IEEE 383 Ballot Comments

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:
  - "Shall inform the IEEE (or cause the IEEE to be informed)" of the identity of each "holder of any potential Essential Patent Claims of which they are personally aware" if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
  - "Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of potential Essential Patent Claims" (that is, third parties that are not affiliated with the participant, with the participant's employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6

IEEE-SA Standards Board Operations Manual

http://standards.ieee.org/develop/policies/opman/sect6.html#6.3

Material about the patent policy is available at

http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit http://standards.ieee.org/about/sasb/patcom/index.html

This slide set is available at https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt

Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted

Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
      - Technical considerations remain primary focus
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed … do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

IEEE 383 Ballot

- 55 People in Ballot Group
- 90% Returned
- 93% Affirmative
- 2% Abstention
- 67 Comments
  - 15 Must Be Satisfied

- We Meet IEEE 75%/75% Rules & Can Proceed

Time Line

- Reviewed All Comments & Will Answer
- Review Comments Proposed To Make Change
  - Need ICC & SC-2 To Agree on Changes
    - If Not, Leave As Is
  - Will Then Go For 10 Day Ballot
    - Comments Only On These Changes
      - If Additional Comments May Revert To Previous Wording
- Re-Ballot Late April
- Try To Get on June RevCom, But Tight
  - Material Needs to Be in At Least 30 Days Ahead
  - Else Next RevCom Meeting Oct 16th (?)
- Par Ends Dec 31, 2015

Normative References

- Added Reaffirmation Dates: Have on IEEE 101
  - IEEE 1-2000 (R2011)
  - IEEE 98-2002 (R2007)
  - IEEE 323-2003 (R2008)
- Moved Standards From Bibliography: Used In Body of Document
  - ICEA T-27-581
  - ICEA T-22-294
  - ICEA S-94-649 Change to **S-97-682 Here & Sec 7**
  - UL 44 **(Added Revision Yr)**
  - UL 2556

Definitions

- Nuclear Facilities
  - **Do not** Add or fusionable materials
    - Have fissionable now – Proposal is For Future
  - Add storage facility
    - Used in Storage Facilities

Priciples of Qualification

- Envelope changed to envelop
  - Typographical Error

6.1.1 Single, multiconductor, and multiplexed cables

- ~~The~~When the insulation and jacket ~~is assumed to be~~are thermoset~~.~~, the qualification shall proceed as outlined below. If one or more of the materials are thermoplastic or radiation can improve the performance of the materials additional samples that have not been thermally aged or irradiated shall also be included in DBE testing.
- Editorial

6.1.1 Single, multiconductor, and multiplexed cables

- Added (kV/**m**m) after volts/mil
  - Addition of Metric

6.1.3 Splices

- To qualify a multiconductor splice (i.e., electrically interconnecting three or more conductors) similar design characteristics including representative number of conductors, functional configurations and components shall be used. Design characteristics include configuration (In-line or “V” type), connection type (bolted or crimped), construction layers (jacket, insulation, shield, semiconductive), layer thickness, and cable interface (cable jacket/insulation materials, seal overlap length, sealing adhesive, and interface preparation).
- Editorial

6.2 Description of cables and splices

- The description or specification of cable and splice samples as a minimum shall include the following information as applicable.
- Editorial

6.2.1.3 Assembly

- Number and arrangement of insulated conductors, fillers, and binders, including filler and binder material identification.
- Editorial

6.2.1.4 Shielding

- Material identification, thickness, and form, including the braid angle and percent coverage for braided shields, percent overlap and lay of tape shields, and information on other shields such as insulation or overall static shield.
- Additional Information

6.2.1.5 Fillers and binders

- Material ~~type~~ identification, including ~~identification of compound,~~ manufacturer's ~~compound~~ identification ~~number~~ and material type.
- Editorial

6.2.2.2 Conductor connection

- Type (e.g., bolted, crimped, etc.), material identification, size and method of assembly.
- Additional Information

6.2.2.4 Materials

- Identification of all insulation, shields (e.g. in MV splices), mastic, and jacketing materials, including manufacturer compound identification numbers, thickness, color, and form.
- Additional Information

6.2.2.5 Characteristics

- As defined by the pertinent service requirements, including configuration, connection, construction layers, and cable interface. Other examples of pertinent service requirements include, but are not limited to, voltage, current, frequency, conductor temperature, and ambient conditions.
- Additional Information

6.4.2 Thermal and radiation exposure for normal service

- The coiled sample shall then be immersed in tap water at room temperature for a minimum one-hour "soak" period. At the end of the "soak" period and while still immersed, the coiled sample shall pass a voltage withstand test, conductor to conductor and conductor to water and shield if present, for five minutes at a potential of 80 Vac/mil (3.15 kVac/mm) of insulation thickness at a nominal line frequency of 50 or 60 Hz or 240 Vdc/mil (9.45 kVdc/mm) of insulation thickness. In addition to this test, a dc insulation resistance or high potential test shall be performed in accordance with ICEA T-27-581/NEMA WC53 to demonstrate jacket integrity for coaxial, triaxial, and twinaxial cables or other shielded cables requiring jacket integrity and dielectric capability.
- Metric and Additional Information

6.4.2 Thermal and radiation exposure for normal service

- Consideration should be given to acquiring ~~performance of~~ material condition data during or after the aging simulations.
- Editorial

6.4.4.1 Post-design basis event simulation test

- Upon completion of the DBE simulation, to demonstrate retention of a degree of flexibility, margin in electrical performance and the ability to withstand some movement and vibration, the samples shall be ~~straighten~~straightened (if bent) and coiled around a mandrel with a diameter of approximately 40 times the overall cable diameter and immersed in tap water at room temperature for a period of one hour.
- Editorial

6.4.4.1 Post-design basis event simulation test

- Some specialty cables, such as certain coaxial or triaxial cables are selected for their added insulation.
- Editorial

9.1 General

- Qualification plan or procedure, which contains the specified performance requirements, environmental service conditions and DBE parameters, ~~and~~ range of cables and splices being qualified, ~~and~~ an explanation of the methodology and bases for establishing qualification, including a description of and justification for the analyses and operating experience used as part of the qualification.
- Editorial

Rewrite

- The qualification plan or procedure shall contain the specified performance requirements, environmental service conditions, DBE parameters, range of cables and splices being qualified, an explanation of the methodologies and bases for establishing qualification. The bases for establishing qualification shall include a description of and justification for the analyses and operating experience used as part of the qualification.

QUESTIONS

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