

Working Group D2 Cable Systems (IEEE 525)
Meeting Notes of May 22, 2012 – Raleigh, NC

Chair: Debra Longtin
Vice Chair: Steve Shelton
Secretary: Brian Farmer

Meeting called to order by the Chair, Deb Longtin at 8:00, welcoming members and guests.

Total attendance: 30. 8 Members; 3 Corresponding Members (17 rostered members); 19 Guests

Barac, Rad	Member
Borden, Eric	Guest
Bougie, Jim	Guest
Buhle, Kevin	Guest
Cenzon, Ed	Guest
Davey, Tom	Guest
Day, Carson	Guest
Farmer, Brian	Secretary
Gaetz, Alan	Guest
Longtin, Debra	Chair
Luri, Gregory	Guest
Moreau, DJ	Guest
Nadeau, Mike	Member
Nuckles, Kim	Guest
Patel, Pathik	Guest

Patel, Shashi	Corresponding Member
Preuss, Craig	Corresponding Member
Reid, Toby	Guest
Shelton, Steven	Vice Chair
Shvartsberg, Boris	Corresponding Member
Smalls, JK	Guest
Spiewak, Erin	Guest
Stevenson, Robert	Guest
Strahl, Kenneth	Guest
Thibodeau, Eric	Guest
Thompson, Bill	Member
Watkins, Diane	Member
Widdefield, John	Guest
Zhang, Yaowu	Guest
Zook, Adam	Member

After the meeting, Alan Gaetz, DJ Moreau, Kenneth Strahl and Boris Shvartsberg will be changed to Member status.

1. Patent slides were shown.
2. Deb reviewed meeting notes from both the Chicago and Nashville meetings in 2011.
3. Reviewed the schedule. The intent is to get most of the draft done before fall meeting so the group can start a general review of the completed draft.
4. The main items in this revision are the addition of a large station example and adding more information on communication cables.
5. Discussed the general development and balloting process for the benefit of guests. Typically a tutorial is developed and offered after the standard has gone to ballot.
6. Communications Cables Material: Craig Preuss mentioned that recently a PSRC standard, C37.236 *Power System Protective Relay Applications over Digital Communication Channels*, was balloted. That standard has some information on cables

and connectors that might be useful for topics/issues in our standard. Looking for additional assistance with this material, several people volunteered to create the following **Communications Team**:

- Jim Bougie, Lead, Greg Luri, Ed Cenzone, Carson Day, Craig Preuss & Diane Watkins.

The group should focus on Sections **5 Communication Cable & 6 Fiber optic Cable** and **Annexes D & H**. They should also review the other annexes for applicable material. Also consider adding information regarding terminations.

7. Large Station Example: A new **Large Station Team** was formed.

- Alan Gaetz, Lead, Steve Shelton, DJ Moreau, Ken Strahl, Deb Longtin and Rad Barac.

Steve will also contact Randy Clelland to see if he can still assist. Will incorporate communications aspects after the communications group does their write up. Then have them review at next spring meeting.

8. Deb shared two documents submitted by Jody Cathey regarding paralleling of CT circuits (section 4.3.1.1). He is suggesting that paralleling is an acceptable, though not the preferred alternative. Two members mentioned that some eastern and one western utilities commonly use parallel conductors for very long runs. Large single conductors can cause termination problems. Adam will add a sentence noting paralleling is an option for long runs.
9. The list of prior assignments was reviewed and several sections were reassigned as noted below.

Furnish all input to Adam Zook and copy Brian and Deb by Sept 1.

adam.j.zook@gmail.com dlongtin@atcllc.com bkf1@pge.com

Section	Person	Action/Comment
4.3.1.1	Adam Zook	Adam will add a sentence noting paralleling is an option for long runs.
4.3.3	Mike Nadeau	Review comment/draft from Steve Brown regarding cable construction. (Adam to forward to Mike)
6.3	Adam Zook	Delete reference to Appendix C (which applies to copper conductors)
7	Dale Fox	Provide proposed draft language based on his own comments.
7.6	Joe Gravelle	Segregation (See Fall 2011 meeting notes)
8.11	Adam Zook	Provide reference paper on testing
Annex A Flowchart	Working Group	Agreed to move segregation (H) & redundancy (I) questions to above New Cable Raceway (E). Also consider if the re-check the conductor sizing box is needed? Should it be a Diamond?
Annex B		Submitted
Annex C		Submitted

Annex D	Communications Team	Review/Develop
Annex E		Submitted
Annex F	Dale Fox	Provide proposed text based on his own comments
Annex G	Shashi Patel and Carson Day	Review
Annex H	Joe G & Brian F	Review, clarify about DC power cable (e.g. MOAS, battery leads, emergency lighting). Clarify not necessarily intended for building wiring (e.g. lighting, AC, receptacles, etc.)
Annex I	Mike Nadeau	Review
Annex J	Boris Shvartsberg, Dewan Jamir	Boris general review, Dewan jamming ratio.
Annex K	Bill Thompson	Review
Annex L	Bill Thompson	Review and add new paragraph regarding terminations. Boris to send Bill sample requirement.
Annex M	Roland Youngblood	Review
Annex N	Diane Watkins	Review
Annex O		No review required
Annex P	Large Station Team	Develop

10. Review of other related standards and their status.

- Deb notified the group that a new working group is forming for IEEE 789 Standard Performance Requirements for Communications and Control Cables for Application in High Voltage Environments. There was an initial inquiry to determine any overlap with 525. It is felt that 789 focuses more on cable manufacturing (construction) and not on application (installation), which 525 focuses on.
- IEEE 422 has been balloted, but not sure of status.
- IEEE 1143 Shielding practices for LV cables also going through revision.

11. A general review of the document with changes to date commenced. Review of the draft was stopped after Section 6 due to lack of time.

12. Next Meeting is at the Holiday Inn in Nashville, October 8 – 11, 2012.

Meeting Adjourned 11:45.