



Sherry  
Hampton/STDS/STAFF/  
US/IEEE

10/02/2007 10:18 PM

To jim.mcdowall@saftbatteries.com

cc r.j.fletcher@ieee.org, stds-pes-scc@ieee.org,  
jean.baronas@am.sony.com

bcc

Subject Approval of Project - P1625

02 October 2007

James A McDowall  
Saft America Inc.  
3 Powdered Metal Drive  
North Haven, CT 06473  
jim.mcdowall@saftbatteries.com

Re: P1625 - Standard for Rechargeable Batteries for Multi-cell Mobile Computing Devices

Dear James:

I am pleased to inform you that on 27 September 2007 the IEEE-SA Standards Board approved the above referenced project until 31 December 2010. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/1625.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

Rosters can be submitted in any format to the NesCom Administrator ([nescom-admin@ieee.org](mailto:nescom-admin@ieee.org)). Please forward this list to the NesCom Administrator via e-mail at [nescom-admin@ieee.org](mailto:nescom-admin@ieee.org) no later than 26 December 2007.

Or, for your convenience, you can manage your standards development roster in myProject. Instructions are as follows:

- Go to myProject - <https://development.standards.ieee.org/my-site>
- Login using your IEEE Web Account username and password.
- Once logged into myProject, go to "Manage Committees"
- Drill down to the project by clicking the (+) on the left to expand each level. The actual project will be highlighted in yellow
- Click "Manage Committees" for that project. A list of individuals enrolled in the Committee/Project will appear. On this screen you can assign whether a person is a Participant, a Non-Voting Member or a Voting Member of the project group. You may also view contact information for that individual.

Please visit our website, IEEE Standards Development Online (<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any questions, please contact the NesCom Administrator via e-mail at [nescom-admin@ieee.org](mailto:nescom-admin@ieee.org) or via telephone at +1 732 562 3806.

Sincerely,

NesCom Admin  
Standards Activities  
Email: [nescom-admin@ieee.org](mailto:nescom-admin@ieee.org)

**PAR Request Date:** 17 August 2007**PAR Approval Date:** 27 September 2007**PAR Signature Page on File:** Yes**Type of PAR:** Modification to Approved PAR**Status:** Modification to a Previously Approved PAR for the Revision of a Standard - P1625, 02 November 2006**Root Project:** IEEE Std 1625-2004**1.1 Project No.:** **1625****1.2 Type of Document:** Standard**1.3 Life Cycle:** Full-Use**1.4 Is this document in ballot now?** No**2.1 Title**

Standard for Rechargeable Batteries for Multi-cell Mobile Computing Devices

**3.1 Working Group Name** [Portable Computer Battery Working Group](#)**Working Group Chair**[Baronas, Jean M](#)

Phone: 408-352-4557

Email: jean.baronas@am.sony.com

**Working Group Vice Chair****3.2 Sponsor**[IEEE Power Engineering Society Stationary Batteries Committee \(PE/SB\)](#)**Sponsor Chair**[Fletcher, Robert J](#)

Phone: 847-838-6475

Email: r.j.fletcher@ieee.org

**Name of Standards Liaison Representative (if applicable)**[McDowall, James A](#)

Phone: 203-985-2712

Email: jim.mcdowall@saftbatteries.com

**3.3 Joint Sponsor****4.1 Type of Ballot:** Entity**4.2 Expected Date of Submission for Initial Sponsor Ballot:** December 2007**4.3 Projected Completion Date for Submittal to RevCom:** June 2008**5.1 Approximate number of people expected to work on this project:** 25

**5.2 Scope:** This standard establishes criteria for design analysis for qualification, quality and reliability of rechargeable battery systems for multi-cell mobile computing devices. It also provides methods for quantifying the operational performance of these batteries and their associated management and control systems including considerations for end-user notification. This standard covers rechargeable battery systems for mobile computing. The battery technologies covered are limited to lithium ion and lithium ion polymer, but future versions of this document may include technologies that are not in general use at present. Also included are: battery pack electrical and mechanical construction; system, pack, and cell level charge and discharge controls; and battery status communications. The following are addressed: Qualification Process; Manufacturing Process Control; Energy Capacity and Demand Management; Levels of management and control in the battery systems; Current and planned lithium-based battery chemistries, packaging technologies, and considerations for end-user notification.

**Old Scope:** This standard establishes criteria for design analysis for qualification, quality and reliability of rechargeable battery systems for portable computing. It also provides methods for quantifying the operational performance of these batteries and their associated management and control systems including considerations for end user notification. This standard covers rechargeable battery systems for mobile computing. The battery technologies covered are limited to lithium ion and lithium ion polymer, but future versions of this document may include technologies that are not in general use at present. Also included are: battery pack electrical and mechanical construction; system, pack, and cell level charge and discharge controls; and battery status communications. The following are addressed: Qualification Process; Manufacturing Process Control; Energy Capacity and Demand Management; Levels of management and control in the battery systems; Current and planned lithium-based battery chemistries, packaging technologies, and considerations for end-user notification.

**5.3 Is the completion of this document contingent upon the completion of another document?** No

**5.4 Purpose:** The purpose of this standard is to ensure reliable user experience and operation of batteries in mobile computing environments. The battery and mobile computing industries need standardized criteria for the design and qualification of rechargeable battery systems and to verify the quality and reliability of such cell, batteries and systems.

**Old Purpose:** The purpose of this standard is to ensure reliable user experience and operation of batteries in portable computing environments. The battery industries need standardized criteria for design and qualification of rechargeable battery systems and for verifying the quality and reliability of those batteries.

**5.5 Need for the Project:** This standard will enable consistent battery cell, battery pack, and host device design methodology so that the risk of field failures is minimized; resulting in greater end-user satisfaction and reliability of products.

**5.6 Stakeholders for the Standard:** The stakeholders for this standard include designers/manufacturers/suppliers of the portable computing battery subsystems, portable computing manufacturers, and end users.

**6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?** Yes **Presented Date:** 2006-09-21

If no, please explain:

**6.1.b. Is the Sponsor aware of any copyright permissions needed for this project?** No

If yes, please explain:

**6.1.c. Is the Sponsor aware of possible registration activity related to this project?** No

If yes, please explain:

**7.1 Are there other standards or projects with a similar scope?** No

If yes, please explain:

**Sponsor Organization:**

**Project/Standard Number:**

**Project/Standard Date:** 0000-00-00

**Project/Standard Title:**

**7.2 Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization?** ? Do not know at this time

**Technical Committee Name and Number:**

**Contact person:**

**Contact person Phone Number:**

**Contact person Email Address:**

**7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety?** No

**7.4 Additional Explanatory Notes:**

The working group feels that the updates of "portable" to multi-cell mobile computing device is more descriptive of their focus.

**8.1 Sponsor Information:**

Is the Scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain:



Sherry  
Hampton/STDS/STAFF/US/IE  
EE

11/02/2006 09:57 PM

To jamarrer@southernco.com

cc snorman@ieee.org, stds-pes-scc@ieee.org,  
david.ling@hp.com

bcc

Subject Approval of Project - P1625

02 November 2006

Jose A Marrero  
Southern Company Generation  
42 Inverness Center Bin B425  
Birmingham, AL 35242  
jamarrer@southernco.com

Re: P1625 - Standard for Rechargeable Batteries for Portable Computing

Dear Jose:

I am pleased to inform you that on 02 November 2006 the IEEE-SA Standards Board approved the above referenced project until 31 December 2010. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/1625.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at <http://standards.ieee.org/guides/par/roster.xls>. Please forward this list to me via e-mail at [s.hampton@ieee.org](mailto:s.hampton@ieee.org) no later than 31 January 2007.

Please visit our website, IEEE Standards Development Online ( <http://standards.ieee.org/resources/development/index.html> ), for tools, forms and training to assist you in the standards development process. Specifically for entity projects, please be aware that baseline entity sponsor procedures ( <http://standards.ieee.org/corpforum/cag/sponsor.html> ) and entity working group procedures ( <http://standards.ieee.org/corpforum/cag/wgproc.html> ) are available for your use. Guides to the policies and procedures of entity standardization can be found at <http://standards.ieee.org/corpforum/participation/corpstdspandp.html>.

You should also be aware that anyone who wishes to earn and maintain voting rights in an entity working group must pay an annual entity project participation fee. An initial roster of contacts who have indicated an interest in becoming a voting member of the working group and who

therefore should be invoiced for this fee shall be submitted to Lauren Suppa – Administrator, Business Development via email at [l.suppa@ieee.org](mailto:l.suppa@ieee.org) no later than two weeks from the date of this letter.

If you have any questions about the rules of entity project development, please contact Mary Lynne Nielsen at [m.nielsen@ieee.org](mailto:m.nielsen@ieee.org).

Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at +1 732 562 6003 or by email at [s.hampton@ieee.org](mailto:s.hampton@ieee.org).

Sincerely,

Sherry Hampton  
Administrator, Governance  
Standards Activities  
Phone +1 732 562 6003  
FAX +1 732 875 0695  
Email: [s.hampton@ieee.org](mailto:s.hampton@ieee.org)

**PAR Request Date:** 25 September 2006**PAR Approval Date:** 02 November 2006**PAR Signature Page on File:** Yes**Type of PAR:** Revision to IEEE Standard**Status:** Revision to an Existing IEEE Std 1625-2004**Root Project:****1.1 Project No.:** **P1625****1.2 Type of Document:** Standard**1.3 Life Cycle:** Full-Use**1.4 Is this document in ballot now?** No

| 2.1 Title  | Old Title   |
|--|---|
| Standard for Rechargeable Batteries for Portable Computing | IEEE Standard for Rechargeable Batteries for Portable Computing |

**2.1 Amendment/Corrigenda Title****3.1 Working Group Name** [Portable Computer Battery Working Group](#)

|                                 |   |
|---------------------------------|---|
| <b>Working Group Chair</b>      | <a href="#">Ling, David Y.</a><br>Phone: 650-857-5057<br>Email: david.ling@hp.com |
| <b>Working Group Vice Chair</b> |   |

**3.2 Sponsor** [IEEE Power Engineering Society Stationary Batteries Committee \(PE/SB\)](#)

|                      |   |
|----------------------|---|
| <b>Sponsor Chair</b> | <a href="#">Norman, Samuel</a><br>Phone: +1 919 563 6610<br>Email: snorman@ieee.org |
|----------------------|---|

|   |  |
|---|--|
| <b>Name of Standards Liaison Representative (if applicable)</b> | <a href="#">Marrero, Jose A</a><br>Phone: 205-992-5527<br>Email: jamarrer@southernco.com |
|---|--|

**3.3 Joint Sponsor****4.1 Type of Ballot:** Entity**4.2 Expected Date of Submission for Initial Sponsor Ballot:** December 2007**4.3 Projected Completion Date for Submittal to RevCom:** June 2008**5.1 Approximate number of people expected to work on this project:** 4

**5.2 Scope:** This standard establishes criteria for design analysis for qualification, quality and reliability of rechargeable battery systems for portable computing. It also provides methods for quantifying the operational performance of these batteries and their associated management and control systems including considerations for end user notification. This standard covers rechargeable battery systems for mobile computing. The battery technologies covered are limited to lithium ion and lithium ion polymer, but future versions of this document may include technologies that are not in general use at present. Also included are: battery pack electrical and mechanical construction; system, pack, and cell level charge and discharge controls; and battery status communications. The following are addressed: Qualification Process; Manufacturing Process Control; Energy Capacity and Demand Management; Levels of management and control in the battery systems; Current and planned lithium-based battery chemistries, packaging technologies, and considerations for end-user notification.

**Old Scope:** This standard establishes criteria for design analysis for qualification, quality, and reliability of rechargeable battery systems for portable computing. It also provides methods for quantifying the operational performance of these batteries and their associated management and control systems, including considerations for end-user notification. This standard covers rechargeable battery systems for mobile computing. The battery technologies covered are limited to Li-ion and Li-ion polymer, but future versions of this standard may include technologies that are not in general use at present. Also included are: battery pack electrical and mechanical construction; system, pack, and cell level charge and discharge controls; and battery status communications. The following are addressed: qualification process, manufacturing process control, energy capacity and demand management, levels of management and control in the battery systems, current and planned lithium-based battery chemistries, packaging technologies, and considerations for end-user notification.

**5.3 Is the completion of this document contingent upon the completion of another document?** No

**5.4 Purpose:** The purpose of this standard is to ensure reliable user experience and operation of batteries in portable computing environments. The battery industries need standardized criteria for design and qualification of rechargeable battery systems and for verifying the quality and reliability of those batteries.

**Old Purpose:** The purpose of this standard is to ensure reliable user experience and operation of batteries in portable computing environments. The battery industries need standardized criteria for design and qualification of rechargeable battery systems and for verifying the quality and reliability of those batteries. This standard, and its accompanying annexes, provides no guarantee of protection or safety for battery users. This standard sets forth recommendations for design analyses and certain testing procedures. The level of assurance for protection and safety resulting from applying this standard depends on the implementation by the manufacturer/supplier and the actions of the end user. In the recommendations for design analyses contained herein, this standard contemplates reasonable intended use by the end user, but it does not provide a complete guarantee against hazards to the end user, such as fire, explosion, and leakage.

**5.5 Need for the Project:** This standard will enable consistent battery cell, battery pack, and host device design methodology so that the risk of field failures is minimized; resulting in greater end-user satisfaction and reliability of products.

**5.6 Stakeholders for the Standard:** The stakeholders for this standard include designers/manufacturers/suppliers of the portable computing battery subsystems, portable computing manufacturers, and end users.

**6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes Presented Date:** 2006-09-21

If no, please explain:

**6.1.b. Is the Sponsor aware of any copyright permissions needed for this project?** No

If yes, please explain:

**6.1.c. Is the Sponsor aware of possible registration activity related to this project?** No

If yes, please explain:

**7.1 Are there other standards or projects with a similar scope?** No

If yes, please explain:

**Sponsor Organization:**

**Project/Standard Number:**

**Project/Standard Date:** 0000-00-00

**Project/Standard Title:**

**7.2 Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? ?** Do not know at this time

**Technical Committee Name and Number:**

**Contact person:**

**Contact person Phone Number:**

**Contact person Email Address:**

**7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety?** No

**7.4 Additional Explanatory Notes:**

Item 5.2 The working group will produce specific enhancements and corrections to IEEE Std 1625-2004. Items 5.2, 5.4 The scope and purpose of the standard remain unchanged. Item 5.1 Hewlett Packard, Dell, Intel and Apple have expressed an interest in participating in this effort

**8.1 Sponsor Information:**

Is the Scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain: