IEC TR 62898-4

Edition 1.0 2023-04

TECHNICAL REPORT

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Microgrids –
Part 4: Use cases

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.240.01

ISBN 978-2-8322-6645-8

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CONTENTS

FOREWORD 5
INTRODUCTION 7
1 Scope 8
2 Normative references 8
3 Terms, definitions, and abbreviated terms 8
3.1 Terms and definitions 8
3.2 Abbreviated terms 11
4 Overview of the document 12
5 Role model associated to decentralized electrical energy systems 12
5.1 Role model based on SGAM 12
5.2 Business roles 13
5.3 System roles 15
5.4 Clarifications on some roles and further detailing concepts 20
6 Microgrids use cases 22
6.1 General 22
6.2 List of business use cases identified 22
6.3 Use case methodology applied to microgrid domain 23
6.4 Guarantee a continuity in load service by islanding (BUC A) 25
6.4.1 General 25
6.4.2 Scope 25
6.4.3 Objectives 25
6.4.4 Operation of use case and technical issues 26
6.5 Electrify areas using renewable energy resources (BUC B) 29
6.5.1 General 29
6.5.2 Scope 29
6.5.3 Objectives 29
6.5.4 Operation of use case and technical issues 29
6.6 Optimize local resources to provide services to customers inside the microgrid (BUC C) 30
6.6.1 Scope 30
6.6.2 Objectives 30
6.6.3 Operation and related technical issues 31
6.7 Optimize local resources to provide services to the area EPS for disaster preparedness and power quality (BUC D) 33
6.7.1 Scope 33
6.7.2 Objectives 33
6.7.3 Operation of use case and technical issues 34
6.8 Develop larger energy systems by interconnection of isolated microgrids (BUC E) 34
6.8.1 Scope 34
6.8.2 Objectives 34
6.8.3 Operation of use case and technical issues 35
6.9 Optimize energy supply cost and exploitation of local assets inside community-run distribution utility by managing local resources (BUC F) 36
6.9.1 Scope 36
6.9.2 Objectives 37
6.9.3 Operation and related technical issues 37

6.10 List of system use cases 40
7 Coordination with other IEC Standards 47
7.1 Links with IEC 61968-1 47
7.2 Links with IEC 61968-5 49
7.3 Links with IEC TR 61850-90-23 51
7.4 Links with the IEC 62898 series 53
7.4.1 General 53
7.4.2 Links with IEC TS 62898-1 53
7.4.3 Links with IEC TS 62898-2 53
7.4.4 Links with IEC TS 62898-3 series 54
7.5 VPP related standards 56
7.6 Prosumer electrical installations 58
8 Perspectives 59
Annex A (informative) Business use case A, Guarantee a continuity in load service by islanding the microgrid, in IEC 62559-2 template 60
Annex B (informative) UML microgrid use case repository 64
Bibliography 65

Figure 1 – The Smart Grid Architecture Model (CEN-CENELEC-ETSI, 2014) 13
Figure 2 – Schematic view of the different types of electric power systems 21
Figure 3 – Graphic user guide for DER related terms and concepts 22
Figure 4 – Schematic vision of the microgrids business use cases 23
Figure 5 – Process for SUC edition for each BUC 25
Figure 6 – Illustration of a microgrid for electrifying remote areas using renewable energy resources 30
Figure 7 – Representation of the power regulation and control of a microgrid 33
Figure 8 – Illustration of an area with microgrids and local energy supply systems without interconnection 35
Figure 9 – Illustration of the connection between microgrids and local energy supply systems of an area 36
Figure 10 – Customer regulation and EMS connection options 40
Figure 11 – Interface Reference Model (IEC 61968-1) 48
Figure 12 – Architectural options for DERMS deployment (from IEC 61968-5) 49
Figure 13 – Request-and-reply message exchange pattern for the creation of a DER Group (from IEC 61968-5) 50
Figure 14 – Notification message exchange pattern for the creation of a DER Group (from IEC 61968-5) 51
Figure 15 – First set of sub-roles attached to a DER (microgrid) deduced from IEC 61850-7-420 52
Figure 16 – Current role transpositions into LNs according to IEC 61850-7-420 53
Figure 17 – Function mapping among subparts in the IEC TS 62898-3 series 54
Figure 18 – VPP composition diagram 56
Figure 19 – Centralized control mode architecture 57
Figure 20 – Decentralized control mode architecture 57
Figure 21 – Example of prosumer’s low-voltage electrical installation 58
Figure B.1 – UML microgrid use case repository 64
Figure B.2 – System use case illustration 64

Table 1 – Business roles of the domain 13
Table 2 – System roles of the domain 16
Table 3 – List of microgrids system use cases 41

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MICROGRIDS –

Part 4: Use cases

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IEC TR 62898-4 has been prepared by subcommittee SC 8B: Decentralized electrical energy systems, of IEC technical committee 8: System aspects of electrical energy supply. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
8B/120/DTR	8B/142/RVDTR

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 Technical Report 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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 62898 series, published under the general title *Microgrids*, can be found on the IEC website.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

This document provides a set of use cases related to microgrids, as a form of "decentralized energy system". Decentralized energy systems are small energy systems containing loads and distributed energy resources (generation, storage) with decentralized management for energy supply. This document completes the SC 8B roadmap for decentralized electrical energy systems. The goal is to explain the methodology retained on the microgrid sub-domain, which is a kind of decentralized system. This methodology, based on IEC 62913-1, describes high-level use cases (business use cases) covering the main typical usage of microgrids, and details some of them through system use cases. The proposed list of use cases is a first version, proposed for review; the goal is to cover all use cases with the same level of depth.

MICROGRIDS –

Part 4: Use cases

1 Scope

In line with the methodology specified in IEC SRD 62913-1, this document describes business use cases (high-level use cases covering the main typical usage of microgrids) and details some of them. System use cases linked to those business use cases are listed and briefly described for contextualizing the main functions to be performed for managing microgrids. Ultimately, the goal of this document is to provide a consistent level of detail for all business use cases. The document details the methodology retained to develop system use cases from the business use cases.

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 SRD 62913-1, *Generic smart grid requirements – Part 1: Specific application of the Use case methodology for defining generic smart grid requirements according to the IEC systems approach*