



Committee Meeting Minutes

Codes & Standards

Committee Meeting Objective: Review, report, and discuss standard updates
 Date and Time: Monday, March 19, 2018
 Location: Bernalillo, NM – Room: Badger AB
 Time: 1:00 - 5:00p.m.
 Chairperson: Robert Simmons

Preparation

- Reading Standards Report article in the latest Powerline magazine.
- Review meeting minutes from Fall 2017 conference.
- Review proposal to NFPA110 attached below

Schedule

Item	Description	Conclusion
<i>Welcome</i>	Leader: Robert Simmons Introduce officers, Recognize first time attendees	Many 1 st timers. Good to see. Two way communications is the goal.
<i>Review Committee Initiatives</i>	Robert Simmons	Complete.
Review Mission statement, and initiatives of the C&SS committee	Robert Simmons	Complete.
Review and update of membership	Leader: Brad Affeldt Request any information relative to changes in personnel data from attendees	Complete.
Meeting minutes from the Fall conference in Minneapolis, MN	Leader: Jeff Jonas Request any amendment to minutes previously distributed and move to accept as appropriate	Motion made and seconded. Passed unanimously.
Presentation from Diesel fuel working group. (NFPA 110)	Leader: Michelle Hilger, Kurt Summers, Ted Olszewski See proposal made to NFPA110 below Attachment A. There will be discussion on the proposals and, if enough consensus, a call for vote to support it.	Michelle started off the presentation. See attached. NFPA 110 8.3.7 proposal needs work and will be worked on and presented at the EGSA fall conference. Ted O. next spoke on biodiesel. Introduced the National Biodiesel Board and Biodiesel Marketers. Suggestion was to follow their lead. Not the best alternative

		<p>for all applications. Looking for support of EGSA.</p> <p>Suggestion that we need to be proactive and take care of our fuels (influence standards ASTM-fuel, NFPA-installation and UL-equipment). Next ASTM meeting in June-18'. No solutions yet. Best advice is to maintain the fuel.</p> <p>TIA-temporary interim amendment can be used for NFPA 110 to change it now. TIA will be drafted in DD committee. Will look for support of EGSA board. A lot of interest in this topic and discussion.</p>
IBC, ASCE, BSSC, Seismic certification Working Group	<p>Leader: Robert Simmons</p> <p>Discuss some update in the ASCE 7-16. What can EGSA members do to affect the process. Progress on update and conversion to code language of EGSA best practice for seismic certification.</p>	<p>IBC does not write any codes, they only reference it. ASCE and BSSC do the code writing. Looking for EGSA representation on ASCE and BSSC. Motion made to have Robert Simmons to represent EGSA (Dean Weigand) and seconded (Jack Harris). Vote passed unanimously.</p>
Working Group update-Jeff Jonas, UL 2200	<p>Jeff Jonas</p> <p>Review and comment on ULC 2200</p>	<p>Working group meets on Sunday afternoon. Attended by Ric Quintero (UL) and Rick George (Intertek) Looking for more participation. Need to get EGSA to announce meeting in advance.</p>
UL 2200 -NRTL Discussion Panel	<p>Brad Affeldt, Rick George, Ric Quintero</p>	<p>Overview of changes that will be a part of UL2200 3rd edition. UL is still reviewing and addressing comments internally. Next step is technical conference call in April. STP vote in May is the current plan.</p>
UL2201 (Portable Generators)	<p>Jeff Jonas, Brad Affeldt</p>	<p>It is now an emissions standard. Not much relevance to this group.</p>
UL1008	<p>Herb Daugherty, Jeff Jonas</p>	<p>No report.</p>
UL 6200	<p>Jeff Jonas</p>	<p>Being worked on by UL led by George Langton. Preliminary comment period ended in November 2017. Will likely be released later in 2018'</p>

UL 1778 Uninterruptable Power Systems 2 nd Edition	Robert Simmons: Call for EGSA liaison, Open discussion	EGSA will reimburse travel and lodging for attendance at meetings. Dean Weigand volunteered to be EGSA's liaison.
NFPA 110, 111	Herb Daugherty, James Hunt	110-will be voted on at the June meeting to be released. 111-no activity.
NFPA 99	Herb Daugherty, Brad Affeldt	Starting next cycle (2021) in August of this year.
NFPA 70 Panel 13	Jeff Jonas	Reviewed the current status of the process for the 2020 version. Next step is first draft release in July. Encouraged public comments by members.
NFPA 37	Keith Page, Herb Daugherty	Roof mounted clearances and outside installation clearances. Over pressure protection and other new language.
NFPA (NEC)	Open discussion	No discussion.
IEEE Color Books	Herb Daugherty	Color books have been discontinued. They will be replaced by "." Standards. The process is long and arduous. Next meeting in May. Volunteer effort is lacking. Pertinent to our industry. No "burning" issues.
<p>IEEE 1547</p> <p>1547.1a Standard Test Procedures for Distributed Resources</p> <p>IEEE 1547.3 – "Draft Guide for Monitoring Information Exchange and Control of DR Interconnected with EPS"</p> <p>IEEE 1547.4 – Standard for Design, Operation, and Integration of Distributed Resource Island System with Electric Power Systems."</p> <p>1547.5</p> <p>IEEE 1547.6– "Draft Recommended Practice for Interconnecting Distributed Resources with Electric Power Systems Distribution Secondary Networks."</p> <p>IEEE 1547.7</p> <p>IEEE 1547.8 – Extended Use of IEEE 1547 Voltage and Frequency Ride through Requirements</p>	<p>Herb Daugherty, Marcelo Algrain, Mark Siira:</p> <p>Open discussion on any changes to the 1547 series</p>	<p>Marcelo will attend the Fall conference and provide a more comprehensive update.</p> <p>UL2200 calls for an evaluation to UL1741 if the generator is to parallel to the utility grid. UL1741 calls out IEEE 1547 for this test. IEEE is working on a ".1" (test method) draft standard by the end of the year.</p> <p>AHJ's are creating issues for compliance. Education is needed. If there is a change in UL2200 needed? Brad suggested a conference call to collaborate and resolve. Report back in Fall.</p>

<p>ISO 8528 ISO 8578-5: Reciprocating Internal Combustion Engines Driven Alternating Current Generator Sets – Part 5 Generator Sets. ISO 15615:Reciprocating Internal combustion engines – Measurement procedure for exhaust silencers – Sound power level of exhaust noise and insertion loss using sound pressure level and power loss ratio</p>	<p>Robert Simmons: Call for EGSA liaison, Open discussion</p>	<p>All of ISO is covered by SAE. Need a SAE member to be a part of ISO TC 70. ISO always ask for how many countries enforce it? No one says yes. Caution is that ISO compliance (typically is self-declared) can mean different things in different countries. Herb was participating but will not in future. EGSA should still have representation. Rino Sbriglia of HiPower would be willing to represent EGSA.</p>
<p>NECA</p>	<p>Ron Schroeder</p>	<p>No report.</p>
<p>PGMA</p>	<p>Jeff Jonas</p>	<p>Update on progress of G300 safety standard to include CO monitoring and shutdown requirements. Look for release in next few months.</p>
<p>Gulf Region/Middle East Activity</p>	<p>Brad Affeldt</p>	<p>Similar to CE. Technical file will be submitted to government for a certificate valid for one year. Any notified body can issue this certificate. Rohs and Reach requirements are active now in this region. Functional safety is still coming. Brad prepared a presentation but in the interest of time did not want to go through it. Will add to minutes.</p>
<p>Any New Business: Member feedback - What questions are most pressing, needed training or presentations.</p>	<p>Robert Simmons</p>	<p>Herb Whittall addressed the committee. Herb feels this committee needs to write an article in Powerline magazine. Herb is leaving but the information is needed for its members. Need to get the word out. PL is now quarterly. Article will be needed 2 times per year. Topics were not dictated can be chosen by this committee. Robert S. thanked Herb for his dedication to all things codes and standards and his service to EGSA. Herb was encouraged by the</p>

		<p>enthusiasm shown in the committee and felt it had a bright future.</p> <p>Steve Sappington suggested that this committee create a matrix of EGSA members that are involved in standards development activity to be used for the benefit of its members.</p>
Adjourn	Robert Simmons: Receive motion and vote on adjournment	Motion made and seconded. Vote carried unanimously.

ATTACHMENT A

Public Comment to NFPA 110 submitted by Michelle Hilger

8.3.7*

A fuel quality test shall be performed at least annually using appropriate ASTM standards.

Please see my additions and changes to the current 8.3.7* below as there is much confusion in the industry due to the broadness of the testing recommendations and information. It would be my privilege to assist in the upcoming editions pertaining to this Chapter and Section.

8.3.7***

A fuel quality test shall be performed no less than annually using appropriate test methods approved under ASTM D 975, *Standard Specifications for Diesel Fuel Oils*, to indicate fuel can be stored for a minimum of 1 year without degradation. Not all approved testing under D 975 specifications shall be required, but **a minimum testing of Bacteria/Fungi ASTM D6469, Water & Sediment ASTM D2709 and other foreign materials shall be performed** as where there is a separation of water from the diesel fuel, microbial contamination can occur. For fuels being stored for periods longer than 12 months, the **diesel fuel shall also be tested for ignition quality and performance by testing for a minimum of Cetane Index ASTM D4737** approved under ASTM D 975 standards.

Additional tests chosen should be recommended on several factors including but not limited to the following:

- 1) Geographical location and climate in which diesel fuel is being stored. Climates where the temperature does not get below freezing should not require the testing of the diesel fuels cold weather properties such as cloud point, pour point, and cold filter plug point.
- 2) The environment in which the fuel stored. See points referenced in Annex A 7.9.1.2 which suggest that fuel degradation accelerates in tanks subjected to temperature variations as it can lead to the presence of water and where there is a separation of diesel fuel and water microorganisms and fungi can grow and contaminate the fuel supply which can lead to general or pitting corrosion of steel tanks and components, possibly resulting in filter plugging, operational issues or a hydrocarbon release to the environment.
- 3) The material of the tank in which the fuel stored. See points referenced in Annex A 7.9.3.1 that states "Copper can promote fuel degradation and can produce mercaptide gels. Zinc coatings can react with water or organic acids in the fuel to form gels that rapidly plug filters." Tanks with copper and zinc material could recommend having Copper Corrosion testing performed by methods approved under ASTM D 975 specifications.
- 4) ASTM D 975 specification allows biodiesel concentrations up to 5% (B5) in diesel fuel with no separate labeling required at the pump. It is recommended to test for **% Biodiesel Concentration ASTM D7371** in a fuel supply being

stored for a minimum of 6 months as biodiesel blends are comprised of organic substances which accelerate the degradation of fuel if not properly treated. Acceleration is greater with any presence of microbiological growth and could possibly lead to sludge like substances within the fuel supply leading to clogged filters and operational issues.

5) All diesel fuel tanks filled after 2014, when the ULSD diesel fuel was made required for all NRLM engines and equipment, it is recommended to test for the **Sulfur Content ASTM D2622** to ensure all stored fuels meet the current USLD requirement which reduced Sulfur Content to 15ppm.

6) Diesel fuel overtime will lose its stability and hydrocarbons can agglomerate into larger particles. It is recommended, but not required to test fuel supply being stored for 6 months or longer for fuel aging and stability using approved methods under ASTM D975 specifications. This test can monitor the condition of the fuel currently and show the rate at which solids, particulates, gums, and varnishes may form, providing an idea as to whether the fuel is likely to degrade in six, 12, 24 months or longer.

Additional documentation suggested to be added from the NFPA 25 - Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems—2017 Edition is as follows:

- 1) If diesel fuel is found to be deficient in the testing required in 8.3.7, the fuel shall be reconditioned or replaced, the supply tank shall be cleaned internally, and the engine fuel filter(s) shall be changed.
- 2) After the restoration of the fuel and tank, the fuel shall be retested every 6 months until experience indicates the fuel can be stored for a minimum of 1 year without degradation beyond that allowed in above chapters.

Public Comment No. 13-NFPA 110-2017

State the problem that would be resolved by your proposed change and provide substantiation for the Technical Committee –

As a provider of diesel fuel testing predominately within the power generation industry, I believe the clarification and guidelines within the fuel quality testing requirements would eliminate much confusion and inconsistency nationwide, particularly when it comes to critical and emergency power operations. As a member of several associations and hundreds of customers, I have experienced that lack of guidance and education is largest and most consistent challenge in the field not only at the service level but especially at the end user level. In addition, it would certainly assist other regulatory firms that reference the NFPA110 regulations in understanding what to look for when enforcing the requirements within their jurisdiction.

Action Items (additional space on back)

Item	Person Responsible	Deadline
Task	Name of person assigned to complete task	Date and time task should be completed.

Codes and Standards Surveillance Committee Mission Statement:

Represents EGSA and its members' interests on select national and international industry codes and standards committees and reports back to the membership through *Powerline* magazine, Committee meetings, Action Alerts, and e-mail blasts. The Committee also:

- Develops recommendations and provides action regarding industry codes and standards development and review by request and as needed
- Surveys the membership and other industry professionals to determine the applicable standards it should monitor
- Provides the Association with a platform from which it may develop Recommended Practices for the proper application of codes and standards within the industry
- Educates EGSA members on standards, their application and interpretation