IEEE PES STATIONARY BATTERY COMMITTEE

PES Stationary Battery Committee Meeting Minutes

Monday January 10, 2011; O’Fallon, MO

January 10, 2011

General Meeting

1. Introductions

There are currently 56 current members of the StatBatt committee.
31 Voting members attending

Bill Cantor called the meeting to order at 8:00 am
Welcome to all attendees – members and visitors. The attendee list was sent around.
Introductions of all attending.
Dan Lambert was the Host of this meeting and provided an overview of the APC Technology Center.
IEEE StaBatt committee thanks Dan and APC for organizing the meeting, etc.

Minutes from June 2010 Minneapolis, MN 2010 meeting – Approved.

Document status:
Standards and Working Group Status

Bill Cantor and the working group chairs provided an update on the various standards.

<table>
<thead>
<tr>
<th>PAR # / WG</th>
<th>Subject</th>
<th>Chair</th>
<th>Last Issued</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>Vented Lead Acid Maint and Testing</td>
<td>Clark</td>
<td>2002</td>
<td>Approved by revcom in December. Editorial review pending. Expect publication by end of 1st quarter</td>
</tr>
<tr>
<td>484</td>
<td>Vented Lead Acid Installation</td>
<td>LaMarca</td>
<td>2002</td>
<td>No action. Jeff not present at this meeting</td>
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<tr>
<td>485</td>
<td>Lead Acid Sizing</td>
<td>Fletcher</td>
<td>1997-R2003</td>
<td>Approved by revcom in early December. Expect publication by end of 1st quarter</td>
</tr>
<tr>
<td>535</td>
<td>Nuclear Battery Qualification</td>
<td>R. Beavers</td>
<td>2006</td>
<td>PAR approved</td>
</tr>
<tr>
<td>1106</td>
<td>NiCad Install, Maint, and Testing</td>
<td>McDowall</td>
<td>2005</td>
<td>No action</td>
</tr>
<tr>
<td>PAR # / WG</td>
<td>Subject</td>
<td>Chair</td>
<td>Last Issued</td>
<td>Status</td>
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No action                                                                 |
| 1184       | UPS Battery              | Patel     | 2006             | A new chair may be needed. Document up for reaffirmation in 2011         |
| 1187       | VRLA Installation        | Miller    | 2002             | Russ Miller taking over as chair effective 1/2011                       |
| 1189       | Battery (VRLA) Selection | Marrero   | 2007             | Chris Searles handling chair duties this meeting as Jose not available.  |
| 1375       | Battery Protection       | Uhlar     | 1998 – R2003     | Samuel Norman reported on current status. Hope to have issues resolved by the end of the January meeting. |
| 1578       | Spill Containment        | (Taylor)  | 2007             | Steve McLuer is new chair effective. January 2011                       |
| 1635       | Ventilation Document     | Clark     | Draft            | Submitted recirculation ballot to occur during January 2011.            |
| 1657       | Technician Qualification | Ashton    | 2009             | No action.                                                              |
| 1679       | Emerging Battery Technologies | McDowall | 2010             | No action
3. **Coordination**

Coordinating reports.

Curtis Ashton – ATIS - is working on documents for DC Cable and Lugs. Working on document on voltage operating windows for equipment to incorporate 400 VDC equip. Telcordia to hold a meeting in New Jersey relating to NFPA 704 hazards signs and MSDS.

Curtis Ashton - Telcordia – fire codes, signage, battery related standards, revision of SR4228

Rick Tressler – Battcon next year 2011 will be held May- 16-18 in Orlando FL at the Westin Dolphin hotel. All details can be found at www.Battcon.com. Submission of abstracts for papers is encouraged.

Infobatt: Zbig Nowroloski noted Infobatt 2011 is scheduled. See website www.infobatt.com for dates for 2011. The next Infobatt will be held on September 11-13, 2011.

Steve McClure –Glossary Report – Encouraged members to resolve definitions within their documents through use of the glossary.

Steve McClure - NEC 2011 has been published. Most proposals for changed by the codes committee were accepted. The next version of NFPA 70E has major changes to the battery section (#320). ROC is now complete and is in process. Comments are due by summer 2011. NFPA 70B now out for proposal. NFPA 110/111 meeting in January 2011.

Tom Carpenter commented that there will be some dc arc flash requirements contained in the new version NFPA 70E. Scheduled to come out in October and will be included in the 2012 version.
IEEE PES STATIONARY BATTERY COMMITTEE

Nuclear Task Force – New member, Prem Sahay with NRC Washington, DC attended to replace Matt McConnell.

PES general meeting - Next meeting to be held in Detroit in late July 2011. PES-SB representative TBD.

4. Site Selection Committee

Wayne Johnson: not present at this meeting.
Yves Lavoie reported on the June meeting arrangement effort - Next meeting will be June 27-30, 2011. Attendees are encouraged to book early due to tourist traffic and room availability.
Tania Martinez reported on tentative summer 2012 meeting in San Juan PR. Currently working on dates and pricing for the group. It was discussed to try to move the meeting to later in January.

Steve Vechy – possible organizer for the June 2012 meeting in Philadelphia
Allen Byrne – looking to secure facility for summer 2013 in Dallas

We are looking for dates and volunteers for 2013.

Information on setting up meetings is posted on the website.

5. Sunday Technical Sessions

A discussion was held for the potential Technical Sessions for the Sunday session at the next meeting - Sunday June 26, 2011 in Montreal.

Catastrophic Failure, Safety Concerns – case studies - AC Ripple effect on Batteries- Coordinating: Allen Byrne
Emerging Technologies – Coordinating: Ed Rafter

Break at 0930
Resume 0945

Distinguished service award issued to Jeff Lamarca for 6 years as a committee officer by Samuel Norman.
Bill Cantor discussed the meeting host duties and responsibilities regarding financial commitments for hotel room bookings and meeting expenses. The following wording was discussed.

- For all future meetings, the Stationary Battery Committee (SBC) will cover costs incurred by the host if the minimum number of room nights (125 maximum) is not reached.
- The SBC reserves the right to charge attendees who do not stay at the specified hotel at the specified rate.
- The SBC reserves the right to charge all meeting attendees.
- The host must provide the hotel contract to the Chair for review prior to signing.

Jim McDowall moved to accept the proposed wording above and seconded by Bob Beavers. Discussion followed. A vote was taken. One abstention, none against, all others in favor of the proposal – PASSED.

Jim McDowall presented on treatment of emerging technologies and stationary battery documents, specifically IEEE 1106, 1115 and 1189. Pete Demar indicated that Nickel-Iron batteries should be included in these documents. Discussion followed. A proposal was made by Steve Clark and seconded by Lesley Varga that Ni-Fe batteries not be included in IEEE 1115 & 1106. 32 voted yes, no negative votes, no abstentions. Nickel Iron discussion moved to IEEE 1189 WG.

Bill Cantor - Reported on the Policy & Procedures Document. A new template was issued and was completed by Bill. Another request for changes by AudCom came in on Monday 1/10. The document remains in its present state until more information is received from AudCom.

Bill Cantor - Presented new procedure for WG minutes and drafts. Specific WG folders will be established in the PESSB private area to be used as a repository. Before each WG meeting, the WG chair must submit the current document draft version to the committee secretary for posting in the private area. After each WG meeting the WG chair must submit the updated document draft and the WG minutes to the committee secretary for submission to the private area.

Bill Cantor - WG chairs are reminded to maintain their respective WG membership rosters on MyProject on the IEEE website. Names of Char, vice-chair and secretary must be maintained and updated as required.

Bart Cotton – Reported that he will be stepping down as chair of IEEE 1491 battery monitoring WG. Bart provided an overview of the history of the WG. Dan Lambert is now the chair of this WG.

Bill Cantor - Mike Jump has had to resign from chair of WG 1187. Russ Miller will be taking over as chair. Bill Cantor – made the attendees aware that the VuSpec CD is being developed and that the committee should consider which battery standards would be good to put in this CD. We may miss this most recent release but need to organize this for the following releases. An ad hoc group was created to develop a list of papers and standards for the CD. Jim McDowall volunteered to chair the group. Anyone interested in joining this group should contact Jim McDowall.
IEEE 946-2004 IEEE Recommended Practice for the Design of DC Auxiliary Power Systems for Generating Systems has been administratively withdrawn. Discussion followed. Bob Beavers moved that IEEE 946 be brought into the PESSB by the Committee chair. The motion was seconded by numerous members. Discussion followed. Vote was taken. Unanimous vote. No abstentions.

The Wednesday morning session for 1635 has been replaced with a session on further discussion on IEEE 946. Steve Clark volunteered to run this discussion session.

Reminder for the WG chairs regarding patent slides was made by Bill Cantor.

Steve Clark commented that copyright releases for documents are essential for inclusion in these standards.

New Business – Steve McCluer asked about attendees being able to receive CEU (continuing education units) for attending PESSB meetings. Bill Cantor and Samuel Norman are going to research this effort.

The meeting was recessed at 1100, to be reconvened Thursday, January 13 at 1130.

Reminder to all working group chairs to present patent slides, etc..

General Meeting recessed.

**Tuesday, January 11th**

Working Group meetings continued.

**Wednesday, January 12th**

Working Group meetings continued.

**Thursday, January 13th**

Working Group meetings continued until mid-morning. At which time, the full committee was re-opened to discuss progress of the working groups and sub-committees.

**Closing meeting on Thursday January 13th:**

Rick Tressler opened the closing meeting at 1115.
IEEE PES STATIONARY BATTERY COMMITTEE

Working Group Chair reports & Sessions needed for the June 2011 summer meeting:

450 – possible half session (2hrs)
484 - 0
485 - 0
946 - 1
1106/1115 – 1
1184 - 0
1187 – 1
1188 – 1
535 - 1
1189 – 2
1375 – 2
1491 – 2
1578 - 1
1635 – half session (2hrs)
1657 - 0
1660 - 0
1679 – 1
1679.1 -
Nuclear Battery Working Group -1 (Tuesday)

Next meeting will be hosted by Yves Lavoie June 27-30, 2011 in Montreal. Check PES-SB website for details on the hotel, costs, etc.

Motion to close by Chris Searles
Seconded by Kyle Floyd
Meeting closed by Rick Tressler at 1125 CST
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.
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
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.

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.