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AS/NZS 5139:2019

Australian/New Zealand Standard™

Electrical installations — Safety of battery systems for use with power conversion equipment



AS/NZS 5139:2019

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-042, Renewable Energy Power Supply Systems and Equipment. It was approved on behalf of the Council of Standards Australia on 23 September 2019 and by the New Zealand Standards Approval Board on 4 September 2019.

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Electrical installations — Safety of battery systems for use with power conversion equipment

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Preface

This Standard was prepared by Joint Standards Australia/Standards New Zealand Committee EL-042, Renewable Energy Power Supply Systems and Equipment, to supersede AS 4086.2—1997, *Secondary batteries for use with stand-alone systems*, Part 2: *Installation and maintenance*.

AS 4086.2—1997 will also remain current for three months after the date of publication of this Standard and after that period it will be superseded by AS/NZS 5139:2019. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this Standard is to provide manufacturers, system integrators, designers and installers of battery energy storage systems with the requirements for the safety and installation of battery systems connected to power conversion equipment for the supply of a.c. and/or d.c. power.

This Standard necessarily deals with existing types of energy storage, but is not intended to discourage innovation or to exclude materials, equipment and methods that may be developed in the future.

Due to the innovative nature of many new energy storage technologies and the lack of detailed information on their risks and failures, it is necessary to state that the material contained in this Standard is based on the best information available at the time of its preparation. During the process of the development of this Standard, these technologies are evolving and it is expected that this document will require ongoing updating to truly ensure safe installation and operation of battery energy storage systems. Revisions may be made from time to time in view of such developments, and amendments to this edition will be made when necessary.

This Standard contains a substantial number of informative components so that the level of knowledge and understanding in this new field of technology and its application is increased and so that this information can act as a guide for interested parties.

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The terms “normative” and “informative” are used in Standards to define the application of the appendix to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

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