Working Group on Voltages at Publicly and Privately Accessible Locations
Chuck DeNardo, Chair

Vancouver Convention Center
Vancouver, BC

(Room VCC West – West Meeting Room 116)
July 22, 2013
2:00 p.m. – 5:00 p.m.

Meeting Minutes

The Working Group on Voltages at Publicly and Privately Accessible Locations (aka the Stray & Contact Voltage Working Group) met at the 2013 IEEE PES General Meeting from 2:00 p.m. until 5:00 p.m. on Monday July 22nd in West Meeting Room 116 at the Vancouver Convention Center in Vancouver, BC. There were approximately 35 people in attendance. Following presentation of the mandatory patent infringement and litigation slides; and review/approval of the Memphis meeting minutes, Matt Norwalk gave a presentation titled: *Selection of Shunt Resistors for Human Involved S.V. Investigations*. He discussed the traditional use of a 500 ohm resistor and questioned whether it is the right value shunt resistor to be used when responding to human concerns of stray voltage (e.g. outdoor shower exposures). Matt recommended using a 1000 ohm resistor with a stacking connector instead of a shunt box with a push button so that customers can have a better understanding of what the engineer is doing during an investigation. Jens Schoene then led a discussion on how to gain access to the current version of the working group's Master Draft (pdf format) which is located on an internet site called SkyDrive. He also discussed the individual clause layout indicating that each clause has a lead author and each author can request access to his or her clause for their team members. He presented a list of clause sections and authors and asked the group to review the document and send their comments to the appropriate clause lead.

Doug Dorr of EPRI then presented: *The Importance of a Stray and Contact Voltage Data Collection Standard*. Doug's presentation emphasized a need to get the Trial Use Guide we're working on finished. He indicated we have learned many important things that would be useful to others attempting to make a stray or contact voltage measurement and this information needs to be shared (e.g. carry long remote reference leads, spend extra time making a clean, bare metal contact for measurement, and verify the references are not energized). Doug feels we are very close to having something that can go to ballot. Anthony Cedrone was scheduled to make a presentation concerning a structured approach to troubleshooting contact voltage concerns, but instead voiced concern and solicited feedback on Clause 6, the contact voltage clause. Several changes to the existing approved outline were considered including adding a clause specific to investigation protocol. This was thought possible because there are significant measurement consistencies between the various protocols (e.g. stray voltage and confined livestock, stray voltage and pools or boat docks, contact voltage). Also discussed was adding a clause addressing boat dock exposures and modifying Clause 6 to include more information on the investigation of overhead facilities.

In addition to its regular meeting, the working group held a Contact Voltage Panel Session on Tuesday from 9 to noon in VCC West - Room 114. The topics and presenters were as follows:

- The Results of Asset-Based Manual Testing of Utility-Owned Objects for Contact Voltage in New York State – Stuart Hanebuth
- Using Harmonic Measurements to Aid in Source Determination during Elevated Voltage Investigations – Sal Martino
- Measurement Techniques for the Evaluation of Contact Voltage on Publicly and Privately Accessible Locations – Dave Kalokitis
- The Link Between Contact Voltage and Manhole Fires and Explosions – Stuart Hanebuth

The meeting was adjourned following additional discussion of the importance of getting a draft to ballot.