FACT SHEET AND FREQUENTLY ASKED QUESTIONS

Use of Backup Generators to Maintain the Reliability of the Electric Grid

INTRODUCTION

May 1, 2025: On February 4, 2025, U.S. Environmental Protection Agency (EPA) Administrator Lee Zeldin announced the Agency's *Powering the Great American Comeback* initiative, to achieve the Agency's mission while energizing the greatness of the American economy. This plan outlines the Agency's priorities under the leadership of President Trump and Administrator Zeldin. The *Powering the Great American Comeback* initiative consists of five pillars that guide the EPA's work over the first 100 days and beyond. This document highlights regulatory provisions that help to achieve two of these pillars: Pillar 2, Restore American Energy Dominance and Pillar 4, Make the United States the Artificial Intelligence Capital of the World. These pillars prioritize pursuing energy independence and energy dominance to cut energy costs for Americans and ensure the United States becomes the AI capital of the world.

In addition to the *Powering the Great American Comeback* initiative, these regulatory provisions address the priorities outlined in Executive Order 14156: Declaring a National Energy Emergency (90 FR 8433; January 29, 2025). The Executive Order states that an affordable and reliable supply of energy and the integrity of the United States' electrical grid are fundamental to the nation's national and economic security. Significant load growth is expected from increased demand from manufacturing and data centers. Many electric system planners and operators use demand response programs as valuable resource options for balancing electricity supply and demand. Demand response programs can reduce the need to construct new generation by lowering the peak grid demand for energy. The EPA has recognized the importance of using backup generators powered by stationary reciprocating internal combustion engines (RICE) as a resource to maintain the reliability of the electric grid; this importance will likely increase in the coming years due to the forecasted significant load growth.

What are the regulatory provisions that help achieve those two pillars?

The EPA's emission standards for stationary engines include provisions specifying situations under which emergency engines can be operated for up to 50 hours per year to prevent the interruption of power supply in a local area. The regulations containing those provisions are:

- National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR part 63 subpart ZZZZ);
- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR part 60 subpart IIII); and
- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR part 60 subpart JJJJ).

Specifically, the regulatory provisions[1] state that emergency engines can operate for up to 50 hours per year in non-emergency situations to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- The dispatch is 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.
- The dispatch follows 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.
- The power is provided only to the facility itself or to support the local transmission and distribution system.
- The owner or operator identifies and records 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.

What is an example of how the 50-hour provisions could be used to maintain electric reliability?

A recent regulatory interpretation requested by Duke Energy provides an example of how a local balancing authority or local transmission and distribution system operator could use backup generators to maintain electric reliability in accordance with these provisions. Duke Energy stated that their new PowerShare Mandatory 50 demand response program serves an important role in maintaining reliability during this time of significant new and expanding load from manufacturing, electric transportation, data centers, and advanced cloud computing and blockchain operations. As the local balancing authority, Duke Energy is able to dispatch generators enrolled in the program to mitigate imminent local energy emergencies and limitations on local transmission and/or distribution reliability equipment to avert voltage collapse and power supply interruptions. This prevents the need for rotating load shed, which would create local disturbances that could result in the use of all generators in an affected area. To access the letter from EPA granting a regulatory interpretation for Duke Energy's PowerShare Mandatory 50 demand response program and additional information or to ask questions regarding the EPA's regulations for stationary engines, please visit https://www.epa.gov/stationary-engines.

[1] See 40 CFR 63.6640(f)(4)(ii), 40 CFR 60.4211(f)(3)(i), 40 CFR 60.4243(d)(3)(i). Note the subpart ZZZZ requirements only apply to engines located at area sources of hazardous air pollutants.