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IEEE PES STATIONARY BATTERY COMMITTEE

## **PES Stationary Battery Committee Meeting Minutes**

**Monday January 23, 2012 San Juan, Puerto Rico**

### **General Meeting**

#### **1. Meeting Opening and Introductions**

The meeting was called to order by committee Chair Bill Cantor at 8:00 a.m. on Monday, January 23<sup>rd</sup>.

As of January 23<sup>rd</sup>, 2012, there were currently 55 members of the SBC.

There were 44 people attending the general session, 31 of which were voting members of the Committee.

Welcome to all attendees, members and visitors. The attendee list was sent around. Introductions by all attending were given.

Jose Marrero and Tania Martinez-Navedo organized the San Juan meeting. Jose provided a review of the site logistics, meals, fees, etc. Thanks to them both for their time and efforts to organize this meeting.

The minutes from June 2011 Montreal meeting were approved.

#### **2. Document status:**

##### *Standards and Working Group Status*

Bill Cantor 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	2010	Changes needed. Need to decide whether to split the document into a nuclear standard.
484	Vented Lead Acid Installation	LaMarca	2002	Reaffirmed in 2008. Need to work on this in 2013. Possible affirmation vote.
485	Lead Acid Sizing	Fletcher	2010	No action.
535	Nuclear Battery Qualification	R. Beavers	2006	Getting ready to ballot.



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PAR # / WG	Subject	Chair	Last Issued	Status
946	DC Systems Design	Haissam Nasrat	2004	PAR opened in Montreal to address remaining negatives. Will address here.
1106	NiCad Install, Maint, and Testing	McDowall	2005	Reaffirmed 2011
1115	NiCad Sizing	McDowall	Reaffirmed 2011	Revision pending
1184	UPS Battery	Patel	2011	Will be splitting up the selection side and move to 1189.
1187	VRLA Installation	Miller	2002	Now finalizing so the document can go to ballot by March 2012. Needs to be moved along quickly. No further PAR extensions should be done.
1188	VRLA Maint and Testing	Cantor	2004	Reaffirmed in 2010. Working on completing the amendment
1189	Battery (VRLA) Selection	Marrero	2007	PAR was submitted by WG chair June 2011
1375	Battery Protection	Uhlir	1998 – R2003	Open PAR to the end of 2012. No action this session.
1491	Battery Monitoring	Lambert	2005	Last ballot complete with 93% now going to RevCom
1578	Spill Containment	McCluer	2007	Working on a PAR.
1635	Ventilation Document	Clark	Draft	Ballot complete. Comments review in process.
1657	Technician Qualification	Ashton	2009	No action.
1660	Battery Cycling	Corey	2008	No action.
1679	Emerging Battery Technologies	McDowall	2010	No action.



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PAR # / WG	Subject	Chair	Last Issued	Status
1625	Portable Computer Batteries	Layton	2008	No Action
1725	Cell Phone Battery	Howard	2006	Open PAR and currently in ballot.
1679.1	Emerging Technologies	Nispel		Working on subsidiary document. PAR ends at the end of 2015.
1679.2		Chatwin		WG meeting this session

### 3. Coordination Reports

**ATIS report** by Curtis Ashton - Completed ASTM wire sizing standards. High voltage 380 VDC standard is in progress. Past chair, Tom Croda passed away and was the ATIS chair. Assistance in the group is needed. Membership requires a fee to participate. Curtis also discussed Telcordia and NEBS, GR standards, how they work, what they do, etc.

**UL/UL 1973** - Troy Chatwin - Discussed this Standard on stationary batteries to be published. This will have significant effect on all stationary battery systems. The vote on this standard is upcoming.

UL's Collaborative Standards Development Systems (CSDS) is the tool used to comment on, and participate in, the development of a UL standard. UL CSDS site is located at <http://csds.ul.com>. Access to the site is free, but registration is required. Access allows a person to comment on any UL standard. Membership is limited to maintaining a balance within industry segments.

UL 1973 is the Standard for Batteries for Use in Light Electric Rail (LER) Applications and Stationary Applications. LER is basically commuter rail.

The comment period on DRAFT of UL 1973 ends 23 Jan 2012 (today). This is not for vote right now. Comments will be reviewed and addressed, then resubmitted to industry for comment. I expect this standard to be approved late in 2012.

**IEC Participation** – Troy Chatwin - The U.S. National Committee is managed by ANSI. The contact person at ANSI is Kevin Sullivan.

**Battcon 2012** – Rick Tressler reported on Battcon 2012 dates and provided an overview of the



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conference. Battcon 2012 will be held at the Westin Diplomat May 15-17 in Hollywood, FL. Details at [www.battcon.com](http://www.battcon.com). Note – The conference begins TUESDAY this year and ends on Thursday.

**Infobatt** – Zbig Noworolski - reported on the next Infobatt Canadian battery conference. White papers are welcomed but not necessary. Presentation slides required. Infobatt will be held in downtown Montreal. The date is March 18<sup>th</sup>, 2013 in Calgary. Details can be found at [www.infobatt.com](http://www.infobatt.com). There will be no conference in 2012.

**INTELEC** – Steve Vechy - 34<sup>th</sup> conference September 30-October 4<sup>th</sup>. Location is Scottsdale, AZ. Details at [www.intelec.org](http://www.intelec.org). Call for papers is out. It ends March 16<sup>th</sup>. There will be numerous recreation programs for attendees and spouses.

**NFPA 70E** - Steve McCluer – Code making panels just met over the past 2 weeks. SBC submitted 28 proposals were submitted to NFPA 70E. Installation requirements were asked to be submitted to the NEC as opposed to NFPA 70E. Steve explained the process involved for submitting proposal for changes to codes. NFPA 70B (maintenance) is now in the comment stage. Steve welcomed one and all interested in participating on this, please contact Steve to get information.

**Battery Working Group Glossary** – Steve McCluer – Now looking at making the glossary a Standard. Further discussion and vote to be held later in the general session as to whether a PAR will be opened to create the WG to develop into an official document.

**SAE** – Bill Cantor – Anyone interested in learning more about this group and how it relates to battery standards, contact Bill Cantor.

**MSDS Standardization** - Gary Balash – Still working on standardizing MSDS sheets. NFPA diamond was discussed. Level 2 reactivity (white diamond) is of concern. Electrolyte is not perceived to be reactive and the group is attempting to have this reactivity stepped down to level 1. Preliminary test data indicates that the water reactivity of electrolyte is a zero.

**Nuclear Task Force** - Jeff LaMarca – The Group meets once every SBC meeting. Usually have 10-15 people attending. The group will be meeting during this session to discuss various topics that are nuclear plant related.

**PES General Meeting** – July 22-26, 2012 San Diego. Bill Cantor, SBC Chair, will be attending and chairing a paper session. There will be battery-related papers presented; most are research related. Details at [www.pes-gm.org](http://www.pes-gm.org).



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**NERC PRC-005-2 Draft** – Jose Marrero and Chris Searles presented information relating to the current status of the draft. Concerns were raised relating to the validity of the proposed standard, PRC-005-2. Rick Tressler motioned to develop a Task Group to form an opinion and consensus on the draft and send that to the NERC Drafting Team. The motion was seconded. Discussion followed. A vote was called and passed unanimously. Chris Searles is chairing this group. If you are interested in being part of this task force, contact Chris at [chris.searles@baebatteriesusa.com](mailto:chris.searles@baebatteriesusa.com).

**4. Site Selection Committee**

January 2012 Report

The Site Selection Subcommittee would like to plan meetings and select locations in advance. In order to achieve this goal, it will require volunteers to host and/or plan an upcoming Stationary Battery Committee meeting.

**Next Meeting - Summer 2012** - Steve Vechy gave an overview of the summer 2012 meeting in Philadelphia, PA. The meeting will be held June 24 – 28 at the Crowne Plaza Philadelphia Downtown hotel. A rental car is not recommended. Much can be accessed by walking, shuttle and taxi. Hotels will likely be heavily booked downtown.

Go to <http://www.ewh.ieee.org/cmte/PES-SBC/meetings.html> to book.

The following companies and/or individuals have indicated that they would like to sponsor/organize a meeting. Please find below the list of preliminary meeting locations:

<b>Date</b>	<b>Location</b>	<b>Sponsor</b>
Summer 2012	Energys Philadelphia, PA	Steve Vechy June 2012
Winter 2013	BAE Tucson, AZ	Chris Searles January 2013
Summer 2013	API Kansas City, MO	Edward Rogers June 2013
Winter 2014	ICCNEXERGY San Diego, CA	Bansi Patel January 2014
Summer 2014	APC Providence, RI	Dan Lambert June 2014
Winter 2015	XXX XXX, XX	January 2015
Summer 2015	Alber?? Columbus, OH	Rick Tressler?? June 2015



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Chris Searles has volunteered to join Wayne Johnson and his efforts to work with the Site Selection Subcommittee.

Please keep in mind that locations are subject to change base on prevailing conditions at each sponsors company. This list serves as a guideline and can be changed with sufficient notice to the group.

A break was taken at 9:45  
The general meeting resumed at 10:10

### 5. Sunday Technical Sessions

A discussion was held for the Sunday Technical Sessions at the next meeting on Sunday June 24, 2012 in Philadelphia. The following topics were selected by vote of the attendees.

Topic #1 - Impact of Fukushima on Stationary Batteries – Jeff LaMarca, Chair  
Topic #2 – NERC PRC-005 Draft – Chris Searles, Chair

### 6. New Business

**IEEE Staff Liaison** – Mike Kipness presented on IEEE-SA policy changes. A copy of Mike’s slides will be available on the SBC website. Members are encouraged to review these slides so they may understand very important changes that have occurred that affect the Committee and its operations.

**Awards** – Samuel Norman announced 30+ year participants on the SBC. They included Kyle Floyd for 30 years and Ramesh Desai for 33 years. Congratulations to both of these gentlemen for their support of the SBC and their expertise over the years!

**Battery Glossary Update & PAR** – Steve McCluer thanked the participants who were involved in the process of the battery glossary for their hard work with special thanks to Curtis Ashton, Jim McDowall and Jay Chamberlain over the past several years. Additionally, Steve placed a motion on the floor which was seconded, to create a PAR to make the glossary an IEEE Guide. Discussion followed. A vote was taken. The motion passed unanimously. The initial meeting was held at 3:00 p.m. Monday.

**PES Affiliation with SBC** – Bill Cantor discussed SBC’s affiliation with PES (Power and Energy Society) and provided some history of the SBC (Stationary Battery Committee), PES and SCC (Standards Coordinating Committee). The feeling is that SBC does not fit well with PES and that, as a group, we do not take advantage of PES affiliation. Attendee discussion, comments, etc. were exchanged.



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**Non-responsive voters** – Some SBC members have signed up to ballot on standards, and then do not participate in the balloting process. Failure to ballot can result in being barred from future standards balloting. If you cannot ballot, then indicate so on MyProject, for instance, “insufficient time”, “lack of expertise”, etc. Simply failing to ballot is not acceptable.

**Attendance at WG meetings** – If you fail to attend the General Membership meeting on Monday, you will not be counted as having attended even if you attended the working group meetings that week. Please schedule your time to include attendance at the Monday morning meeting.

**SBC Membership** – Bill Cantor encouraged attendees to join the committee, the IEEE and PES. Bill also reviewed the requirements to become a member. Contact Bill Cantor for details. Note – if you wish to ballot on IEEE standards, you must be a member of the IEEE Standards Association (SA).

**IMAT IEEE Meeting Attendance Tool**– Jim McDowall – presented slides on this online tool which intended to serve as working groups’ attendance roster. This will replace the old paper sign-in sheets. The SBC is going online with this tool, so all working group chairs should make use of it immediately. Jim’s slides will be available on the SBC website shortly. You need an IEEE web account to use this tool. See <https://seabass.ieee.org/imat/index> for additional information.

**Passing of Tom Croda and Dave Feder** – Bill Cantor mentioned the passing of both Tom and Dave and the fact that both of these people contributed tremendously to the betterment of the SBC and the industries they served. They will be sorely missed.

**Submitting drafts and minutes** – Bill Cantor reminded WG chairs that drafts and rosters need to be submitted in a timely manner to Secretary Rick Tressler. It is strongly recommended that these be provided to Rick BEFORE the end of the week the meeting is held.

The General Membership meeting was suspended at 12:05 p.m. until 11:00 a.m. Thursday, January 26<sup>th</sup>.

### **Tuesday, January 24th**

Working Group meetings continued.

### **Wednesday, January 25th**

Working Group meetings continued.



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**Thursday, January 26th**

Working Group meetings continued until mid-morning. At which time, the full committee was reconvened to discuss progress of the working groups and sub-committees request sessions for the next meeting.

**Closing meeting on Thursday January 26<sup>th</sup>:**

Lesley Varga reconvened the general meeting at 11:30 a.m. Lesley thanked Jose and Tania for hosting and organizing the meeting and additional activities.

Lesley reminded WG chairs to get minutes in to Rick Tressler as soon as possible following the meeting. The agenda for Philadelphia 2012 will be forthcoming and is subject to change.

Working Group Chair reports & Sessions needed for the June 2012 summer meeting:

Standard/PAR#	Status - End of This Meeting	Sessions Needed	Session Duration (Hours)
450	No PAR to be opened		
484		1	2
485	N/A		
535	Ready for editorial review, and then ballot shortly thereafter.	1	4
946	Dropping reaffirmation. Considering new PAR to integrate this with 1375, battery protection. Discussion needs to be an agenda item for June 2012 meeting.	2	4
1106	Discussed reaffirmation Will be opening revision PAR.	1	2
1115	Discussed reaffirmation Will be opening revision PAR.	1	2
1184	WG agreed to wait on 1189 because of relevance to 1189. There were 143 comments on the reaffirmation ballot.		
1187	Final review of the draft complete. Format issues to be handled. Hope to go to ballot by March.	1	4
1188	No action		





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1189	Progress is slow as this is a very large document. Need 6 hours minimum.	2	4
1375	No action		
1491	Final draft submitted to RevCom.	1	2
1578	Reaffirmation ballot completed. Received 67 comments. Addressed 47 comments. May need to amend document or open a new PAR. Add discussion to agenda for June meeting.	1	4
1635	In the process of resolving negative comments. Will be going out for recirculation ballot.		
1657	No action		
1660	No action		
1679.1	Continued with creation. Now 2/3 complete on the draft. Hope to have a complete draft.	1	4
1679.2	Informative annexes need to be developed. NGK supports draft of this document and will be attending WG meetings in the future.	1	2
Nuclear WG	Discussion on Fukushima, TSTF-500, duty cycles on 72 hr rates	1	4
Battery Glossary	Met for first time. Great attendance. Work began on the new document. 20 definitions addressed. No PAR submitted as of today. Will be asking for a PAR. Needs to be an agenda item for June. Need one session.	1	4

Motion to adjourn the meeting was made by Rick Tressler.

Motion seconded by Steve Clark.

Meeting adjourned by Lesley Varga at 11:53 a.m.



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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](mailto: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>***



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Slide 3

**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*

Slide 4

**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.

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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.