P1361

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Type of Project: Modify Existing Approved PAR
PAR Request Date: 26-Oct-2010
PAR Approval Date: 02-Feb-2011
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Status: Modification to a Previously Approved PAR for the Revision of a Standard
Root PAR: P1361 **Approved on:** 30-Jan-2009
Project Record: P1361
Root Project: 1361-2003

1.1 Project Number: P1361
1.2 Type of Document: Guide
1.3 Life Cycle: Full Use

2.1 Title: Guide for Selection, Charging, Test and Evaluation of Lead-Acid Batteries Used in Stand-Alone Photovoltaic (PV) Systems

3.1 Working Group: Working Group for Energy Storage Subsystems (SASB/SCC21/ESS_WG)
Contact Information for Working Group Chair
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None

3.2 Sponsoring Society and Committee: IEEE-SASB Coordinating Committees/SCC21 - Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage (SASB/SCC21)
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 04/2011
4.3 Projected Completion Date for Submittal to RevCom: 10/2011

5.1 Approximate number of people expected to be actively involved in the development of this project: 15
5.2 Scope: This guide contains a tutorial on lead-acid battery technology, battery charging characteristics, and a laboratory test procedure to evaluate charge parameters and battery performance. The information on lead-acid battery designs and environmental characteristics is provided to help the PV system designer make appropriate battery decisions. PV system parameters and operating conditions are discussed. Charging parameters related to PV systems are also suggested to help in the selection of appropriate test setpoints. Finally, a performance test to verify the battery's operating setpoints and performance is provided, including discussions on how to interpret test results. This guide is applicable to all stand-alone PV systems where PV is the only charging source. This guide does not include PV hybrid systems.

Old Scope: This guide contains a tutorial on lead-acid battery technology, battery charging characteristics, and a laboratory test procedure to evaluate charge parameters and battery performance. The information on lead-acid battery designs and environmental characteristics is provided to help the PV system designer make appropriate battery decisions. PV system parameters and operating conditions are discussed. Charging parameters related to PV systems are also suggested to help in the selection of appropriate test setpoints. Finally, a performance test to verify the battery test setpoints and performance is provided, including discussions on how to interpret test results. This guide is applicable to all stand-alone PV systems where PV is the only charging source. This guide does not include PV hybrid systems.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: This document provides guidance in understanding lead-acid battery charging requirements in relation to the operational parameters that affect overall PV system design and battery performance. This document will aid in battery selection, evaluation, PV system design, and provide a test plan for evaluating the selected battery.

Old Purpose: This document provides guidance in understanding lead-acid battery charging requirements in relation to the operational parameters that affect overall PV system design and battery performance. This document will aid in battery selection, evaluation, PV system design, and provide a test plan for evaluating the selected battery.

5.5 Need for the Project: Members of the working group evaluated the published standard and agreed that revision was warranted to update references, add some new material and update some existing information.

5.6 Stakeholders for the Standard: funding organizations, battery manufacturers, PV system integrators, and consumers

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Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
Is it the intent to develop this document jointly with another organization?: No

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8.1 Additional Explanatory Notes (Item Number and Explanation): The WG felt changing the wording of the Scope would better describe the document as testing the actual battery operating set points as opposed to the tests of the set points.