

<b>STN</b>	<b>Integrácia výroby energie z obnoviteľných zdrojov do siete Termíny, definície a symboly</b>	<b>STN EN IEC 62934</b>
		33 3150

Grid integration of renewable energy generation - Terms and definitions

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/21

Obsahuje: EN IEC 62934:2021, IEC 62934:2021

**133275**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN IEC 62934**

June 2021

ICS 27.010; 29.020

English Version

Grid integration of renewable energy generation - Terms and  
definitions  
(IEC 62934:2021)

Intégration de la production d'énergie renouvelable aux  
réseaux électriques - Termes et définitions  
(IEC 62934:2021)

Netzintegration erneuerbarer Energieerzeugung - Begriffe,  
Definitionen und Symbole  
(IEC 62934:2021)

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## European foreword

The text of document 8A/75/FDIS, future edition 1 of IEC 62934, prepared by SC 8A "Grid Integration of Renewable Energy Generation" of IEC/TC 8 "System aspects of electrical energy supply" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62934:2021.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-02-28
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IEC 61400-21-1:2019	NOTE	Harmonized as EN IEC 61400-21-1:2019 (not modified)
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IEC 62934

Edition 1.0 2021-04

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Grid integration of renewable energy generation – Terms and definitions**

**Intégration de la production d'énergie renouvelable aux réseaux électriques –  
Termes et définitions**





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IEC 62934

Edition 1.0 2021-04

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Grid integration of renewable energy generation – Terms and definitions**

**Intégration de la production d'énergie renouvelable aux réseaux électriques –  
Termes et définitions**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 27.010; 29.020

ISBN 978-2-8322-9621-9

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## **GRID INTEGRATION OF RENEWABLE ENERGY GENERATION – TERMS AND DEFINITIONS**

### FOREWORD

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IEC 62934 has been prepared by subcommittee 8A: Grid Integration of Renewable Energy Generation, of IEC technical committee 8: System aspects of electrical energy supply. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
8A/75/FDIS	8A/79/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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## INTRODUCTION

The purpose of this terminology document is to provide terms and definitions for all publications under the responsibility of SC 8A. In this document, renewable energy generation is the electric power generation which uses renewable energy as its primary source for the conversion into electricity.

All SC 8A normative documents to be published should keep consistency with this International Standard (IS). This IS will be revised together with other SC 8A publications in order to avoid mismatches when necessary.

From the technical point of view, grid integration of renewable energy generation is a interdisciplinary complex technical field which is concerned with basic equipment, system integration, control and protection, operation and dispatch, market and trade and so on. Without a strong standardization of terminology, focal terms can have a different understanding by different countries, parties, and technical areas. Harmonised vocabulary is critical also from the market point of view. It impacts economics and this can become a barrier to commerce. The correct comparison among different options is fundamental, therefore basic terms and definitions impact economic decisions.

Several IEC product standards give definitions of certain terms which are necessary for the understanding of how to design, manufacture and use of those products. The International Electrotechnical Vocabulary (IEV, IEC 60050, <http://www.electropedia.org>) and the IEC Glossary (<http://std.iec.ch/glossary>) allow on-line access to this information.

Terms and definitions of this document have been harmonized with the IEV, the IEC Glossary and other IEC documents as far as possible. Definitions not included in this terminology standard may be found elsewhere in other IEC documents.

The use of abbreviations has been optimized, on the one hand to avoid tedious repetition and, on the other hand, to avoid confusion. A minimum set of abbreviations is identified in Clause 4 of this document; the other terms are written out in full spelling when needed.

## GRID INTEGRATION OF RENEWABLE ENERGY GENERATION – TERMS AND DEFINITIONS

### 1 Scope

This terminology document provides terms and definitions in the subject area of grid integration of renewable energy generation. The technical issues of grid integration mainly focus on the issues caused by renewable energy generation with variable sources and/or converter based technology, such as wind power and photovoltaic power generation. Some renewable energy generations such as hydro power and biomass power with a relatively continuously available primary energy source and a rotating generator are conventional sources of generation, and are therefore not covered in this document.

The intention of this document is to answer the question "what do the words mean" and not "under what conditions do the terms apply".

### 2 Normative references

There are no normative references in this document.

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