KIRKLAND & ELLIS

Kirkland Alert

New EPA Guidance Clarifies When Data Centers and Other Operators May Utilize Emergency Backup Generators to Support Local Power Supply

12 May 2025

Data center operators and other businesses often utilize emergency backup generators to provide power to critical infrastructure when grid power is unavailable. Emergency backup generators, however, are subject to certain use restrictions under U.S. Environmental Protection Agency ("EPA") regulations due to potential air pollutant emissions. These EPA regulations allow emergency generator use during certain nonemergency scenarios, including when operated for up to 50 hours per year as part of a financial arrangement (e.g., demand response program) in order to prevent the interruption of local power supply (the "50-Hour Rule"). On May 1, 2025, EPA published a fact sheet and frequently asked questions document and corresponding press release clarifying when emergency backup generators may be operated under the 50-Hour Rule. Both the fact sheet and press release cite a regulatory interpretation response letter issued by EPA to Duke Energy on February 27, 2025, in which EPA confirmed that Duke Energy is considered a "local balancing authority" under the 50-Hour Rule, and clarified that a certain Energy Emergency Alert ("EEA") scenario (under EEA Level 1 when transition to Level 2 is imminent without further action) meets the 50-Hour Rule requirement that a related dispatch is intended to mitigate against the risk of interruption of power supply in a local area or region. EEAs are a series of notifications released by grid coordinators when facing or anticipating conditions where all available energy resources are committed to meeting supply demands. These developments suggest that the current EPA may be open to a broader interpretation of the 50-Hour Rule's applicability than prior interpretations, which may be formalized in a future EPA rulemaking.

EPA's fact sheet, press release and Duke Energy response letter address, in part, certain ambiguities in the 50-Hour Rule threshold criteria, which have for the past decade remained generally unaddressed by EPA and unresolved by litigation and industry inquiries. The press release states that EPA's new fact sheet is aimed at providing "specific guidance to help ensure data centers and power companies have reliable power to maintain America's lead on artificial intelligence," and that "reliable, affordable power is vital to powering data centers as any loss of power can result in devastating impacts." This Alert provides background on the 50-Hour Rule, summarizes the recent developments noted above, and describes anticipated implications for data center operators and others utilizing emergency backup generators on a large scale.

Background on the 50-Hour Rule

In 2013, EPA issued a final rule revising the Clean Air Act's ("CAA's") hazardous air pollutant emission requirements applicable to certain classes of emergency engines. Within these regulations, the 50-Hour Rule allows for the operation of certain types of stationary emergency engines (e.g., Reciprocating Internal Combustion Engines, or "RICE") for up to 50 hours per year in nonemergency circumstances without losing their emergency engine status only if five criteria are met:

1. The engine must be dispatched by the local balancing authority ("LBA") or local transmission and distribution system operator;
2. The dispatch must be intended to mitigate local transmission and/or distribution limitations, so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
3. The dispatch must follow reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation ("NERC"), regional, state, public utility commission or local standards or guidelines;
4. The engine's power must be provided only to the facility itself or to support the local transmission and distribution system; and
5. The owner or operator of the engine must identify and record the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine (the local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator).

CAA Definition of LBAs Prior to EPA's Duke Energy Response Letter

Under the first 50-Hour Rule factor ("Factor A"), the engine must be "dispatched by a local balancing authority ["LBA"] or local transmission and distribution system operator." If the dispatcher does not qualify as an LBA or local transmission and distribution system operator under Factor A, emergency engines may not be dispatched for nonemergency demand response under the 50-Hour Rule even if all other criteria are met. Unless the 50-Hour Rule factors are met, the 50 hours per year generally cannot be used for peak shaving operations or nonemergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The meaning of the terms "LBA" or "local transmission and distribution system operators" has remained relatively unclear over the last decade. The terms are not defined in the CAA statute or in the implementing regulations, and EPA has generally not issued formal guidance to the regulated community on clearer or more specific definitions of these terms or other ambiguous terms in the 50-Hour Rule factors. The 2013 final rule preamble also indicates that the entity that dispatches the engines to operate may include a curtailment service provider or utility.

Engine Use to Avert Interruption of Power Supply and Guidance Prior to EPA's Duke Energy Response Letter

Under the second 50-Hour Rule factor ("Factor B"), the dispatch of engines by an LBA must be "intended to mitigate local transmissions and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region." In response to public comments in 2013, EPA specifically rejected NERC EEA Level 1 as an appropriate trigger for dispatch of engines in response to a local power supply emergency under Factor B. NERC EEA Level 1 is the first stage in a series of notifications released by NERC and other grid coordinators (e.g., Independent System Operators/Regional Transmission Organizations) when facing or anticipating conditions where all available energy resources are committed to meeting supply demands.

The 50-Hour Rule incorporates other key terms, which also remain ambiguous, including the definition of "emergency" engines and situations under the 50-Hour Rule. EPA defines an engine's "emergency" use, which is not subject to a time limit, by referencing narrow examples like when an engine is "used to produce power for critical networks or equipment (including power supplied to portions of a facility) when

electric power from the local utility [or a facility's own normal power source] is interrupted, or stationary RICE used to pump water in the case of fire or flood." However, certain potential LBAs or local transmission and distribution operators, which are responsible for deploying engines under the 50-Hour Rule, may be subject to other, broader definitions of "emergency," creating potential for conflict.

May 2025 EPA Regulatory Interpretation of Duke Energy as an LBA under the 50-Hour Rule

On January 15, 2025, Duke Energy requested EPA's regulatory interpretation as to whether its new PowerShare Mandatory 50 demand response program ("Mandatory 50 Program") meets the criteria for operation of stationary emergency engines in nonemergency situations under the 50-Hour Rule. On February 27, 2025, EPA published a regulatory interpretation letter concurring with Duke Energy's view that the Mandatory 50 Program meets all five 50-Hour Rule criteria.

EPA's response indicates that Duke Energy qualifies as an LBA because Duke Energy's letter states that it is the LBA in the areas served by the Mandatory 50 Program. In addition, according to Duke Energy's letter, the Mandatory 50 program is deployed to avoid electricity grid disturbances "when forecasted grid reserves fall below Duke Energy's thresholds for maintaining reliable service – specifically, under Energy Emergency Alert ("EEA") Level 1 when transition to Level 2 is imminent without further action." In addition, EPA's response indicates that Factor B is satisfied when an engine dispatch averts or reduces a local power supply interruption when it is intended to prevent the imminent escalation of EEA Level 1 to EEA Level 2 for a local area. Notably, this interpretation regarding EEA Level 1 appears to differ from EPA's prior 2013 comment that EEA Level 1 situations cannot appropriately trigger engine dispatches under the 50-Hour Rule. EPA also notes that the Mandatory 50 Program would "fall below other emergency demand response programs in Duke Energy's resource stack and is constrained to 50 hours per calendar year," and "prevents the need for rotating load shed, which would create local disturbances that could result in use of all generators throughout the affected areas."

Overall, EPA determined that the Mandatory 50 Program satisfies each of the five 50-Hour Rule factors because (A) "[t]he engines are dispatched by the local balancing authority, Duke Energy," (B) the dispatch will avert or reduce the risk of local power supply interruptions by mitigating imminent local energy emergencies and local transmission and/or distribution reliability equipment or line limitations or averting potential voltage collapse (i.e., the dispatch responds to an EEA Level 1 that may

imminently escalate to an EEA Level 2 if engines are not dispatched), (C) the dispatch follows reliability protocols that follow specific NERC and public-utility commission standards, (D) the power is provided to support the local transmission and distribution system, (E) Duke Energy will identify and record the specific NERC and public-utility commission standards being followed for dispatching each engine, and, finally, (F) the program is limited to 50 hours per calendar year.

Potential Implications

Analysis of whether specific entities and generation assets may be eligible for nonemergency demand response under the 50-Hour Rule has, to date, been a fact-intensive exercise subject to significant uncertainty due to the ambiguity in the 50-Hour Rule and lack of certain defined terms. EPA's May 2025 fact sheet and press release indicating that Duke Energy is considered an LBA by EPA appears to expand EPA's prior interpretation. EPA has not yet issued a proposed rule on this issue; however, the press release previews that EPA is evaluating "more substantive changes."

A rule change expanding the applicability of the 50-Hour Rule (e.g., by broadly defining LBAs or qualifying entities for Factor A, and the situations that could meet Factor B) could have significant implications for companies in the demand response and data center sectors, as well as other diesel generator-utilizing industries.

Kirkland's environmental team will continue to monitor new developments to assist clients in addressing potential changes to compliance requirements for their businesses.

Authors

James Dolphin

Partner / Houston

Jonathan E. Kidwell

Partner / Dallas

Katherine E. McKeen

Associate / Bay Area – San Francisco

Mary-Michael Robertson

Associate / Dallas

Emily Tabak

Partner / Salt Lake City

Paul D. Tanaka, P.C.

Partner / Bay Area – San Francisco / Houston

Related Services

Practices

- Energy & Infrastructure
- Environmental
- Data Centers
- Artificial Intelligence & Related Fields
- Energy Regulatory

Suggested Reading

- 09 May 2025 Press Release Kirkland Advises NGP-Backed Greenlake Energy on Formation of New E&P Acquisition Platform
- 08 May 2025 Press Release Kirkland Advises Permian Resources on Strategic Bolt-On Acquisition of Core Northern Delaware Basin Assets
- 07 May 2025 Press Release Kirkland Advises I Squared Capital on Joint Agreement with MPLX and Enbridge to Acquire Interests in Matterhorn Express Pipeline