

Electric System Reliability and the Effects of Recent EPA RICE Regulations

Katherine Street

Introduction

On March 3, 2010, the Environmental Protection Agency (EPA) published a new set of regulations aimed at reducing hazardous air pollutants that are generated by Reciprocating Internal Combustion Engine (RICE) units.¹ The new rules became effective May 3, 2010, and were aimed primarily at units installed prior to June 12, 2006 and that the EPA considered non-emergency.² These new regulations require strict operating limits, extensive testing, record keeping and reporting, monitoring and installation of equipment to limit emissions.³ A significant number of public power utilities own RICE units that are subject to the EPA's new rules.⁴ The utilities use those units to support and maintain a reliable electric system and to address or avoid what those in the industry consider emergency or pre-emergency conditions.⁵

The EPA's definition of the term emergency is not consistent with at least some of the electric energy utilities' understanding of that term.⁶ Some in the electric energy industry suggest that the current state of electric power systems in the United States are too complex to be captured effectively in any definition that the EPA might develop.⁷ They suggest the EPA adopt definitions of the term from those with expertise in the industry, such as the North American

¹ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 75 Fed. Reg. 9648 12863-12873 (March 5, 2009) (to be codified at 40 C.F.R. Pt. 63).

² *Id.*

³ *Id.*

⁴ Letter from Mark Crisson, President and CEO, American Public Power Association (APPA), to affected APPA Members (Aug. 20, 2010), *available at* http://www.kmunet.org/associations/11202/files/APPA_RICE_Letter_Aug252010.pdf.

⁵ *Id.*

⁶ *Id.*

⁷ Memorandum from Tanya Parise and Jill Mozier, EC/R, Inc., to Melanie King, EPA, Ec/R memo to EPA 3-11 (Jan 24, 2011), *available at* <http://appanet.cms-plus.com/files//PDFs/EPAnotesRICEmeeting.pdf>.

Electric Reliability Council (NERC).⁸ The EPA's requirements for units that are classified as emergency are less cumbersome than the regulations for units classified by the EPA as non-emergency.⁹ Many public power providers are faced with regulations that require a greater cost of compliance because the way the utilities use their RICE units to support and maintain a reliable electric system do not meet the EPA's emergency definition.¹⁰ The burden of the cost to bring these older RICE units into compliance with the EPA's regulations will likely force the public power utilities to retire the units instead of retrofitting them, thereby removing a measure of reliability from the electric system with each unit that is abandoned.¹¹

History of Federal Interest in the Reliability of the Electric Utility Industry

In as early as 1962, entities in the electric energy industry from the United States and Canada were collaborating to protect and improve the reliability of their interconnected systems.¹² This collaboration eventually evolved into NERC in 1968.¹³ By 2006, several catastrophic losses of electric service had occurred while compliance with reliability standards developed by NERC was voluntary, and the industry was allowed to police itself.¹⁴ As a result of loss of service and the apparent ineffectiveness of the lack of regulation, Congress authorized the Federal Energy Regulatory Commission (FERC) to designate NERC as the official Electric Reliability Organization (ERO), which also required NERC to “develop and enforce bulk power

⁸ *Id.*

⁹ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 75 Fed. Reg. 9648 12863-12873 (March 5, 2009) (to be codified at 40 C.F.R. Pt. 63).

¹⁰ *Id.*

¹¹ Letter from American Municipal Power Inc. (collectively AMP) to the Air and Radiation Docket and Information Center of the Environmental Protection Agency (Feb. 14, 2011), *available at* <http://amppartners.org/pdf/regulatory-comments/AMP-FINAL-RICE-written-comments-Feb-14-2011.pdf>.

¹² NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, NERC OPERATING MANUAL, HIST-1 (Dec. 2010), *available at* http://www.nerc.com/files/opman_12-13Mar08.pdf.

¹³ *Id.*

¹⁴ Chairman Kelliher Statement on North American Electric Reliability Council and Governors of . . . , Federal Energy Regulatory Commission 1 (July 20, 2006) (on file with FERC Documents and Publications).

system reliability standards.”¹⁵ This authorization indicates that Congress considers the reliability of the bulk electric power system vital.¹⁶ FERC’s stated mission in its Fiscal Year 2009-2014 Strategic Plan—“FERC’s Mission: Reliable, Efficient and Sustainable Energy for Consumers”—is evidence that reliability is still considered a top priority.¹⁷ NERC considers the bulk electric power system reliable when it can “meet the electricity needs of end-use customers even when unexpected equipment failures or other factors reduce the amount of available electricity.”¹⁸ Electric system reliability is critical, as indicated by FERC Commissioner Marc Spitzer’s testimony before the Committee on Energy and Commerce: “Reliable service of electricity is essential to the health, welfare and safety of the American people and necessary to serve our economy.”¹⁹

EPA’s Public Meeting to Address the Electric Industry’s Concerns about the RICE Regulations

NERC has identified recent EPA regulations in direct conflict with the reliability of the bulk electric system, particularly regulations aimed at retiring or retrofitting power generation plants that combust fossil fuels.²⁰ In response to growing concerns over the effects of the RICE rules on reliability, the EPA announced it would reconsider the RICE rules and requested comments regarding an increase in the number of hours a unit is allowed to operate as part of a demand-response program and remain classified as an emergency unit under EPA’s definition of

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ FEDERAL ENERGY REGULATORY COMMISSION, FERC FY 2009-2014 STRATEGIC PLAN 3 (Sept. 2009), *available at* <http://www.ferc.gov/about/strat-docs/FY-09-14-strat-plan-print.pdf>.

¹⁸ NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, NERC COMPANY OVERVIEW: FAQ, *available at* <http://www.nerc.com/page.php?cid=1%7C7%7C114>.

¹⁹ *Hearing Before the Comm. on Energy and Commerce 1* (Sept. 14, 2011) (statement of Commissioner Marc Spitzer, Federal Energy Regulatory Commission), *available at* <http://www.ferc.gov/EventCalendar/Files/20110914093533-Spitzer-Testimony.pdf>.

²⁰ NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, NERC’S 2010 SPECIAL RELIABILITY SCENARIO ASSESSMENT: RESOURCE ADEQUACY IMPACTS OF POTENTIAL U.S. ENVIRONMENTAL REGULATIONS I-VII (Oct. 2010), *available at* http://www.nerc.com/files/EPA_Scenario_Final.pdf.

that term.²¹ The EPA also scheduled a public meeting in Raleigh, NC in January 2011.²² The majority of the attendees at that meeting were members of the public power utility community.²³

Most notably, the American Public Power Association (APPA), a trade organization for the public power community, was an active and vocal participant in the meeting.²⁴ APPA representatives specifically discussed the areas of negative impact for the reliability of local electric systems as well as support for the transmission systems that impact electric facilities far beyond that of the local electric system.²⁵ PJM Interconnection LLC (PJM), a Regional Transmission Organization (RTO) was also represented at the meeting.²⁶ PJM representative Craig Glazer suggested that EPA adopt NERC definitions of emergency for the industry, as this would avoid omissions of situations that should be classified as emergencies, such as emergencies caused by insufficient maintenance of minimum voltage levels.²⁷ Mr. Glazer also noted that the RICE units affected by the regulations were relied upon for voltage stability, a component of the electric system's reliability.²⁸ Progress Energy, an investor-owned utility, also attended that meeting.²⁹ Mike Kennedy, representing Progress Energy, noted in his comments that the RICE units are used by Progress Energy in programs to comply with NERC regulations when other sources are unavailable.³⁰

Lingering Concerns Over the Impact of the EPA's RICE Rules Remain

²¹ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 75 Fed. Reg. 80761 (proposed March 5, 2009) (to be codified at 40 C.F.R. Pt. 63).

²² *Id.*

²³ Memorandum from Tanya Parise and Jill Mozier to Melanie King, *supra* note 7, at 2-16.

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

The public power community remains worried about the effects of the EPA's RICE regulations on the reliability of the electric system.³¹ In September of 2011, Commissioner Jeff Davis of the Missouri Public Service Commission testified before the Committee on Energy and Commerce's Subcommittee on Energy and Power about the large numbers of RICE units operated by public power utilities in Missouri and Arkansas.³² Commissioner Davis noted that, in spite of the extreme age of the units, they have proved their immense benefit to the electric system's support during times of duress.³³ He echoed concerns about the upgrade costs associated with bringing RICE units into compliance with EPA rules.³⁴ Commissioner Davis indicated that increasing the number of hours per year the units are allowed to operate and still be classified as emergency units by the EPA would help eliminate the detriment to the reliability of the electric system that will occur if the units are abandoned by utilities that are unable to invest in the compliance upgrades.³⁵

Conclusion: Conflict Between Environmental and Electric Reliability Interests Will Likely Continue

NERC indicated in its 2011 Long Term Reliability Assessment that "one of the greatest risks identified by the NERC Planning Committee (high likelihood, high consequence), is the potential impacts of future environmental regulations."³⁶ Three bills introduced in the fall of 2011 sought to limit the effect of the EPA RICE regulations: H.R. 3616³⁷, H.R. 3185³⁸, and S.

³¹ *Hearing Before the Comm. on Energy and Commerce* (Sept. 14, 2011) (statement of Commissioner Jeff Davis, Missouri Public Service Comm'n), available at

<http://Republicans.EnergyCommerce.house.gov/Media/file/Hearings/Energy/091411/Davis.pdf>.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, NERC 2011 LONG-TERM RELIABILITY ASSESSMENT 2 (Dec. 2010), available at http://www.nerc.com/files/opman_12-13Mar08.pdf.

³⁷ H.R. 3616, 112th Cong. (2011), available at <http://www.gpo.gov/fdsys/pkg/BILLS-112hr3616ih/pdf/BILLS->

1702.³⁹ The events of 2011 seem to have led the EPA to reconsider some of the specific RICE requirements, which they plan to announce during a workshop scheduled for early January 2012.⁴⁰

112hr3616ih.pdf.

³⁸ H.R. 3616, 112th Cong. (2011), *available at* <http://www.gpo.gov/fdsys/pkg/BILLS-112hr3185ih/pdf/BILLS-112hr3185ih.pdf>.

³⁹ S. 1702, 112th Cong. (2011), *available at* <http://www.gpo.gov/fdsys/pkg/BILLS-112s1702is/pdf/BILLS-112s1702is.pdf>.

⁴⁰ *Region 1: EPA New England*, ENVIRONMENTAL PROTECTION AGENCY, *available at* <http://www.epa.gov/region1/rice/workshopwebinar.html>.