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

Marriott Memphis Downtown
Memphis, Tennessee
January 14, 2013
1:00 p.m. – 4:00 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 Joint Technical Committee Meeting from 1:00 p.m. until 4:00 p.m. on Monday January 14, 2013 in Room L5 at the Memphis Cook Convention Center in Memphis, TN. There were approximately 45 people in attendance. Following presentation of the mandatory patent infringement and litigation slides; and review/approval of the San Diego meeting minutes, there was a discussion of the trial use guide outline that had been agreed to shortly after formation of the working group. The purpose of the discussion was to review the existing outline and determine if any modification was needed. There were few comments and no recommendations for change. Jim Bouford then led a discussion concerning a need to modify the working definitions for stray and contact voltage that the group had been using. The concern was that use of the term "power system" in these definitions implied utility stray and contact voltage sources only. Review of existing IEEE definitions of "power system" validated this concern. After discussion it was agreed the term "power system" faults would be replaced with "electrical" faults. The agreed to working definitions are now as follows:

> Stray Voltage: A voltage resulting from the normal delivery or use of electricity which may be present between two conductive surfaces that can be simultaneously contacted by members of the general public or their animals. Stray voltage is not related to electrical faults, and is generally not considered hazardous. (See also Contact Voltage)
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> Contact Voltage: A voltage resulting from electrical faults which may be present between two conductive surfaces that can be simultaneously contacted by members of the general public or their animals. Contact voltage is not related to the normal delivery or use of electricity, and can exist at levels that may be hazardous. (See also Stray Voltage)

Frank Lambert of NEETRAC gave a presentation concerning an NEC code change proposal that would specifically allow the use of isolation transformers in the wiring of marinas and boat docks. If accepted, this change could significantly reduce the possibility of harmful shocks and make these unique electrical exposure locations much safer. Matt Norwalk walked the group through two case studies related to personal shocks. The first case study involved swimming pool shocks near a grounded transmission structure; and the second was related to unacceptable levels of stray voltage at a residence adjacent to a substation. Matt then provided a brief review of the work he and Jens Schoene had been doing on the swimming pool investigation protocol and several other sections of the guide we're working on. After discussion it was agreed the draft would be broken down by section and sent to the mailing list for comment. The existing draft of Clause 7.1.2.3, Confined Livestock Investigation Protocol, was also reviewed and it too will be circulated for additional comment. There was a general consensus the confined livestock draft needed to be made less Wisconsin specific and more generic in nature.

The meeting was adjourned following brief discussions of the planned Vancouver Contact Voltage Panel Session, an update on the possibility of a voluntary anonymous contact voltage data repository and a solicitation of additional volunteers.