

MGI

MOTOR AND
GENERATOR
INSTITUTE

FPC Orlando

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39th Annual FPC Seminar + Expo

Conspiracy Theory?

CMS Critical Waiver for Microgrids - LTC Exception

EPA - Elimination for 50 Hour exemption for non-emergencies (Demand Response) (DR) - 71 Comments

TJC - Voluntary Reporting, For Now - 19 Standards, 25 EPs

ASHE - Support for Joint Commission - 14%

CMS Waiver: Hospital Microgrids

The 2021 edition of NFPA 99 now permits normal and emergency power to be supplied by sources other than a generator or battery system, including a health care microgrid system (HCMS).

Ref: QSO-23-11-LSC

March 31, 2023

Seven-page waiver

Nursing Home Caveat

However, there is one exception. The long-term care (LTC) requirement at 42 CFR §483.90(c)(2) specifically requires nursing homes to provide emergency electrical power with an emergency generator when life support systems are used. As this LTC regulation does not provide a waiver allowance, sources of emergency power other than a generator are not permitted for use in LTC facilities that provide life support systems for residents.

NFPA Definition of a Microgrid

Health Care Microgrid. A group of interconnected loads and distributed energy resources within clearly defined boundaries that acts as a single controllable entity with respect to the utility.

NFPA 99, 3.3.75, 2021 edition

Microgrid Assessment

- Comprehensive, tailored analysis and detailed energy action plan
- Inventory and identify critical assets within the hospital's existing EES
- Determine whether current assets can fully support the proposed microgrid
- Load sizes, load profiles, switchgear location, metering, and control capabilities

Financing a Microgrid

- Third-party financing -redirect capital to patient care improvements
- Power Purchase Agreement (PPA) -advantageous in regions with high electricity prices
- Inflation Reduction Act (IRA) - rebates for investment in green technologies

EPA - 50-Hour Provision - Elimination

- Engines can operate for up to 50 hours per year in non-emergency situations
- The 50 hours can be used to supply power as part of a financial arrangement with another entity
- Comment Deadline: August 25, 2023
- Number of Comments: 71

Benefits of 50-hour Provision

- Grid reliability and resilience
- Reduced emissions through strategic use
- Modern generators are cleaner
- Economic benefits for consumers
- Supports renewable integrations
- Incremental participation reduces strain on grid

71 Comments to EPA

While the environmental concerns regarding the operation of emergency generators are valid, their strategic use in demand response programs can offer a net benefit for regional and local grid reliability and can potentially reduce emissions. We urge the EPA to consider regulations that promote more efficient operation of these generators combined with oversight and best practices for their use within demand response programs.

EPA Response After Comment Period

Dan,

I believe a final rule is expected in the first half of 2024. Note that nothing was proposed with respect to the 50-hour provision for emergency engines, so there will not be any changes related to that provision in the final rule.

Melanie King
Energy Strategies Group
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
(919) 541-2469
king.melanie@epa.gov

Demand Response Opportunities in FL

- Duke Energy - \$6.61 / KW
- FPL - \$8.63 / KW
- Requirements for participation - Talk to Rep

The Joint Commission

- LD.05.01.01: The hospital decreases greenhouse gas emissions and waste. Elements of Performance (EPs) for LD.05.01.01 - Shot down by 300 facilities
- Certification Participation Requirements (CPR) Chapter CPR.01
The organization allows The Joint Commission to review the results of external evaluations from publicly recognized bodies. Element(s) of Performance for CPR.01 New EP 1 When requested, the organization provides The Joint Commission with all official records and reports of licensing, examining, reviewing, or planning bodies. Documentation is required - Effective Jan 1 2024

TJC Questions

- What does a hospital receive for participating, other than atta-boys?
- Is information sent to TJC kept confidential or shared with any organizations, public, governmental or private?
- Has the CMS been involved in creating this "voluntary" certification? If not, then why is TJC spending money to create it?

Decommissioning Assets

- Sell your EPSS equipment while still using it
- Buyers will pay more knowing the equipment is functional and not sitting in a yard



EPO - Emergency Power Off

- All installations shall be provided with at least one remote emergency stop switch for each prime mover.
- The remote emergency stop switch shall be located outside the room housing the prime mover or exterior enclosure and shall be permitted to be mounted on the exterior of the enclosure.
- Provisions shall be made so access is limited to qualified persons.
- The remote emergency stop switch shall identify the prime mover it controls.

Battery Testing

Options for Maintenance Free Batteries

- Conductance testing
- Ohmic testing
- Carbon pile load testing
- Cranking voltage drop testing

NFPA 110 - Next Edition

Reliability Centered Maintenance
(RCM)

vs.

Alternative Equipment Maintenance
(AEM)