

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50, 52, and 100

**[Docket Nos. PRM-50-97, PRM-50-98, PRM-50-99,
PRM-50-100, PRM-50-101, PRM-50-102; NRC-2011-0189]**

Petitions for Rulemaking Submitted by the Natural Resources Defense Council, Inc.

AGENCY: Nuclear Regulatory Commission.

ACTION: Petitions for rulemaking; notice of receipt.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC or the Commission) has received six petitions for rulemaking (PRM), dated July 26, 2011, from the Natural Resources Defense Council, Inc. (NRDC or the petitioner). The petitioner requests that the NRC amend its regulations to require emergency preparedness (EP) enhancements for prolonged station blackouts; EP enhancements for multiunit events; licensees to confirm seismic hazards and flooding hazards every 10 years and address any new and significant information; licensees to improve spent nuclear fuel pool safety; each operating and new reactor licensee to establish station blackout mitigation strategies and resources; and more realistic, hands-on training and exercises on Severe Accident Mitigation [sic] Guidelines and Extreme Damage Mitigation Guidelines for specified licensee staff. The NRC is not instituting a public comment period for these PRMs at this time.

ADDRESSES: You can access publicly available documents related to this action, including the six petitions for rulemaking, using the following methods:

- **NRC's Public Document Room (PDR):** The public may examine and have copies made, for a fee, publicly available documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of the NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. For the ADAMS accession numbers to the six PRMs, see Section I, Procedural Processing, of this document.

- **Federal Rulemaking Web Site:** Supporting materials related to the six petitions for rulemaking can be found at <http://www.regulations.gov> by searching on the related Docket IDs. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov.

FOR FURTHER INFORMATION CONTACT: Cindy Bladey, Chief, Rules, Announcements, and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-492-3667, e-mail: Cindy.Bladey@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Procedural Processing

The petitions for rulemaking were docketed by the NRC on July 28, 2011, and have been assigned the following Docket Numbers and can be accessed in ADAMS under the associated ADAMS accession number:

Title	Docket Nos.	ADAMS ML#
Emergency Preparedness Enhancements for Prolonged Station Blackouts	PRM-50-97	ML11216A237
Emergency Preparedness Enhancements for Multiunit Events	PRM-50-98	ML11216A238
Seismic Hazards and Flooding Hazards	PRM-50-99	ML11216A239
Spent Nuclear Fuel Pool Safety	PRM-50-100	ML11216A240
Station Blackout Mitigation	PRM-50-101	ML11216A241
Training on Severe Accident Mitigation [sic] Guidelines	PRM-50-102	ML11216A242

Each submission separately cites the “Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident” (Fukushima Task Force Report, ML111861807), dated July 12, 2011, as the rationale for the petition for rulemaking. The Commission has recently directed staff to engage promptly with stakeholders to review and assess the recommendations of the Fukushima Task Force Report for the purpose of providing the Commission with fully-informed options and recommendations. See U.S. Nuclear Regulatory Commission, “Near-Term Report and Recommendations for Agency Actions Following the Events in Japan,” Staff Requirements Memorandum SECY-11-0093, August 19, 2011 (ADAMS Accession No. ML112310021) and U.S. Nuclear Regulatory Commission, “Engagement of Stakeholders Regarding the Events in Japan,” Staff Requirements Memorandum COMWDM-11-0001/COMWCO-11-0001, August 22, 2011 (ADAMS Accession No. ML112340693). The NRC will consider the issues raised by these PRMs through the process the Commission has established for addressing the recommendations from the Fukushima Task Force Report, and is not providing a separate opportunity for public comment on the PRMs at this time.

II. Petitioner

The NRDC is a national, nonprofit, membership environmental organization incorporated in New York in 1970. The NRDC has offices in Washington, D.C., New York City, San Francisco, Chicago, Los Angeles, and Beijing. The staff membership of NRDC consists of lawyers, scientists, and policy experts. The NRDC states that its purpose is to maintain and enhance environmental quality and monitor Federal agency actions to ensure that Federal statutes enacted to protect human health and the environment are fully and properly implemented. With regard to the NRC, the NRDC asserts that, since its inception in 1970, it has sought to improve the environmental, health, and safety conditions at the nuclear facilities licensed by the NRC and its predecessor agency.

III. Petitions

All six PRMs cite the Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident (Fukushima Task Force Report), dated July 12, 2011, currently under review by the Commission, as the rationale and bases for the petitions for rulemaking. The Fukushima Task Force was a group of NRC staff experts specifically selected to review the Fukushima Dai-ichi Accident and made recommendations applicable to power reactors in the United States. A summary of each PRM follows.

1. *Require EP enhancements for prolonged station blackouts.* [PRM-50-97]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, and other applicable regulations to require emergency preparedness enhancements for prolonged station blackouts in the areas of 1) communications ability, 2) Emergency Response Data System capability, 3) training and exercises, and 4) equipment and facilities. The petitioner cites Section 4.3.1, pages 50-56—regarding the requiring of facility emergency plans to address prolonged station blackouts—of the Fukushima Task Force Report as the rationale for its PRM.

2. Require EP enhancements for multiunit events. [PRM-50-98]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, and other applicable regulations to require EP enhancements for multiunit events in the areas of 1) personnel staffing, 2) dose assessment capability, 3) training and exercises, and 4) equipment and facilities. The petitioner cites Section 4.3.1, pages 50-56—regarding the requiring of facility emergency plans to address multiunit events—of the Fukushima Task Force Report as the rationale for its PRM.

3. Require licensees to confirm seismic hazards and flooding hazards every 10 years and address any new and significant information. [PRM-50-99]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, 100, and other applicable regulations to require licensees to confirm seismic hazards and flooding hazards every 10 years and address any new and significant information, which would include, if necessary, updating the design basis for structures, systems, and components important to safety to protect against the updated hazards. The petitioner cites Section 4.1.1, pages 25-30—regarding the reevaluation and

upgrade of design basis seismic and flooding protection of structures, systems, and components for each operating reactor—of the Fukushima Task Force Report as the rationale for its PRM.

4. Require licensees to improve spent nuclear fuel pool safety. [PRM-50-100]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, and other applicable regulations to require licensees to 1) provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters (i.e., water level, temperature, and area radiation levels) from the control room; 2) provide safety-related AC electrical power for the spent fuel pool makeup system; 3) revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor; and 4) have an installed seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building. The petitioner cites Section 4.2.4, pages 43-46—regarding the enhancement of spent fuel pool makeup capability and instrumentation for the spent fuel pool—of the Fukushima Task Force Report as the rationale for its PRM.

5. Revise 10 CFR 50.63 [Station Blackout Mitigation]. [PRM-50-101]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, and other applicable regulations to revise 10 CFR 50.63 to require each operating and new reactor licensee to 1) establish a minimum coping

time of 8 hours for a loss of all AC power, 2) establish the equipment, procedures, and training necessary to implement an “extended loss of all AC” coping time of 72 hours for core and spent fuel pool cooling and for reactor coolant system and primary containment integrity as needed, and 3) preplan and prestage offsite resources to support uninterrupted core and spent fuel pool cooling and reactor coolant system and containment integrity as needed, including the ability to deliver the equipment to the site in the time period allowed for extending coping, under conditions involving significant degradation of offsite transportation infrastructure associated with significant natural disasters.

The petitioner cites Section 4.2.1, pages 32-39, of the Fukushima Task Force Report, regarding the enhancement of the ability of nuclear power plants to deal with the effect of prolonged station blackout conditions at single and multiunit sites without damage to the nuclear fuel in the reactor or spent fuel pool and without the loss of reactor coolant system or primary containment integrity.

6. Require more realistic training on Severe Accident Mitigation Guidelines. [PRM-50-102]

The petitioner requests that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under 10 CFR 50, 52, and other applicable regulations to require more realistic, hands-on training and exercises on Severe Accident Mitigation [sic] Guidelines (SAMGs) and Extreme Damage Mitigation Guidelines (EDMGs) for licensee staff expected to implement the strategies and those licensee staff expected to make decisions during emergencies, including emergency coordinators and emergency directors. The petitioner cites Section 4.2.5, pages 46-50—regarding the strengthening and integration of onsite emergency response capabilities such as emergency operating procedures, SAMGs, and EDMGs—of the Fukushima Task Force Report as the rationale for its PRM.

IV. Conclusion

The Commission is currently reviewing the Fukushima Task Force Report, including each issue presented in the six petitions for rulemaking. The petitioner solely and specifically cites the Fukushima Task Force Report as the rationale and bases for its six PRMs. The NRC will consider the issues raised by these PRMs through the process the Commission has established for addressing the recommendations from the Fukushima Task Force Report and is not providing a separate opportunity for public comment on the PRMs at this time.

Dated at Rockville, Maryland, this 14th day of September 2011.

For the Nuclear Regulatory Commission.

/RA/

Annette Vietti-Cook,
Secretary of the Commission.