



IEEE PES STATIONARY BATTERY COMMITTEE

PES Stationary Battery Committee Meeting Minutes
Monday, June 11, 2007; Worthington, OH

June 11, 2007

1. *Introductions*

Robert Fletcher called the meeting to order at 08:00.

There are 60 members of the committee and 36 members were in attendance. There were 56 total attendees.

The PES Stationary Battery Committee thanks Rick Tressler for organizing the meeting. Rick gave a short presentation.

Each attendee introduced themselves.

Allen Byrne made a clarification to the minutes stating that the title of IEEE 1100 in the last minutes was incorrect and that the presentation on this document would be delayed until next meeting. The correct title is IEEE 1100 (Emerald Book) "Recommended Practice for Powering & Grounding Electronic Equipment". Tim Bolgeo made a motion to accept the minutes and Steve McClure seconded. The meeting minutes were unanimously approved.

Bob Fletcher announced a few changes to the working group schedules during the week.

Sam Shah is stepping down as chair of Nuclear Task Force WG. Jeff LaMarca will be taking over as Chair.

Jose Marrero is stepping down as the standards coordinator and from the chair of the standards subcommittee. He will become the vice-chair of the standards subcommittee. Jim McDowall has agreed to take over both positions from Jose.

2. *Standards and Working Group Status*

Jose Marrero and the working group chairs provided an update on the various standards.

PAR #/ WG	Subject	Chair	Last Issued	Status
450	Vented Lead Acid Maint and Testing	Clark	2003	Document under revision. A working group session is scheduled this week.
484	Vented Lead Acid Installation	LaMarca	2003	Was approved and published in 2003. The re-affirmation process has begun.
485	Lead Acid Sizing	Fletcher	1997	The revision is ready to go to ballot.



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PAR #/ WG	Subject	Chair	Last Issued	Status
535	Nuclear Battery Qualification	R. Beavers	1994	Approved revision by IEEE in December 2006 and should be published in the next few months.
1106	NiCad Install, Maint, and Testing	McDowall	2005	No action
1115	NiCad Sizing	McDowall	2000	Reaffirmed in 2005. The amendment has been approved.
1184	UPS Battery	Patel	2006	Approved revision in 2006.
1187	VRLA Installation	Jump	2002	PAR opened. A working group session is scheduled this week.
1188	VRLA Maint and Testing	Cantor	2005	No action at this time.
1189	VRLA Selection	Marrero	1996	A few comments have yet to be resolved the week and then the document will be re-circulated.
1375	Battery Protection	Epstein	1998	No action required until 2008.
1491	Battery Monitoring	Cotton	2005	A working group session is scheduled this week.
1578	Spill Containment	Taylor	Draft	Approved last week.
1625	Portable Computer Batteries	Layton	2004	There is an open PAR. See Ms. Nielsen's presentation for more information.
1635	Ventilation Document	Clark	Draft	Is in pre ballot.
1657	Technician Qualification	Ashton	Draft	A working group session is scheduled this week. The document is expected to be balloted after this meeting or next.
1660	Battery Cycling	Corey	Draft	The document should be balloted within one year.
1679	Emerging Battery Technologies	McDowell	Draft	Meeting this week. Parent document should be ready for ballot within the year
1725	Cell Phone	Latham	2006	Attempting international adoption. See



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PAR #/ WG	Subject	Chair	Last Issued	Status
	Battery			Ms. Nielsen's presentation for more information.
1825	Digital Camera and Camcorder Batteries		Draft	PAR issued September 2007. See Ms. Nielsen's presentation for more information.

Bob Fletcher presented an award to Samuel Norman for two years of service as the PES-SB Chair.

Samuel Norman has agreed to be the awards chair for the PES-SB committee. The past chair will be the awards chair in the future.

3. *Interpretations report.*

None requested during this period.

4. *Coordination*

ATIS (Alliance for Telecommunication Industry Solutions) There was recently a two day meeting in Minneapolis. T1.311 (telecom power) and T1.315 (operating voltage range) are being prepared for re-ballot. There is a new draft standard for power cable. There is also a request for a new standard on telecom equipment efficiency. The next meeting is scheduled for September 24-28 in Miami.

Telcordia – Jim McDowall reported that there is a new standard, GR-3150 (Generic Requirements for Secondary Non-Aqueous Lithium Batteries). The standard is approved and will be issued very soon.

SCC-21 –Garth Corey reported that Jay Chamberlin is now fully retired. Peter McNutt is the new chair of the committee. The committee is looking for volunteers to work on standards.

Steve McClure made the following announcements:

CODES WORKING GROUP

The working group was created at the winter meeting in Chattanooga to examine and propose necessary changes to codes on batteries. The committee met several times via web meeting to review Article 480 of the National Electrical Code (NEC) for batteries. The group rewrote most of the Article and will submit it for consideration in the next code cycle (2011 NEC), via SCC 18. Next action will be to consider proposals for the Uniform Fire Code (NFPA 1) and NFPA 70E, both of which have deadlines in August 2007.



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The codes group also reviewed the most recent NEC changes and noted the following items relating to batteries:

- 1) Section 240.21(H): Overcurrent protection should be as close as possible to the battery terminals.
- 2) Section 480.5: Disconnecting means required on all ungrounded conductors from batteries with voltages greater than 30 volts. The disconnect should be visible and readily accessible from the battery.

MSDS TASK FORCE

The task force was created at the winter meeting in Chattanooga to examine existing Material Safety Data Sheets (MSDS) to see if there should be a standardized format for presenting safety information on batteries. Despite attempts to meet by web meeting, attendance was too low to accomplish anything. The TF will attempt to meet again in the next semester.

GLOSSARY WORKING GROUP

Working group was created to standardize terminology used in all stationary battery standards. The group started with about 1500 definitions for almost 500 terms, and is about 2/3 through the list. The group activity should be completed by the next summer meeting (possibly earlier). The final product will be an internal guidance document for use by the StaBat committee that will not be made public.

The next Battcon meeting is scheduled for the week of May 5-7, 2008.

Mike Jump announced that there was a discussion on DC arc flash during the technical meetings on Sunday. A synopsis of the discussion was that there was little or no knowledge of the arc flash effects from dc. Mike is going to join the IEEE 1584 (arc flash) working group. The arc flash community is planning to perform some dc arc flash testing, but there is not funding available at this point to complete the testing.

Nuclear Task Force WG – Steve Clark announced that there will be a discussion of TSTF 500 and reg guides 128 and 129 during the nuclear task force working group this week.

The following new PES SB members were announced:

Paul Hectors
Dan Lambert
Russell Miller
John Polenz

5. *Technical Activities*



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Panel Sessions - A discussion was held on possible panel sessions for the next meeting. After voting from a broad selection of topics, the following panel session topics were chosen:

Tutorial on Li batteries - Jim McDowall - Chair

Battery Failure Mechanisms - Steve Clark - Chair

6. *Site Selection Committee*

January 2008 – Dallas, TX - Steve McClure

Jan 20-25, 2008

Richardson, TX

Holiday Inn Select

Room cost includes breakfast and Lunch

Summer 2008 – Chicago, IL – Kurt Uhlir

Winter 2009 – Fort Lauderdale, FL - Dan McMenamin

Summer 2009 - TBD

Winter 2010 - San Diego, CA – Bansi Patel

See the Web Site for more information & other possible future locations.

7. *New Business*

Bob Fletcher announced that there is now a PES history committee. The PES history committee is looking for volunteers. The goal of the PES history committee is to ensure PES topics are included in the IEEE History Center. The following is a brief description of the IEEE History Center:

The IEEE History Center was established in 1983 to honor significant achievements in the history of electrical engineering and computing. The mission is to preserve, research and promote the history of information and electrical technologies. The Center maintains many useful resources for the engineer, for the historian of technology, and for anyone interested in the development of electrical and computer engineering and their role in modern society.

To be designated an achievement it must be at least 25 years old, must have involved a unique solution to an engineering problem, and must have had at least regional impact. To date there are 75 milestones (for all of IEEE), throughout the world.

Contact Bob Fletcher if you are interested.

Web page

- 1) A PES-SB summary developed by Steve Clark will be posted on the PES-SB web page



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- 2) A new electronic form for applying for PES-SB membership will be posted on the web site.
- 3) Instructions for adding your email to the PES-SB email list will be posted on the website.

Tom Croda announced that he is a member of IEEE press editorial board. The committee is looking for people who are interested in writing a book. There is also a new dc power systems design book for telecommunications. Contact Tom Croda for details.

Contact Samuel Normal if you are interested in upgrading to senior IEEE membership. Samuel is coordinating an effort to upgrade PES-SB members to senior grade.

Jim McDowall demonstrated a new tool for adding member names to working group rosters. Each member must use this tool to be included on a working group roster. All members must disclose who they work for and their affiliation. The affiliation should be the organization that is funding their work on the committee.

Mary Lynn Nielsen (Director Corporate Programs – IEEE Standards Association) delivered a presentation on the corporate standards. The presentation is attached.

John D. McDonald (president of PES) delivered a presentation on the PES organization. The presentation is attached.

At this time, the meeting was recessed.

Working groups were convened for standards processing. The working groups meeting are P450, P485, P1187, P1189, P1491, P1635/200, P1657, P1679, the Nuclear Power Working Group, and the Battery Definitions Working Group.

Tuesday, June 12

Working Group meetings continued.

Wednesday, June 13

Working Group meetings continued.

Thursday, June 14

Working Group meetings continued.



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11:24 am: The full committee was re-opened to discuss progress of the working groups and sub-committees.

Committee and working group progress and action items are listed in their respective minutes.

At this time the meeting was adjourned at 11:36 am.

Respectfully submitted,
William Cantor



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Instructions for the WG Chair

- **At Each Meeting, the Working Group Chair shall:**
- **Show slides #1 and #2 of this presentation**
- **Advise the WG membership that:**
 - The IEEE's patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
 - Early disclosure of patents which may be essential for the use of standards under development is encouraged;
 - Disclosures made of such patents may not be exhaustive of all patents that may be essential for the use of standards under development, and that neither the IEEE, the WG, nor the WG Chairman ensure the accuracy or completeness of any disclosure or whether any disclosure is of a patent that, in fact, may be essential for the use of standards under development.
 - Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
 - That the foregoing advice was provided and the two slides were shown;
 - That an opportunity was provided for WG members to identify or disclose patents that the WG member believes may be essential for the use of that standard;
 - Any responses that were given, specifically the patents and patent applications that were identified (if any) and by whom.



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Slide 1

IEEE-SA Standards Board Bylaws on Patents in Standards

6. Patents

IEEE standards may include the known use of essential patents and patent applications provided the IEEE receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard [essential patents]. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent or patent application becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of either:

a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed IEEE standard against any person or entity complying with the standard; or

b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

This assurance shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable during that period.

Slide 2

Inappropriate Topics for IEEE WG Meetings

- Don't discuss the validity/essentiality of patents/patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't be silent if inappropriate topics are discussed... do formally object.

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

This slide set is available at <http://standards.ieee.org/board/pat/pat-slideset.ppt>