

# C37.68 Controls for Distribution Equipment

## April 26, 2010 Meeting Minutes

---

- Meeting called to order at 1:45 PM by Don Parker, chair.
- Self introduction of attendees was performed.
- The standard four IEEE patent information slides were presented.
- The minutes of the 9/28/09 meeting were displayed. Don reviewed the goal of the proposed guide. The minutes were approved as written.
- Don Parker informed the group that the draft 2 version of the document that was emailed on Sunday was incorrect. The correct one will be emailed to the group today. Everyone should delete the D2 draft received with yesterday's date.
- The question was raised why we do not cover submersible devices.
  - The scope from the PAR, as obtained in an October 2008 file, was read to the group. It did not exclude submersible. The draft document has comments of submersible
  - The group decided to add submersible to the document but to prioritize it as one of the later items to work on.
- Discussion regarding the Controls IEEE Grouper site
  - Don Parker sent an email to the members on the roster list this morning. This email contained two links to use.
    - The first link does not need a password.
    - The second link will allow you to upload to the site. Use the login id and password provided in the email.
    - Contact Don Parker if you need this logon information. It will not be part of the published minutes since they are open to the general public.
- Review of the existing document.
  - Don displayed the correct version of Draft 2. Some modifications were made to this draft during the meeting. Assignments were set for the working group members and noted in draft 2. Don will send this version of the draft out to everyone. **REMEMBER TO LOOK AT THIS DOCUMENT TO DETERMINE WHAT YOUR ASSIGNMENT FOR NEXT MEETING IS!** Please submit documents to Don Parker as you create them. Do not wait until the next meeting.
- Bob Behl made a presentation of documents he obtained from James Burke. James Burke's credentials were presented to the group. He has allowed Bob Behl to use parts of his book to extract the grounding section of it.
  - The table in the tutorial document would be good with a third column added for how the different items affect control equipment.
  - A lot of this is good for safety and equipment operation on the grid.
  - There are also issues dealing with transients coupled to the control electronics. To address this issue the document needs to discuss various methods and conditions for grounding techniques for the control, recloser, and voltage transformer.

- It was commented that we should explain the environment and not concentrate as much on traditional methods of protection for the electronics. More attention needs to be focused on protection for all I/O for the control such as installing TVSS devices etc.
- Antone Bonner made a presentation on mechanical vibration.
  - A question was raised if vibration testing is required in C37.60?
    - No, it is not.
  - Soulard commented that there are three areas of vibration considerations. 1) Vibrations from transportation/handling; 2) steady state vibrations while mounted on poles due to traffic, wind, etc; 3) disruptive event such as car crashing into pole or vault.
    - Voltage regulators can shake poles while they are changing taps.
    - Controls need to operate with “galloping” conductors without having false operations.
    - Electronic component connector/connection problems in service should be investigated further.
  - It was pointed out that there is an ASTM D-999 standard which is for standard test methods for vibration testing of shipping containers.
  - Royster commented that the manufacturers probably perform vibration testing now even though it is not required.
  - Soulard provided reference of CEI 60255-21-1 as vibration test acceptable criteria.
- Befus stated that control gear appears to have documentation needs. Documentation supplied by the manufacturers should completely and accurately reflect the operation of the equipment.
- Meeting Adjourned at 5:17 PM