SEK TS 62933-4-1

Utgiven	Utgåva	Sida	Ansvarig kommitté
2018-12-12	1	1 (1+17)	SEK TK 120

Elektriska energilagringssystem (EES) – Del 4-1: Vägledning beträffande miljöfrågor – Allmänt

Electrical energy storage (EES) systems – Part 4-1: Guidance on environmental issues – General specification (IEC Technical Specification 62933-4-1:2017)

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ICS 13.020.30

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL ENERGY STORAGE (EES) SYSTEMS –

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FOREWORD

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- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 62933-4-1 which is a technical specification, has been prepared by IEC technical committee 120: Electrical Energy Storage (EES) Systems.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
120/93/DTS	120/98/RVDTS

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62933 series, published under the general title *Electrical energy storage (EES) systems*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

Electrical energy storage systems (EES systems) have been integrated into the grid systems. The EES systems play one of the key roles in grid operation. Integrating the EES systems with the grid systems may further bring benefits such as efficient utilization in renewable energy sources. A variety of electrical energy storage technologies have been used widely in small and large sizes, for residential, industrial and utility siting, and in renewable energy stabilization and other applications. An EES system is an integrated system with components that are well standardised, however, system aspects specific to EES systems have not been well discussed. Furthermore, environmental issues for product level have been discussed horizontally in other IEC documents; however, specific environmental aspects of systems have not been well discussed. Therefore, a standard method for assessing environmental issues in EES systems is indispensable.

Under these circumstances, this document describes, in accordance with ISO Guide 64:2008, principles and approaches for environmental issues of EES systems in both normal and abnormal operating conditions, and presents guidelines to address environmental impacts to and from EES systems, including the chronic impacts on humans.

ELECTRICAL ENERGY STORAGE (EES) SYSTEMS –

Part 4-1: Guidance on environmental issues – General specification

1 Scope

This part of IEC 62933, which is a Technical Specification, describes environmental issues associated with electrical energy storage systems (EES systems), and presents guidelines to address the environmental impacts to and from EES systems including the impacts to humans due to chronic exposure associated with the mentioned environmental impacts.

It is the aim of this document to describe environmental issues that are uniquely and only applicable to EES systems. However, it is not the aim of this document to describe environmental issues that are applicable to any systems.

It is not the aim of this document to describe environmental issues associated with components and products used in EES systems.

This document applies to all EES systems regardless of the type of electrical energy storage technologies.

This document considers the issues in both normal and abnormal operating conditions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62933-1[1], *Electrical energy storage (EES) systems – Part 1: Terminology*

[1] Under preparation. Stage at the time of publication:IEC/CDV 62933-1:2017.