

December 3, 2012

Thomas Popik
Foundation for Resilient Society
52 Technology Way
Nashua, New Hampshire 03060

Dear Mr. Popik:

I am responding to your letter dated March 14, 2011, in which you submitted to the U.S. Nuclear Regulatory Commission (NRC) a petition for rulemaking (PRM) on behalf of the Foundation for Resilient Societies under NRC's (Agencywide Access and Management System Accession No. MK110750145). You requested that the NRC amend its regulations to require facilities licensed by the NRC under Part 50 of Title 10 of the *Code of Federal Regulations* to assure long-term cooling and unattended water makeup of spent fuel pools (SFPs). Your petition asserts that the North American commercial electric power grids are vulnerable to prolonged outage caused by extreme space weather such as coronal mass ejections and associated geomagnetic disturbances, and therefore cannot be relied upon to provide continual power for active cooling and/or water makeup of SFPs. Your petition was docketed as PRM-50-96, and a notice of receipt and request for public comment was published in the *Federal Register* (FR) on May 6, 2011 (76 FR 26223). The NRC received 97 letters with public comments on your PRM.

Based upon our preliminary review of the PRM and the public comments received, the NRC has determined that it is appropriate to consider the underlying technical and policy issues relevant to your petition in the NRC's rulemaking process. The NRC will initiate the rulemaking process for development of a regulatory basis in a phased approach. Initially, the NRC will monitor the progress of several ongoing and potential regulatory activities. The NRC staff will monitor the implementation of Order EA-12-049 (ADAMS Accession No. ML12054A736), which requires that licensees develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and SFP cooling capabilities following a beyond-design-basis external event, and the ongoing enhancements to the station blackout rule being developed under Fukushima Near-term Task Force (NTTF) Recommendation 4.1, NRC Docket No. RIN 3150-AJ08. The NRC staff will also monitor possible rulemakings in response to Fukushima NTTF Recommendation 7.2, which could potentially require all licensees to provide Class 1E (safety-grade) electric power to SFP makeup systems, and the activities being developed for prolonged station blackout scenarios under Fukushima NTTF Recommendation 8 and if applicable Recommendation 9. If an assessment of the progress in these areas concludes that the efforts are not likely to address the diesel generator fuel depletion and resupply issues raised by the petition, then the NRC will begin work to develop a regulatory basis to address the extensive grid outage scenario that could potentially be caused by an extreme solar storm. If the NRC proceeds with a rulemaking, the changes requested in your petition may or may not be incorporated exactly as you requested.

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Further details are discussed in the enclosed notice, which will be published in the FR and is available under (ADAMS Accession No. ML12194A619). The NRC has completed its preliminary evaluation of PRM-50-96 and made a determination to consider the underlying technical and policy issues relevant to this petition in the NRC's rulemaking process; therefore, this PRM is considered administratively closed.

You can monitor further NRC actions on the issues raised by your PRM online at www.regulations.gov by searching on rulemaking Docket ID NRC-2011-0069. The NRC also tracks all actions at <http://www.nrc.gov/reading-rm/doc.collections/rulemaking-ruleforum/petitions-by-year.html>

Any questions you may have regarding this matter should be directed to Manash K. Bagchi at 301-415-2905 or via e-mail at Manash.Bagchi@nrc.gov.

The NRC appreciates your interest in the NRC's regulations and your submission of a petition for rulemaking.

Sincerely,

/RA by Michael R. Johnson for/

R. W. Borchardt
Executive Director
for Operations

Docket Nos. PRM-50-96; NRC-2011-0069

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