



IEEE PES STATIONARY BATTERY COMMITTEE

PES Stationary Battery Committee (SBC) Meeting Minutes

SBC Winter 2016 Meeting

Monday January 11, 2016 Memphis, TN

General Meeting

1. Meeting Opening and Introductions

The meeting was called to order by committee Chair Rick Tressler at 8:00 AM (Local Time) on Monday, January 11, 2016.

As of January 11, 2016, there were currently 65 members of the SBC.

There were 59 people attending the general session, 40 of which are voting members (membership) of the Committee which constitutes a quorum (a minimum of 33 members present required for a quorum).

Welcome to all attendees, members and guest.

Chris Searles from BAE Batteries organized the SBC Winter 2016 Memphis meeting which is meeting in conjunction with the IEEE PES Joint Technical Committee Meeting (JTCM) at the Sheraton Memphis Downtown Hotel in Memphis, TN.

Rick Tressler introduced the SBC Executive Committee which is currently: Rick Tressler (Chair), Curtis Ashton (Vice Chair) and Kurt Uhler (Secretary).

The attendee list was sent around. Introductions by all attending were given. Attendance will also be taken via IMAT, similar to the working group meetings (Rick Tressler gave a brief overview and the website address, as sign-in for this general meeting is available there, listed as MCATT under PE/SB WM2015). <https://imat.ieee.org/my-site/home>.

Michael Kipness, Program Manager – Technical Program Development and staff liaison to SBC from the IEEE Standards Association (SA) was present and was introduced.

The minutes from the Summer 2015 Quebec City meeting were approved. Dan Lambert motioned to approve the meeting minutes and Bob Beavers seconded the motion. All voting members in attendance voted in favor to approve.



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2. Document status:

Standards and Working Group Status

Jim McDowall (SBC Standards Coordinator) 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	Wallis	2010	Document expires 2020. WG to determine if a PAR is to be submitted to have the current document balloted “as is”. WG will meet on Monday 1/11/16 from 1:00 PM to 5:00 PM.
484	Vented Lead Acid Installation	LaMarca	2002- R2008	Active PAR expires 12/31/2017. Document expires 2018. WG is in comment resolution for this meeting. WG will meet on Monday 1/12/16 from 1:00 PM to 5:00 PM.
485	Lead Acid Sizing	Fletcher	2010	Approved 2010. Document expires 2020. WG to determine opening PAR and put document out for ballot. WG will meet on Monday 1/12/16 from 8:00 AM to 12:00 PM.
535	Nuclear Battery Qualification	Beavers	2013	Approved 2013. No activity. Document expires 2023.
946	DC Systems Design	Nasrat	2004	PAR extended to 12/31/17. Document expires 2018. WG will meet Monday 1/11/16 from 1:00 PM to 5:00 PM and Wednesday 1/13/16 from 8:00 AM to 12:00 PM.
1106	Ni-Cd Install, Maint, and Testing		2015	Approved 2015. Document expires 2025. No activity.
1115	Ni-Cd Sizing	McDowall	2014	Approved 2014. Document expires 2024. No activity.
1184	UPS Battery	Patel	2006 - R2011	Waiting on completion of 1189 before opening a PAR. Document expires 2021. (Per Jim McDowall).
1187	VRLA Installation	Polenz	2013	Document approved 2013. Document expires 2023. No activity.
1188	VRLA Maint and Testing	Cantor	2005- R2010	Reaffirmed in 2010, amendment approved in 2014. Document expires 2020.



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PAR #/ WG	Subject	Chair	Last Issued	Status
1189	Battery (VRLA) Selection	Marrero	2007	PAR expires 12/31/2016. Document expires 2018. Extension of PAR will be requested. WG will meet Tuesday 1/12/16 1:00 PM to 5:00 PM and Thursday 1/14/16 8:00 AM to 11:30 AM.
1375	Battery Protection	Belcher	1998-R2003	Re-affirmed 2003. Document expires 2018. Reform WG to begin work on minimalist revision of document Summer 2016 meeting. Need to submit PAR.
1491	Battery Monitoring	Lambert	2012	Open PAR expires 12/31/2018. Document expires 2022. Changing from Guide to recommended Practice. WG will meet Monday 1/11/16 1:00 PM to 5:00 PM. and Tuesday 1/12/16 8:00 AM to 12:00 PM.
1578	Spill Containment	Polenz	2007-R2012	PAR expires 2018. Document expires 2018. WG expects to complete comment resolution during this meeting. Document to be sent out for balloting following completion of comment resolution. WG will meet Thursday 1/14/16 8:00 AM to 11:30 AM.
1625	Portable Computer Batteries	Layton	2008	SBC sponsored, however no activities at the SBC meetings. Document expires 2018. Corporate document (per Jim McDowall).
1635	Ventilation Document	Clark	2012	Document approved 2012. WG to submit PAR for revision. ASHRAE is involved. WG will meet Wednesday 1/13/16 8:00 AM to 12:00 PM.
1657	Technician Qualification	Ashton	2009	PAR for amendment approved in 2015 and expires 12/31/2018. Document expire 2019. WG will need to open revision. No activities scheduled for this meeting.
1660	Battery Cycling	Corey	2008	Document expires 2018. SBC voted at Winter 2015 meeting to release the document from SBC on 12/31/2018 when the document expires.



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PAR #/ WG	Subject	Chair	Last Issued	Status
1679	Emerging Battery Technologies	McDowall	2010	Approved 2010. Document expires 2020. No activity this meeting.
1679.1	Emerging Technologies	Nispel		PAR extension request issued in 2015. NEScom requested additional information on Section 2 of PAR before voting on PAR extension approval. WG will meet Wednesday 1/13/16 1:00 PM to 5:00 PM.
1679.2	Sodium Batteries	Miraldi		PAR extension has been approved and expires 12/31/2017. WG will meet Wednesday 1/13/16 1:00 PM to 5:00 PM.
1725	Cell Phone Battery	Howard	2011	No report. No activities. Corporate document. Document expires 2021. (Per Jim McDowall).
P1881	SBC Glossary	Carmel		PAR expires 2016. WG will be working on comment resolution during this meeting. Document to be sent for re-balloting following comment resolution. WG will meet Monday 1/11/16 1:00 PM to 5:00 PM.
P2405	Utility Battery Chargers	Salander		PAR expires 2017. WG will meet Tuesday 1/12/16 8:00 AM to 12:00 PM, Tuesday 1/12/16 3:00 PM to 5:00 PM and Thursday 1/14/16 9:45 AM to 11:30 AM.
Codes WG	Mostly NFPA Codes	Cantor		NEC 2017 out for public comments. No activities scheduled for this meeting.
SDS task force	formerly MSDS	Polenz		No activities scheduled for this meeting.
NWG	Nuclear Working Group	Salgia		WG scheduled to meet Wednesday 1/13/16 1:00 PM to 5:00 PM.



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3. Coordination Reports

ATIS (T1-E1): No report.

NFPA – Bill Cantor reported that 2015 is the latest revision to NFPA-70E. Document to be updated every three years.

NERC PRC-005-2 – Chris Searles, (SBC NERC Task Force Chair) reported that a SAR was issued to NERC in July 2015 on behalf of the SBC requesting changes to Tables 1.4(a), 1.4(b), and 1.4(f) to comply with the requirement to prove the batteries will "perform as manufactured. There has been no response from NERC regarding this SAR. PRC-005-06 was approved by FERC in December 2015.

Battcon – Rick Tressler reported that 2016 Battcon will be Tues-Thurs May 10-12, 2015 in Boca Raton, FL at the Boca Raton Resort and Club (plus Monday May 9, 2015 paid training sessions). Details are at www.battcon.com, including an ever-standing call for papers.

INTELEC – Telecom Energy Conference. Steve Vechy reported that the next INTELEC 2016 conference is scheduled for October 23 – 27, 2016 in Austin, TX. Details at www.intelec.org.

NewNEB (NE Battery) Conference – No activity. Conference is not scheduled for 2016.

InfoBatt – Conference has been canceled for 2016.

IEEE 650 (Qualification of Class 1E Static Battery Chargers and Inverters and UPS Systems for Nuclear Generating Stations) sponsored by PE/NPE. WG2.13 – Working Group on Battery Chargers/Inverters – Haissam Nasrat reported that a PAR extension was approved. The document is in process of revision.

SCC 18 (IEEE representation to NFPA codes and standards) - Bill Cantor sits on SCC-18 representing the SBC.

4. Site Selection Committee

Next Meeting Summer 2016 – LaMarche is hosting/organizing the meeting in Chicago tentatively scheduled June 12 -16, 2016 at the aLoft Hotel in Rosemont, IL near O'Hare Airport. Raj Dhiman of LaMarche provided a report on the location. Room reservation cut – off date is 5/21/16. Information for the Summer 2016 meeting and reservations will be posted to the SBC website.



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Winter 2017 Meeting - Will meet at IEEE PES JTCM in New Orleans, January 8 -12, 2017 at the New Orleans Marriot. Information for the hotel can be found at: <http://www.marriot.com/hotels/travel/msyla-new-orleans-marriott/>. The room rate is \$172.00 per night plus tax and fees (13% + \$3.00 + 1.75%). Room rates run from Thursday January 5, 2017 through Thursday January 12, 2017. Registration with the JTCM will again be necessary.

Summer 2017 Meeting – TBD – Possibly in Chattanooga, TN hosted by Tom Carpenter, TVA.

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

Date	Location	Sponsor
Summer 2016	Chicago, IL – aLoft Hotel (Rosemont, IL)	Raj Dhiman - LaMarche June 12 – 16, 2016
Winter 2017	New Orleans, LA – New Orleans Marriot with IEEE PES JTCM.	Meet in conjunction with IEEE PES JTCM
Summer 2017	Chattanooga, TN	Tom Carpenter - TVA June 2017
Winter 2018	Anaheim, CA - TBD	Meet in conjunction with IEEE PES JTCM
Summer 2018	TBD	TBD

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

5. Sunday Technical Sessions

A discussion was held for the Sunday Technical Sessions at the Summer 2016 Meeting on Sunday June 12, 2016 in Chicago, IL (Rosemont, IL). Committee voting for the Sunday Technical Sessions resulted in the following agenda for the Summer 2016 Meeting:

Topic #1 – Analytical Battery Modeling.
 Chair: Brian Hanking, Presenters: Jim McDowall

Topic #2 – Common Problems with Performance and Acceptance Testing.
 Chair: Sal Salgia, Presenters: Bob Beavers, John Polenz, and Rick Tressler.



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6. Membership, Recognitions and Awards

New members Robert Beck of Hindle Power, Kevin Fellhoelter of Solara, Doug Frazier of Enviroguard and Michael George of AEP were recognized.

Membership Outreach: Information table at Battcon May 10 and 11, 2016. PES General Meeting July 17 -21, 2016 at the Sheraton Boston Hotel, Boston, MA.

Membership details and requirements can be found at <http://www.ewh.ieee.org/cmte/PES-SBC/index.html>. Once on the site, click “Membership” link.

SBC Executive Committee Announcement – Richard Hutchins of LaMarche agreed to join the SBC executive committee and will assume the SBC Secretary position for a two year term beginning Winter 2017 meeting.

7. New Business

SBC Annual Report – Rick Tressler reported that the SBC annual report was filed with PES in October 2015. The annual report highlights all SBC 2015 accomplishments and significant plans for 2016.

PES Restructure Proposal (ESSB Status Report) – Chris Searles provided a report on the restructuring proposal. The final proposal for re-organization was presented at the PES -Technical Council level at the Sunday, January 10, 2016 JTCM in Memphis. Chris Searles represented the SBC and the Energy Storage and Stationary Battery Committee (ESSB) proposal at this meeting. The PES – Technical Council approved the proposal and formation of the ESSB. Chris Searles will become ESSB Chair pending approval and ratification of the restructuring proposal by the PES. Chris Searles will present an update on the restructuring and organization of the ESSB Committee on Wednesday, January 13, 2016 from 8:00 AM to 12:00 PM to the SBC in Memphis. SBC Organization and Procedures (O&P), SBC Policies and Procedures (P&P) for Standard Development and Policy and Procedures (P&P) for SBC WGs will likely need to be revised as SBC will become a subcommittee under ESSB.



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IEEE Std. 1660 – Chris Searles motioned to rescind the SBC Winter 2015 meeting vote to have the SBC release this document when it expires on 12/31/2018 and keep the document under the Energy Storage and Stationary Battery Committee (ESSB). Dan Lambert seconded the motion. The decision will be the majority of the quorum.

SBC membership voting was as follows:

(31) – 77.5% of quorum, In Favor rescinding the SBC Winter 2015 meeting vote to have the SBC release this document when it expires on 12/31/2018 and keep the document under the Energy Storage and Stationary Battery Committee (ESSB).

(0) – 0% of quorum, Against rescinding the SBC Winter 2015 meeting vote to have the SBC release this document when it expires on 12/31/2018 and keep the document under the Energy Storage and Stationary Battery Committee (ESSB).

(9) – 22.5% of quorum, Abstained.

Chris Searles motioned to open a PAR under the Energy Storage and Stationary Battery Committee (ESSB) to revise IEEE Std. 1660. Dan Lambert seconded the motion. The decision will be the majority of the quorum.

SBC membership voting was as follows:

(24) – 60% of quorum, In Favor of opening a PAR under the Energy Storage and Stationary Battery Committee (ESSB) to revise IEEE Std. 1660.

(2) – 5% of quorum, Against opening a PAR under the Energy Storage and Stationary Battery Committee (ESSB) to revise IEEE Std. 1660.

(14) – 35% of quorum, Abstained.

Chris Searles volunteered to Chair the 1660 WG when it is formed.

IMAT - Jim McDowall will set up IMAT for the Winter 2016 SBC meeting attendance. Jim McDowall reminded all members to contact him to set up IMAT for any Join Me meetings that are conducted by WGs outside of the semi-annual SBC meetings.

Working Group Meeting Attendance

IMAT – IEEE Meeting Attendance Tool – Rick Tressler reminded the membership that there are no paper attendance sheets. Attendance records for all WG sessions are required. This includes Join Me online sessions, teleconferences and anytime collaborative development of the document occurs.



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- Get a free IEEE Web Account
- Set your MyProject interest area
- Log onto IMAT at <https://imat.ieee.org/my-site/home>.
- Register your attendance by selecting the breakout session you are participating in.
- Contact Jim McDowall for further questions and to coordinate IMAT attendance tool schedule.

Working Group (WG) Meeting Reminders: Rick Tressler reminded the SBC membership and WG Chairs of the following:

WG rosters must be updated thru **MyProject** at each WG meeting.

The **Patent Slides** must be presented at the start of each WG meeting. The Patent Slides were shown.

The **Instructions for WG Chairs** slide was shown and discussed.

Document drafts must be provided (and will be posted) before and after each meeting (draft will not be deleted).

WG Chairs must provide the Secretary (Kurt Uhler) the minutes and drafts of the session in a timely manner. It is strongly recommended that these be provided to Kurt Uhler **BEFORE** the end of the week the meeting is held. The minutes and drafts can be e-mailed to kurt@standbypowersys.com.

SBC WG Meeting Agenda Changes – None. Rick Tressler mentioned the following errors in the IEEE PES JTCM schedule for the SBC WG meetings:

- 484 WG is meeting Tuesday 1/12/16 from 1:00 PM to 5:00 PM. It is not shown on the IEEE PES JTCM schedule, however it is correctly listed in the SBC tri-fold.
- 1679.1 WG and 1679.2 WG meeting rooms are reversed in the IEEE PES JTCM schedule for Wednesday 1/13/16 from 1:00 PM to 5:00 PM, however they are correctly listed in the SBC tri-fold.
- P2405 WG meeting room for the Thursday 1/14/16 meeting is incorrect in the IEEE PES JTCM schedule. P2405 WG will be meeting in Magnolia. This is correctly listed in the SBC tri-fold.
- SBC tri-fold incorrectly identifies one of the meeting rooms as Heritage III. This should be Heritage IV.



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- IMAT has correct WG meeting schedule and meeting rooms.

The SBC General Meeting was recessed by Rick Tressler at 11:59 AM (Local Time) until approximately 11:30 AM (Local Time) on Thursday, January 14, 2016

Monday, January 11, 2016 (Afternoon)

Working Group meetings commenced.

Tuesday, January 12, 2016

Working Group meetings continued.

Wednesday, January 13, 2016

Working Group meetings continued.

Thursday, January 14, 2016 (Morning)

Working Group meetings continued until approximately 11:30 AM (Local Time). At which time, the full committee was re-convened to discuss progress of the working groups and sub-committees request sessions for the next meeting.

Closing Meeting on Thursday January 14, 2016:

Rick Tressler reconvened the General Meeting at 11:30 AM (Local Time).

Rick Tressler reminded WG Chairs to get minutes (and before and after drafts if applicable) to Kurt Uhler as soon as possible following the meeting. The agenda for SBC Summer 2016 Meeting in Chicago, IL (Rosemont, IL) will be forthcoming and is subject to change.



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Working Group Chair reports & Sessions required for the SBC Summer 2016 meeting:

Standard/PAR#	Status - End of This Meeting	Sessions Needed	Session Duration (Hours)
450	WG to submit PAR to have current document balloted “as is”.	1	2
484	WG completing comment resolution. Tentatively planning Join Me meeting in March to complete comment resolution.	1	4
485	WG to submit PAR request for document revision and the document will be put out for ballot.	1	2
535	No report	0	0
946	PAR has been extended to 12/21/2017. Work continues on the document revision. Request made for break-out room at Summer 2016 meeting. Request also made to schedule 946 WG meeting to <u>not</u> conflict with 450 WG meeting at Summer 2016 meeting.	2	4
1106	No activity	0	0
1115	No activity	0	0
1184	Document expires 2021. Schedule 1184 WG meeting at Summer 2016 meeting pending response from WG Chair (Bansi Patel).	1	2
1187	Document approved 2013. Document expires 2023.	1	2
1188	Reaffirmed in 2010, amendment approved in 2014. Document expires 2020.	1	2
1189	PAR expires 12/31/2016. Document expires 2018. WG to request PAR extension. WG tentatively planning Join Me meeting before Summer 2016 meeting.	1 1	4 2
1375	Re-affirmed 2003. Document expires 2018. Reform WG to begin work on minimalist revision of document Summer 2016 meeting. Need to submit PAR.	1	4
1491	Work continues on open PAR that expires 12/31/18.	1	4
1578	PAR expires 2018. Document expires 2018. WG is completing comment resolution. Document to be sent out for balloting following completion of comment resolution.	1	4



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Standard/PAR#	Status - End of This Meeting	Sessions Needed	Session Duration (Hours)
1635	Document approved 2012. WG to submit PAR for revision. Full revision to be performed on document by the WG in conjunction with ASHRAE.	1	2
1657	PAR for amendment approved in 2015 and expires 12/31/2018. Document expire 2019. WG will need to open revision.	1	2
1660	Document expires 2018. SBC voted to rescind Winter 2015 committee vote to release the document from SBC when it expires. SBC also voted to open a PAR and the document will be maintained by ESSB. Chris Searles volunteered to Chair WG.	1	2
1679	No activity.	0	0
1679.1	PAR extension request issued in 2015. NEScom requested additional information on Section 2 of PAR before voting on PAR extension approval.	1	4
1679.2	PAR extension has been approved and expires 12/31/2017. Request made to schedule 1679.2 WG meeting <u>to not</u> conflict with 1679.1 WG meeting at Summer 2016 meeting.	2	4
P1881	Comment resolution was completed. Document will be sent for re-balloting.	1	2
P2405	PAR expires 2017. Work continues. WG tentatively planning Join Me meetings before Summer 2016 meeting. Request made to schedule P2405 WG meeting <u>to not</u> conflict with 946 WG meeting at Summer 2016 meeting.	2	4
Codes WG	No activities.	0	0
Nuclear WG	No report	1	4
SDS WG	No activities.	0	0

Three (3) - meeting rooms for WG sessions will be made available for the Summer 2016 meeting in Chicago, IL (Rosemont, IL).

A request for four (4) - meeting rooms for WG sessions will be made to the JTCM for the Winter 2017 meeting that will be held in conjunction with the IEEE PES – JTCM in New Orleans, LA.

Rick Tressler reminded the SBC membership of our next meeting (Summer 2016), scheduled for



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June 12 – 16, 2016 in Chicago, IL (Rosemont, IL). Hotel registration details and information will be posted to the SBC website.

A motion to adjourn the meeting was made by Curtis Ashton and seconded by Jose Marrero. Meeting adjourned by Rick Tressler at 12:00 PM (Local Time).