

Rulemaking Comments**PRM-50-96
(76FR26223)**DOCKETED
USNRC

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From: Joel Weisberg [jweisberg@carleton.edu] June 23, 2011 (4:40 pm)
Sent: Tuesday, June 21, 2011 9:33 PM
To: Rulemaking Comments
Subject: Comment in support of PRM-50-96 NRC-2011-0069
OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Dear Secretary,

I am a physicist who has extensively studied nuclear power reactors. I have carefully studied the causes of the Fukushima reactor disasters. I also study and do astrophysics and am well aware of the likelihood of a once-per-century-or-so solar superflare that could knock out the currently constituted power grid for weeks or months.

Therefore, I am writing in support of PRM 50-96 (NRC-2011-0069) submitted by Thomas Popik and the Foundation for Resilient Societies.

This petition for rulemaking would require utilities to install reliable and renewable backup power systems, for a period of up to two years, to ensure cooling of irradiated fuel pools in the event of an extended loss of offsite power.

The Fukushima catastrophe demonstrates clearly the consequences of a loss of offsite power-- to fuel pools and nuclear reactors alike. The NRC obviously must take substantive and speedy steps to address this issue.

The typical nuclear facility includes battery backup power that would last 4-8 hours, plus emergency diesel generators. While these generators were inoperable at Fukushima, and the accidents there took place in a relatively short amount of time, these generators are not designed to operate for extended periods of time.

PRM 50-96 was spawned by concern over large-scale solar flares that could cause long power outages in the U.S. As the Washington Post reported on June 21, 2011, a 2008 National Academy of Sciences study warned that a major solar storm "could knock out power in parts of the northeastern and northwestern United States for months, even years."

No U.S. nuclear reactor or fuel pool could withstand such a lengthy loss of power. Immense radiation releases would be certain.

Given the events at Fukushima, it appears nuclear facilities are not able to withstand power outages for even a fraction of that time. Thus, there is considerable urgency to improving back-up power systems.

I urge the NRC to quickly approve PRM 50-96 and to amend this petition to include suitable back-up power supplies for all nuclear reactors and fuel cycle facilities as well as the irradiated fuel pools.

Thank you,

Joel Weisberg
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