

# The latest standards for microgrid demonstration projects



## Overview

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Three updates in the 2026 NEC fundamentally change how microgrid projects get designed, permitted, and built. Article 130 formalizes Power Control Systems (PCS). Previously, there was no standardized code framework for systems that actively manage electrical loads across a site. This checklist provides federal agencies with a standard set of tasks, questions, and reference points to assist in microgrid project development. These seven projects demonstrated low-carbon-based microgrids for critical facilities and high-penetration, renewable-based microgrids. The microgrid developers and customers were early . Any copyrighted material included in this UFC is identified at its point of use. It can connect and disconnect from the grid to . DOE RD&D activities drive grid technology evolution to support grid modernization and provide long-term transformational strategies to ensure that electricity delivery systems can support evolving generation and new types of loads, including distributed energy resources, while operating reliably .

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### [Lessons Learned from Energy Commission Microgrid Projects: Best](#)

Together, the lessons and best practices from the seven EPIC-funded microgrid demonstration projects reflect considerable knowledge and experience gained by project participants.

### **Microgrid Design Toolkit - Energy**

The following download is for the latest development version of the Microgrid Design Toolkit. This download is intended for advanced users needing access to the latest development features.



### **IEC TS 62898-3-2:2024**

This document focuses on developing standards of energy management systems aimed for microgrids integrated in decentralized energy systems or public distribution grids. It concerns some

### **Microgrid Projects**

A rural hospital in Washington State is building resilience one project at a time - turning funding setbacks into a blueprint for community-scale energy independence.



### [A comprehensive review of standards for distributed energy resource](#)



### [NEC 2026 and Microgrid Deployment: What the New Electrical Code](#)

A microgrid built to a recognized national code standard is significantly easier to finance than one relying on local code interpretations or requiring variances. Lower perceived risk means lower capital costs



### **Microgrids , Grid Modernization , NLR**

The Microgrid Cost Study is focused on identifying the costs of components, integration, and installation of existing U.S. microgrids and project cost improvements and technical accelerators



In our paper, we comprehensively review the standards development and current situation of microgrids and DER grid-integration issued by international organizations or individual countries.



### **Microgrid System Project Development Checklist**

The included items are intended for use in the development of a commercial-scale microgrid and help identify the key actions to be taken during the project planning, design, procurement, and



### **UFC 3-550-04 Resilient Installation Microgrid Design**

Consistent with OSD Metrics and Standards for Energy Resilience at Military Installations (2021), the microgrid performance-based design process must identify performance metrics and goals to

inform

## **Microgrid Program R&D within the U.S. Department of Energy**

The DOE Microgrid Program Strategy, with its 7 white papers, is available for download from OE website.



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