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**Cc:** [Riley, Jeffrey](#); [Berrios, Ilka](#)  
**Subject:** Status Update for PRM-50-96  
**Date:** Wednesday, April 1, 2020 8:51:00 AM

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Good afternoon Mr. Popik:

I am contacting you to provide a status update on the petition for rulemaking you submitted to the U.S. Nuclear Regulatory Commission (NRC), dated March 14, 2011, on behalf of the Foundation for Resilient Societies (the Foundation). In your petition, you requested that the NRC amend its regulations in Title 10 of the Code of Federal Regulations (10 CFR) Part 50 to address concerns about the effects of long-term commercial grid outage on spent fuel pool cooling and water makeup. You stated that "in the event of a long-term loss of commercial grid power extending beyond a month, it is likely that water in spent fuel pools would heat up and boil off, fuel rods would become uncovered by water, zirconium cladding would catch fire, and large amounts of dangerous radionuclides would be released into the atmosphere."

The NRC docketed your letter as petition for rulemaking PRM-50-96, and the NRC published a notice of receipt in the Federal Register on May 6, 2011 (76 FR 26223). The status of PRM-50-96 can be found at the NRC Rules and Petition page at <https://www.nrc.gov/reading-rm/doc-collections/rulemaking-ruleforum/active/PetitionIndex.html>. At this Web site there is a link to a listing of all active NRC PRMs. You can monitor this site for status updates as they become available.

You can also continue to monitor the docket for PRM-50-96 at <http://www.regulations.gov>. The Federal rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: 1) navigate to the docket folder (NRC-2011-0069); 2) click the "Sign up for E-mail Alerts" link; and 3) enter your e-mail address and select how frequently you would like to receive e-mails (daily, weekly, or monthly).

On August 12, 2019, the NRC published a the Mitigation of Beyond-Design-Basis Events (MBDBE) final rule (84 FR 39684) which addresses, in part, the issues that you raised because these regulations require licensees to establish offsite assistance to support maintenance of the key functions (including both reactor and SFP cooling) following an extended loss of ac power, which has been postulated as a consequence of geomagnetic disturbances. Additionally, on March 26, 2019, two actions occurred that directly impact the NRC's analysis related to PRM-50-96: 1) the President issued Executive Order 13865, "Coordinating National Resilience to Electromagnetic Pulses;" and 2) the Executive Office of the President's National Science and Technology Council issued the National Space Weather Strategic Action Plan (NSWSAP). The NRC has equities with both the Executive Order and the NSWSAP which include analyzing potential EMP vulnerabilities to licensee sites as well as the NRC's preparedness for EMP events. To fulfill the EO and NSWSAP responsibilities, the NRC is conducting numerous reviews at this time, the result of which will inform how the Commission proceeds with PRM-50-96.

The NRC will address PRM-50-96 giving consideration to EO 13865, the NSWSAP, the MBDBE rule, requirements recently established by the Federal Energy Regulatory Commission to address

geomagnetic disturbances (81 FR 67120; September 30, 2016), and the additional comments that were submitted on this rulemaking that further inform the consideration of geomagnetic disturbances.

Please feel free to contact me at [Yanely.Malave@nrc.gov](mailto:Yanely.Malave@nrc.gov) or (301)-415-1519 if you have questions or concerns.

Thanks

*Yanely Malavé Vélez*

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US Nuclear Regulatory Commission

Office of Nuclear Material and Safeguards

Division of Rulemaking, Environmental, and Financial Support