



#### IEEE PES STATIONARY BATTERY COMMITTEE

# **PES Stationary Battery Committee Meeting Minutes**

### Monday January 14, 2013 Tucson, AZ

### **General Meeting**

# 1. Meeting Opening and Introductions

The meeting was called to order by committee Chair Leslie Varga at 8:00 a.m. on Monday, January 14<sup>th</sup>.

As of January 14<sup>th</sup>, 2013, there were currently 55 members of the SBC. There were 64 people attending the general session, 38 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. In the future, attendance will be taken via IMAT instead, similar to the working group meetings (Jim McDowall and Leslie gave a brief overview and the website address, as signin for this general meeting is available there as well).

Chris Searles organized the Tucson meeting. Chris covered housekeeping items, and introduced the hotel general manager (Margaret Robodeaux), as well as a representative from the visitor's bureau (Roxanne). Chris talked a little about the Pima air museum and airplane graveyard that is an out-of-hours activity on your own if you'd like to attend.

The minutes from June 2012 Philadelphia meeting were approved.

## 2. Document status:

Standards and Working Group Status

Jim McDowall and the working group chairs provided an update on the various standards.

PAR#/	Subject	Chair	Last	Status
WG			Issued	
450	Vented Lead	Clark	2010	No current activity.
	Acid Maint and			
	Testing			
484	Vented Lead	LaMarca	2002-	May start considering a PAR in the
	Acid Installation		R2008	summer of 2013.





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PAR # /	Subject	Chair	Last	Status
WG	T	I	Issued	Ta
485	Lead Acid Sizing	Fletcher	2010	No action. Possibly start thinking about a
				revision in summer of 2014.
535	Nuclear Battery	Beavers	2006	Document was balloted, and there are
	Qualification			some negatives to address (ballot
				resolution group will meet before Tuesday
				morning)
NWG	Nuclear Working	LaMarca		Not a document. NRC to give their
	Group			purview, and Pete DeMar to give his EPRI
				work overview.
946	DC Systems	Nasrat	2004	PAR expires 2015, and document expires
	Design			2018. Expanding the document to address
				all of our main user communities. Monday
				afternoon session (Catalina C) is for sub-
				groups (Haissam gave names), and later
				one in the week is for all committees.
1106	Ni-Cd Install,	McDowall	2005-	Open PAR, submitted, but not yet
	Maint, and		R2011)	approved. NiFe was voted down for this
	Testing			document. NiMH belongs in 1679 series.
1115	Ni-Cd Sizing	McDowall	2005-	Par submitted, not yet approved.
			R2011)	
1184	UPS Battery	Patel	2011	Will be splitting up the selection side and
				move to 1189. Let Bansi know if you want
				to join the group via MyProject Activity
				Profile
1187	VRLA	Miller	2002	John Polenz got PAR extension until the
	Installation			end of 2013.
1188	VRLA Maint and	Cantor	2004-	Reaffirmed in 2010. Open PAR for
	Testing		R2010	Amendment A (that expires in 2014) that
				Bill and Pete DeMar are working on and
				should be out for ballot in a few months.
1189	Battery (VRLA)	Marrero	2007	PAR was submitted by WG chair June
	Selection			2011, and it expires 2016. Scope is widely
				expanded to include all battery type
				selection.
1375	Battery	Uhlir	1998-	Open PAR to the end of 2012 expired.
	Protection		R2003	This will probably become a 946.1
				document.





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PAR # /	Subject	Chair	Last	Status
WG	T		Issued	
1491	Battery Monitoring	Lambert	2012	No action. Might possibly have a meeting in summer of 2013 to see if a PAR needs to be considered.
1578	Spill Containment	McCluer	2007- R2012	Working on a PAR to start in 2014.
1625	Portable Computer Batteries	Layton	2008	No Action. These chairs need to report to us (Leslie can ask them for reports via email and they are required to respond).
1635	Ventilation Document	Clark	2012	Published Oct 2012. Steve willing to give up chairmanship.
1657	Technician Qualification	Ashton	2009	No action.
1660	Battery Cycling	Corey	2008	No action. Discussion ensued on SCC21, and PES solar/wind. SCC21 appears to not be interested in their battery standards, so we may want to investigate picking them up.
1679	Emerging Battery Technologies	McDowall	2010	No action.
1679.1	Emerging Technologies	Nispel		Working on subsidiary document. PAR ends at the end of 2015. Working on it this session.
1679.2		Chatwin		WG meeting this session scheduled, but Troy not here, so probably 1187 will be meeting in their spot on Wednesday. PAR expires 2015.
1725	Cell Phone Battery	Howard	2011	P1825 (camera batteries) was dropped.
1881	SBC Glossary	McCluer		PAR expires 2016. Meeting this week.





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PAR#/	Subject	Chair	Last	Status		
WG			Issued			
Codes	Mostly NFPA	McCluer		Working on comments to NFPA 70E		
WG	Codes			(electrical protection) for 2015: PPE for		
				DC, DC voltage levels (50 vs 60 vs 100		
				V), battery short circuit current, arc flash		
				guidelines for batteries. We've not had		
				much luck with our proposals (in fact		
				they're going backwards), but SCC18		
				could help us (they're hurting instead of		
				helping presently) if anyone knows		
				someone on SCC18.		
				NFPA 70B (maintenance): cleaned up and		
				coordinated it between NFPA 70 (NEC)		
				for 2014 edition.		
			NFPA 70 (NEC): Got about a 65%			
			approval rate on our proposals. We'll work			
				on those. Same short circuit and voltage		
				issues as mentioned for NFPA 70E. There		
				is a DC task group trying to expand DC in		
				the Code.		
SDS	formerly MSDS	Polenz		not a document – group to try to drive		
task	-			manufacturers to common classifications		
force				and reporting of important battery data		
				along with the SDS format standardization		
				that is going on with OSHA's		
				internationalization		

# 3. Coordination Reports

**ATIS and Telcordia report** by Curtis Ashton and Randy Schubert – Curtis has been out of ATIS-STEP (telecom energy and protection standards) for a year, but his company is rejoining, so he'll have more to say next meeting. Randy Schubert also discussed Telcordia and NEBS, GR standards, how they work, what they do, etc.; especially from a battery standards perspective.

**NERC PRC-005-2 Draft** – Chris Searles headed a task force to try to influence this standard (which is at the FERC level now), which will be published soon. Presentations on this subject occurred yesterday, which will be posted on the website by Paul Hectors (webmaster) once the present.





#### IEEE PES STATIONARY BATTERY COMMITTEE

**Battcon 2013** – Rick Tressler reported on Battcon 2013 dates and provided an overview of the conference. Battcon 2013 will be held May 6-8 at Disney's Contemporary Resort near Orlando. Abstract submissions welcomed. Details are at www.battcon.com.

**Infobatt** – Zbig Noworolski - reported on the next Infobatt Canadian battery conference. White papers are welcomed but not necessary (speakers are free, and there are a few slots). Presentation slides required. The date is March 17-19<sup>th</sup>, 2013 in Calgary. Details can be found at www.infobatt.com, or flyers on the front table.

**INTELEC** – Steve Vechy – Hamburg, Germany in October 2013. Details at <a href="www.intelec.org">www.intelec.org</a>. Call for papers is out. There will numerous recreation programs for attendees and spouses. 2014 will be in Vancouver from end of .

**NewNEB** (**NE Battery**) **Conference** – Art Salander – Oct 7-8, 2013. Now sponsored by IEEE. Focus on utility DC power.

**PES General Meeting** – July 21-25, 2013 in Vancouver. Lesley Varga, SBC Chair, will be attending. Details at www.pes-gm.org.

#### 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 2013** – Chris Searles gave an overview of the summer 2013 meeting to be held June 9-13 at the Crowne Plaza Kansas City MO hotel. Ed Rogers of API (whose company is contributing to reduce the very high cost of the meeting) also gave an overview of what is available downtown right by the hotel (everything). Need taxi or other transport from the airport, but Amtrak does run nearby. The costs are high, and that is locked in for this meeting, but we are trying to address the costs for future meetings.

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





### IEEE PES STATIONARY BATTERY COMMITTEE

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:

Date	Location	Sponsor
Summer 2013	API	Edward Rogers
	Kansas City, MO	June 2013
Winter 2014	ICCNEXERGY	Bansi Patel
	San Diego, CA	January 2014
Summer 2014	APC	Dan Lambert
	Providence, RI	June 2014
Winter 2015	XXX	
	XXX, XX	January 2015
Summer 2015	Alber	Rick Tressler
	Columbus, OH	June 2015
Summer 2016	Quebec City?	Yves LaVoie
		June 2016

Several people (Chris, Steve Clark, and Bansi Patel) have volunteered to join Wayne Johnson and his efforts to work on the Site Selection Subcommittee. If you want to join, contact any of the site selection committee. Chris has updated our meeting planning guide, and has created an RFP. The IEEE has a conference planning service and it was looked into, but appears to be too expensive.

Bill Cantor and Chris put together an online survey (30+ have responded so far) that was emailed out to you (and the link [http://www.surveyexpression.com/s/5027/SBC] was given at the meeting so that those who missed the email can take the survey) around what you want at a meeting. Bill and Chris covered the present results of the survey. We talked in AdCom and in today's meeting about possibly breaking out conference A/V and food fees from rooms to accommodate companies that need to see lower lodging costs (the vote was nearly unanimous to do it this way).

Please keep in mind that locations are subject to change based 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 9:51 The general meeting resumed at 10:15





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# 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 – Low Voltage Cells, Single-Cell Equalization, & Spare Cell Treatment – Steve Clark & Sal Salgia, Chairs

Topic #2 – Understanding Arrhenius Activation Energy for Batteries – Mike Nispel, Chair

#### 6. New Business

**Recognition** – The outgoing chair (Bill Cantor) was recognized, along with the new IEEE Senior members on our committee (Rick Tressler, Pete DeMar, and Steve Clark), and the new members of PES SBC. The procedures on becoming a member of PES SBC and a Senior Member were covered.

**NEMA PE5 re-write** – Art Salander proposed an update to this old document. NEMA not terribly interested in it, but there are 4 possibilities, including IEEE writing it, and NEMA throwing their stamp of approval on it. That is the proposal that Art wants (to have us open a PAR). He is also proposing a meeting appended to the end of the NewNEB conference on this subject. Pros and Cons to co-branding with NEMA were discussed. Haissam and Art believe that PE5 needs to be separate from IEEE 946 (which will refer back to it) because PE5 is a standard and 946 is a guide. 34 of 38 present IEEE SBC members voted to have a Working Group. Art was nominated as chair, but Yves preferred a chair who was not a manufacturer. That concern was addressed, and Art prefers a co-chair anyways. The working group will meet this week, find a chair / co-chair, then report back on Thursday.

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 based on Bill's attendance at the PES leaders retreat (the alternatives are SCC or IAS). Bill also discussed expanding our scope to other energy storage, but if we did that, we'd want to break out into main subcommittees so that "batteries" can still get stuff done, or have IEEE have another SCC to deal with the other technologies like flywheels, fuel cells, etc. These issues will continue to be discussed in the future, and reference the minutes from the last Philadelphia meeting for further discussion.

**Patent Slides** – Lesley showed the patent slides and reminded WG chairs to cover them too.

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





### IEEE PES STATIONARY BATTERY COMMITTEE

The General Membership meeting was suspended at 12:45 p.m. until 11:00 a.m. Thursday, January 17<sup>th</sup>.

## **Tuesday, January 15th**

Working Group meetings continued.

#### Wednesday, January 16th

Working Group meetings continued.

# Thursday, January 17th

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 17<sup>th</sup>:

Lesley Varga reconvened the general meeting at 9:40 a.m. Lesley thanked Chris Searles for hosting and organizing the meeting and additional activities.

Lesley reminded WG chairs to get minutes (and before and after drafts if applicable) in to Curtis Ashton 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	PAR revised already, and editorial items and ballot responses to go out before next meeting.	1	4
946	Work advanced. Many assignments given, and more to come. Last ballot comments will try to be addressed in this version.	2	6





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Standard/PAR#	Status - End of This Meeting	Sessions Needed	Session Duration (Hours)
1106	Progressed.	1	2
1115	Progressed.	1	2
1184	Bansi asked members still interested to contact him	1	4
1187	Reviewed disapprovals and made minor changes; then will send out for reballot.  Jim reminded chairs that they need to have communication trail with negative ballots.	1	4
1188	No action		
1189	2 good productive meetings. Several assignments made	2	4
1375	No action		
1491	No action	1	4
1578	No action		
1635	Published – no action		
1657	No action		
1660	No action		
1679.1	Not as much progress as hoped, but light at end of tunnel.	1	4
1679.2	Chair did not show (new chair probably needed – should be a PES SBC member). Jim will contact Troy, and we may ask Andrew Miraldi to be chair (Curtis will talk to him)	?	?
Nuclear WG	Status given: VRLA presentation, extended duty cycles, Fukushima	1	4
1881	Got through 80 definitions, and will have an in-between web session.	1	4
SDS WG	Good progress and good assignments.  Main Monday morning session of 10-15 minutes requested	1	2
Codes WG	No meeting here – all meetings by web		
NEMA PE5	Art/Haissam writing PAR & need members (email Haissam). Art & Yves will contact North American charger mfgs. Art will talk to NEMA. PE5 only applies to non-nuke utility chargers (IEEE 650 for nukes)	1	2





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Bansi talked about future San Diego meeting (same hotel as last time).

There was discussion on missing screens and cords.

Motion to adjourn the meeting was made by Dan Lambert. Motion seconded by Rick Tressler. Meeting adjourned by Lesley Varga at 10:05 a.m.