



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 10, 2016

Ms. Debra Brancato
Riverkeeper, Incorporated
20 Secor Road
Ossining, NY 10562

Dear Ms. Brancato:

The Chairman of the U.S. Nuclear Regulatory Commission, Stephen G. Burns, met with you and your colleagues on December 7, 2015. From that meeting, you requested an update on performance-based standards for Emergency Preparedness. The response to your question is enclosed.

Please feel free to contact me at (301) 415-2339, if you have questions or need more information.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Adams", written in a cursive style.

Darrell E. Adams
Senior Congressional/External Affairs Officer
Office of Congressional Affairs

Enclosure:
As stated

Response to Request from Ms. Debra Brancato, Staff Attorney for Riverkeeper, Inc.

Regarding an Update on Performance-Based Standards for Emergency Preparedness

(Asked during meeting on December 7, 2015)

Background

The NRC staff has completed three studies (listed below) to explore performance-based regulatory approaches involving emergency preparedness (EP):

- NUREG/CR-7160, "Emergency Preparedness Significance Quantification Process: Proof of Concept," (ADAMS Accession No. ML13164A285). This study quantified the protection provided by a compliant EP program and determined the relative significance of EP program elements.
- NUREG/CR-7154, "Risk Informing Emergency Preparedness: Evaluation of Emergency Action Levels: A Pilot Study of Peach Bottom, Surry and Sequoyah," (ADAMS Accession No. ML13031A500). Plant-specific risk analysis models were used to evaluate the risk implications of emergency action levels.
- "Risk-Informed, Performance-Based Radiological Emergency Response Program Oversight" (ADAMS Accession No. ML13274A531). NRC staff coordinated with the Federal Emergency Management Agency to conduct a study of the potential to use performance-based methods for evaluation of offsite response organization EP programs.

A summary of these studies was provided to the Commission in SECY-14-0038, "Performance-Based Framework for Nuclear Power Plant Emergency Preparedness Oversight," dated April 4, 2014 (ADAMS Accession No. ML13238A018). The staff concluded that a new performance-based EP oversight regimen could be developed and codified. However, displacement of higher priority work in EP would be required to fully develop and implement such an approach.

In the Commission's response to SECY-14-0038 dated September 16, 2014 (ADAMS Accession No. ML14259A589), the staff was directed to "be vigilant in continuing to assess the NRC's emergency preparedness program and should not rule out the possibility of moving to a performance-based framework in the future. The Commission notes the potential benefit of a performance-based emergency preparedness regimen for small modular reactors, and the staff should return to the Commission if it finds that conditions warrant rulemaking."

Rulemaking Efforts Regarding Performance-Based EP Standards

The NRC staff is currently pursuing rulemaking in two areas that will consider using a performance-based approach for EP.

Small Modular Reactor (SMR) Rulemaking

In SECY-15-0077, "Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies," dated May 29, 2015 (ADAMS Accession No. ML15037A176), the NRC staff requested that the Commission authorize a rulemaking effort to establish EP requirements for SMRs and other new technologies that are commensurate with the potential consequences to public health and safety, and the common defense and security at these facilities. In its response dated August 4, 2015 (ADAMS Accession No. ML15216A492), the Commission approved the staff's recommendation to initiate a rulemaking to revise EP regulations and guidance for SMRs and other new technologies, such as non-light-water reactors (non-LWRs) and medical isotope production facilities. The staff was also directed to keep the Commission's previous direction for SECY-14-0038 in mind.

The Commission noted that SMR rulemaking provides an opportunity for the staff to further explore the pros and cons of a performance-based EP framework. The staff was requested to provide the Commission with a plan and schedule for this rulemaking, which are currently under development.

Power Reactor Decommissioning Rulemaking

In the Commission's response to SECY-14-0118, "Request by Duke Energy Florida, Inc., for Exemptions from Certain Emergency Planning Requirements," dated December 30, 2014 (ADAMS Accession No. ML14219A444), the NRC staff was directed to proceed with rulemaking on decommissioning with a target of 2019 for completion. A rulemaking plan and schedule were submitted to the Commission in SECY-15-0127, "Schedule, Resource Estimates, and Impacts for the Power Reactor Decommissioning Rulemaking," dated October 7, 2015 (ADAMS Accession No. ML15211A122 – Official Use Only). In its response to SECY-15-0070, the Commission had noted that some aspects of the technical work on the ongoing power reactor decommissioning rulemaking, which also addresses EP, will inform the technical work on the SMR EP rulemaking. The staff was directed to coordinate these efforts, as appropriate; however, the two rules should be developed separately so as not to delay the power reactor decommissioning rulemaking. Consideration of a performance-based approach for EP for decommissioning power reactors is part of the scope of the rulemaking and coordination effort.