electronic control circuitry. It was stated that any such control circuitry would need to have a minimum EMI withstand.

13 TIME AND PLACE OF NEXT MEETING

The next meeting will occur on September 23, 2014 (dependent on the below proposal) in Asheville, NC in conjunction with the IEEE Power & Energy Society Switchgear Committee Meetings.

Members concurred that a request should be submitted to the organizers of the Switchgear Committee meeting for additional time for the STLNA meeting given the extended and useful discussion that is expected to take place during future meetings. It was also noted that any such scheduling should avoid conflicts with other meetings.

Action by Paul Leufkens and Frank DeCesaro

14 <u>ADJOURNMENT</u>

The meeting adjourned at 8:10 PM.

Reviewed by Counsel 5/19/2014

Prepared by: Ken Gettman 15 May 2014