2017 PES Committee Meeting: Richmond, VA
D1-IEEE Std. 1427 Meeting Notes
May 9, 2017
Meeting Time: 13:00hrs-17:00hrs

MEMBERS ATTENDING: 8 of 15 members present
Next working group meeting will occur in Jacksonville, FL (January 7-11, 2018 at JTCM).

- Minutes review from Atlanta, 2016 meeting.

- **ACTION ITEM – 2016-1:** Marked-up draft for ballot to be added to the protected website, for members to review and comment. Draft for Ballot still needs to be finalized.

  Meeting Comment: COMPLETED

- **ACTION ITEM – 2014-1:** Hamid Sharifinia submitted an addendum to the PAR (June, 2014).

  Meeting Comment:
  Proposal below from previous meetings deemed not correct, upon verification.

    1. **EDITORIAL UPDATES (FROM PREVIOUS MEETING DISCUSSED)**: review from last meeting put on minutes and add issue for the close of parenthesis in EHV table.

        - TABLE 3 CORRECTION: Editorial correction to phase-to-ground column, clearances for 169kV system voltages. 56 inches = 1425 mm, not 1325 mm.

        - EQUATION CORRECTION: Table B.3, breaker/switch/bus voltage calculations. Change equation to:
        $E_B = \frac{2E}{n} - \frac{2-n}{n}\left[2S(T_A + T_B)\right] - \frac{2S\tau}{n}\left[1 - e^{-\frac{-t_{f+2(T_B+T_A)}}{\tau}}\right]$, as an example of proposed correction (noted by highlighted +, for change from -). KEEP ON MEETING NOTES FOR VISIBILITY, ISSUE RESOLVED WITH NO ACTION, Hamid to send confirmation showing equation is correct.

ACTION ITEM – 2016 -2: Guide mentions but does not include (clearly) how to apply relative air density in BIL equations. In section 6.3.1, the present standard states the following:

> The resulting minimum phase-to-ground air clearances are shown in Table 3. For elevations higher than sea level, the insulation strength decreases as a linear function of the relative air density (see 6.4.2). The sea level BILs and clearances must be divided by the relative air density. The clearances required by applicable safety codes may vary from the values calculated here (see Clause 7).

Meeting Comment:
Section 6.4.2 does not have an equation to solve for the relative air density (δ). Recommend modifications to text to clarify that we need to multiply by the altitude correction factor δ^m, not divide by δ. Wording developed in draft, during meeting and will be submitted to working group for comment.