

Stray and Contact Voltage Working Group
Matthew Norwalk, Chair
Sal Martino, Vice Chair
Scott Kruse, Secretary

2024 IEEE PES GM
Seattle Convention Center
Seattle, WA

July 22, 2024
3PM – 5PM PT

Approved Meeting Minutes

Attendees

Voting Members

Bryan Beske – Safearth
Joe Grappe – Sentient Energy
Donald Hall – Quanta Tech
John Hofman - Quanta
David Kalokitis - Osmose
Scott Kruse - Osmose

Sal Martino – Duke Energy
John McDaniel – National Grid
Chris Mullins – Power Monitors, Inc
Matt Norwalk– SCE
Paul Ortmann – Idaho Power Co.
Rob Schaerer – Power Engineers

Non-Voting Members

Michael Allison – Power Engineers
Tom Cooke - EPRI
Paul Harris - Pacificorp
Darren Hoppins - Sensorlink
Jason Johns - EPRI
Michael McNally – Power Engineers

Sang Moon – KEPCO
Christian Orlando - IEEE
Grace Piercy - TVA
Rusty Soderberg – Consumer Energy
Jeff Wischkaemper – Texas A&M

The Stray and Contact Voltage Working Group met Monday, July 22, 2024. There were 23 people in attendance.

The meeting began with introductions of the officers and attendees followed by a review of the IEEE patent and copyright slides. There were no patents mentioned.

A quorum was obtained by downgrading voting members, that did not meet the attendance requirement, to non-voting members.

The agenda for the meeting was reviewed.

The group reviewed the meeting minutes from the New Orleans JTCM. The minutes were approved with a motion by John McDaniel and seconded by David Kalokitis.

Prior to the meeting the comment resolution subgroup concluded their efforts and incorporated all changes into a new draft, P1695 /D5. On April 25, 2024 an electronic vote was initiated by the Chair requesting a response from the voting members to approve P1695 /D5 for recirculation to the ballot group. 15 of 24 members responded with approval. The Recirculation Ballot was opened on May 21, 2024 and closed on June 4, 2024, with 100% approval. The draft along with all images and copyrights were uploaded and it is on the REVCOM agenda for the September 2024 meeting. If the draft does not get approved by REVCOM a PAR extension request must be submitted by October 21, 2024.

The Chair continued with a discussion on the next revision of the guide. He would like to add Webex meetings between the in-person meetings to get the next revision done in half the time. During the meeting the group added to the topic list, which the Chair will email to the working group following the meeting. The list will be circulated with the expectation of adding more content and getting volunteers to write.

The following topics were suggested and discussed:

- Adding sensors to the distribution system to detect NEV. It was mentioned that there is a system currently in the trial phase.
- New panel installation with a 5-jaw network revenue meter to measure the phase to neutral voltage to monitor for an open secondary neutral.
- Transmission right of way investigation.
- DC stray and contact voltage sources from DER, DC microgrids, telecom, cathodic protection.
- AC microgrids.
- 120V plug in monitors for open secondary neutral detection.
- 3rd party data sources.
- E-field sensor to look for abnormal disturbances.
- Substation investigations, 3rd harmonic modeling, find the paper written by Jens Schones for T&D World.
- Secondary network neutral current monitoring.
- Globalize 1695

It was determined the group would continue to operate as a working group until ready to submit a new PAR. There was additional discussion on whether standards like P1159 and P519 should have a section or annex on stray voltage.

New Business:

The T&D conference panel session went well.

Someone asked about holding a panel session at the PES GM 2025, the chair will circulate a request for volunteers to present. The deadline for submissions is November 2024.

No round table.

The meeting adjourned with a motion by John McDaniel and seconded by Sal Martino.

The next in-person meeting is scheduled to be held at the IEEE JTCM, January 2025 in Garden Grove, CA.