## IEEE PES Switchgear Committee Meeting

K1 – C37.122 IEEE Standard for High Voltage Gas-Insulated Substations Rated Above 52kV San Diego, CA – October 9, 2019

Chair:Ryan StoneVice Chair:Arnaud FicheuxSecretary:Jennings Graham (temporary)

- 1. Meeting called to order at 8am. Attendance was recorded.
- 2. Secretary presented the agenda

Recording of attendance Call for Notification of Essential patent Claims & other Guidelines for IEEE Working Group Mtg. Review of officers and previous minutes Review of working group assignments & proposed changes to draft Ratings for bus charging current Proposal for kinematic chain testing requirements New assignments and next meetings

Adjournment

- 3. Call for Notification of Essential Patent Claims & Other Guidelines for IEEE Working Group Mtgs were reviewed. No disclosures of any Essential Patent Claims were made after the call for patent claims was given.
- 4. Review of Officers and Previous Minutes:
  - a. Ryan Stone (Chair) not in attendance, Jennings Graham (temporary Secretary) led the meeting. No other officers were in attendance.
  - It was determined that a quorum had not been established during the meeting, so not official motion to approve minutes was issued – no comments on the minutes were issued
- 5. Changes to the previous version of the draft were strictly reviewed based on proposal from those assigned previously:
  - a. Definition of gas-insulated substation (GIS): parenthetical text was added to include "also commonly known as gas-insulated switchgear."
  - b. Section 5.2, rated insulation level the following text was added regarding breakerrated insulation: "In the event of a conflict in circuit breaker dielectric test levels between this documents and IEEE Std C37.06, this document shall take precedence."
    - i. It was suggested to change the reference of IEEE Std. C37.06 to IEEE Std. C37.04
  - c. Section 5.10, rated bus-transfer voltage and current of disconnect switches: text to be revised to avoid copyright issues with IEC (ref. IEC 62271-102: 2018)
  - d. Section 6: "Insulating gas" is used in order to be more general than "SF6 Gas."
  - e. Section 6 added the following text regarding hollow conductors: "Hollow primary conductors shall be properly vented at all times to allow for proper gas filling and gas evacuation."

- f. Section 6.3.3 bonding of enclosures: clarification of bonding vs. grounding connections (phase-to-phase bonding vs. grounding)
  - i. It was suggested to differentiate between bonding across flanges/insulators and cross bonding.
- g. Section 6.27 high-voltage circuit breakers the following text was added: "In case of disagreement, this document takes precedence over the above standards."
- h. Section 7.2.10 dielectric tests on auxiliary and control circuits the following text was added to amend the description of the power-frequency withstand voltage test on auxiliary/control circuits: "OR the test shall be performed according to IEEE Std C37.21 with test voltage of 1500V for 1 minute or 1800V for 1 second."
- i. Section A.4 tests to verify proper functioning of position-indication device the following text was added: "IEC 62271-102: 2018 subclause 7.105 applies."
- 6. Next meeting: IEEE PES JTCM, January 12-16, 2020, Jacksonville, FL
- 7. Meeting adjourned @ 8:30am

## Existing members:

- Becker, George // POWER Engineers
- Byron, Eldridge // Schneider Electric
- · Chiodo, Vincent // HICO America
- · Kim, SangTae // HICO America
- · Kim, Victor // HICO America
- Mitchell, Dave // Mitch & Associates
- · Sharma, Devki // Consultant
- Stage, James // Dominion Technical Solutions, Inc.
- Yoon, DongSun // HICO America
- · Zhu, Xi // GE Energy Management

## Non-member attendees:

- Bryant, Craig // Duke Energy
- Dwyer, Bernie // PECO
- Fennell, Bruce // Nashville Electric Service
- Hetzer, Matthew // PEPCO
- · Joohyun, Lee // Hyosung
- · Kohler, Thomas // Ameren
- · Lopez, Leo // WIKA
- Natale, Anthony // HICO
- Reyes, Roman // Bechtel
- Schuetz, Carl // ATC
- Slattery, Chris // First Energy

- Wen, Jerry // BC Hydro
- Woodyard, Terrance // Siemens
- · Young, Marcus // MEPPI