

# 2013 Annual Meeting of the IEEE PES Substation Committees

## D1-IEEE Std. 1427 Meeting Minutes

April 30, 2013

- **PAR DISCUSSION:** PAR is approved, through 2015, to finish updates to this standard. Action item in PAR discussed. PAR actions are to make known editorial corrections and to "Examine entire guide also". Clarification issued that this means to examine the guide for additional editorial errors. Statement is not intended as an opening to change the scope of document, requiring the working group to pursue possible updates not intended by the scope of 1427. Additions of other items, following consideration by the working group as valid and/or required, should become part of the PAR for 2015 (assuming the request can be completed by 2015).
- **ACTION ITEM:** John Randolph commented that little information is available for clearances at a maximum system voltage of 1,100kV. John will continue to search for information/other standards that have addressed clearances 1,100kV. End goal, including clearances for a 1,100kV maximum system voltage in Table 3.
- **ACTION ITEM:** Keith Graham to contact BMC to determine if they have any research on clearances for 1,100kV. This action item is based upon comments from BMC, at a previous working group meeting, that BMC is working for a client in China that has requested designs at 1,100kV.
- **ACTION ITEM:** Hamid Sharifnia to contact Robert Saint, to learn more about his draft of the TIA for including an altitude correction factor in the NESC for tables relating to BSL.
- **DISCUSSION:** Future tutorials, full day or half day? Leadership asked if there would be any interest, from meeting attendees, in a Saturday tutorial (minimal). Asked if the Fall meeting is an option for a tutorial Conclusion is that the Fall meeting is a working group meeting only and the Annual meeting (over even the General Meeting) is proper time for tutorials.
- **DISCUSSION:** 1427 does not include (clearly) how to apply an altitude correction factor in BIL equations.
- **ACTION ITEM:** Team to research altitude correction factor for BIL. Boris Shvartsberg and Keith Graham to champion team for additional discussions at the next working group meeting, in Nashville of 2013.
- **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:  $E_B = \frac{2E}{n} - \frac{2-n}{n} [2S(T_A + T_B)] - \frac{2S\tau}{n} \left[ 1 - e^{-\frac{t}{\tau} + 2(T_B + T_A)} \right]$ , as an example of proposed correction (noted by highlighted +, for change from -).
- **DISCUSSION:** Should 1427 include more about insulation coordination, relating to lightning protection and surge protection. Insulation coordination is mentioned in the scope of 1427.
- **ACTION ITEM:** Hamid Sharifnia to contact Bill Chisholm, determine what is missing in 1427, related to insulation coordination. Now is the time to change the PAR, not when this is balloted.
- **OFFICER RECRUITED:** Keith Graham accepted invitation to serve as Secretary of D1 working group, invitation was extended by Chair and Vice Chair.