

WG D2 Cable Systems (IEEE 525) Meeting Notes of May 17, 2011 – Chicago, II

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

Deb called the meeting called to order at 1:10. There were 31 persons present, 9 of whom were members, which established a quorum. (Membership at time of meeting was 15 members, 8 required for quorum.) Introductions of those present were made. The following were in attendance:

Brown, Steve	Member	McGann, Shawn	Guest
Cain, Brian	Guest	Nadeau, Mike	Guest
Chavis, Michael	Guest	Pozen, Jason	Guest
Drozdek, Michael	Guest	Preuss, Craig	Cor. Member
Eaton, Howard	Guest	Rahim, Muhammed	Guest
Engmann, Gary	Member	Sharifnia, Hamid	Cor. Member
Farmer, Brian	Secretary	Sharpe, Doug	Guest
Fox, Dale	Guest	Shelton, Steven	Vice Chair
Gajda, John	Guest	Stanton, Dan	Guest
Gravelle, Joe	Member	Stargel, Ryan	Guest
Haar, Charles	Guest	Steinmetz, Bob	Guest
Hobbs, Bob	Guest	Stephens, Brian	Guest
Jamir, Dewan	Guest	Thompson, Bill	Member
Klein, Lucas	Guest	Watkins, Diane	Member
Kunze, Andrew	Guest	Zook, Adam	Member
Longtin, Debra	Chair		

Dale Fox, Mike Nadeau and Doug Sharpe requested and will be changed to Member status.

1. The mandatory IEEE slides on patents/intellectual property were presented. (Note: slides were updated earlier this year.)
2. Notes from both Montreal 2010 and Nashville 2010 were reviewed. No corrections were noted and they were accepted as presented.
3. **525 PAR:** The Par was approved in March. Reviewed scope and purpose. It expires 2015. Tentative milestones are:
 - Drafts submitted Spring 2012
 - WG review Fall 2013
 - Complete draft prior to Spring 2014 meeting
 - Review draft at Spring 2014 meeting
 - Submit final draft to RevCom July 2014.

Par is available on the WG webpage under protected documents. One of the needs is the area of fiber optics. Group is looking to C group for help on this topic. They need input on cable/installation requirements from the user perspective to help narrow it down.

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Meeting Notes of May 17, 2011 – Chicago, II

4. The web page for this working group was reviewed to let people know that there are a lot of resources posted on the site. Folks were reminded of password for the protected files. If password is needed, contact Deb, dlongtin@atcllc.com, or Brian, bkf1@pge.com.

5. Review of large station example

Rad Barac made the following changes to the drawing prior to the meeting:

- Moved the trench in the 345kV area at maximum distance from the 345 kV bus.
- Added a high voltage conduit from the transformer tertiary to the station service pad-mount transformers.
- Added conduit for the OPGW fiber cable at the dead ends for the 345 kV and 138 kV lines.
- Added grading information for showing a high point ridge down the center of the substation North to South for drainage concerns.
- Added lights to dead end structures with accompanying conduits. (Lights were added just for equipment operation "SERVICE LIGHTS", NOT GENERAL AREA LIGHTING.)

Next steps: Randy C & Steve S to start write up and Randy to lead cable sizing calcs. Craig will develop communication part. Joe will provide info on fire protection. Example to be similar in format to existing small scale Annex O, but focus more on the new items. Rad B may also be able to help.

6. Review of Prior Open Items and New Assignments

Open items from previous meetings were reviewed, and the document as a whole was reviewed and assignments for various sections were made. The table below summarizes assignments and issues.

Brian to obtain final approved current version of existing document in Word and forward to Adam and post on website for use by members to make changes with revisions tracked.

Members are to start reviewing their sections as soon as possible. If you want to edit before Word version is available, copy only section of interest from the PDF file into a new Word document, then edit.

Adam to contact SA for latest template/formatting requirements.

For all items, return drafts or comments to Adam Zook with copy to Brian and Deb by 8/1.

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Section	Issue	Person to Address
4	General review	Mike Nadeau & Steve Brown
5 & 6	General review	Craig Preuss & Walt Constantine (Deb to ask)
7	General review	Dale Fox
7.6, Annex H	Segregation- control vs power – also check NEC especially if over 600 v. for personnel protection. Arc flash concerns should be addressed, see IEEE 1584. May need to segregate over 240 volt. Refer also to cyber or physical security standards?	Joe Gravelle, Brian Cain
8	General review	Brian Farmer
Annex A	General review for discussion next meeting	All
Annex B	General review	Dale Fox, Craig Preuss
Annex C	General review, clarify for copper cable only, Table C3 possible error/correction	Doug Sharpe
Annex D	Expand to include fiber optics, isolation devices and GPR. Related standards?	Craig Preuss
Annex E	General review	Bill Thompson
Annex F	General review	Dale Fox
Annex G	General review	Hanna Abdallah (contact Shashi Patel for assistance), Gary Engmann to review shielding and electrostatic/electromagnetic coupling.
Annex H	General Review	Joe Gravelle, Craig Preuss
Annex I	General review	Joe Gravelle
Annex J	General review	Boris Shvartsberg
Annex J 2.3 & J 4.1	Jamming Ratio, compare against IEEE 576	Dewan Jamir
Annex K, L, M & N	General review	Roland Youngberg

7. Related Standards

- a. **422** *Design of Cable and Raceway Systems in Electric Generating Stations* – Has gone through first ballot. Likely more work to do.
- b. **576**: *Recommended Practice for Installation, Termination, and Testing of Insulated Power Cable as Used in Industrial and Commercial Applications*
- c. **1185**: *Guide for Installation Methods for Generating Station Cables* - This standard is currently in balloting.

8. Next Meeting: Nashville, TN, October 2011. Specific date/location TBD.

Meeting adjourned.

Respectfully Submitted,
Brian Farmer, Secretary