

Rulemaking Comments

May 11, 2011 (9:10 am)

**From:** Trent Sikes [trent\_sikes@yahoo.com]  
**Sent:** Thursday, March 31, 2011 10:10 PM  
**To:** NRC Allegation  
**Subject:** Vulnerability to US plants from long term massive US powergrid failure.

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

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Dear NRC,

My name is Trent Sikes; I live very near the edge of the 10 mile evacuation zone of Plant Eriwn Hatch in Georgia. For some time now I have been studying the ability of nuclear plants in the US of being able to withstand power outages lasting longer than 7 days and the ability of these plants to be run without operators. I was very concerned about this well before the events in Japan. I am not one of those who are fooled by the focus on earthquakes and tsunamis. As you and I know, the cause of the disaster in Japan was a loss of power to cooling systems of the spent fuel pools and reactors in the Fukushima plant. Plant Hatch is one of 23 in the US with a containment system that is identical to the one in Japan, the GE MK 1. All indications are that in a mild station black out event at least two of these containment systems have failed and are now spewing radiation around the globe. This is irrelevant to the spent fuel pool because, as we know, it and the massive amount of radioactive material in it, are outside of primary containment.

I find it very concerning that there are many situations that can disrupt electric power to a station for months or years, namely solar flare, cyber attack to the commercial grid or EMP. Also several situation that can severely limit the ability of station workers to report to work, they include but are not limited to, riots, natural disasters, pandemics, fuel embargos, gas price spikes and any number of other unforeseeable circumstances. In light of this I find it grossly negligent, perhaps even criminal that the NRC does not have a plan in place to protect these plants from catastrophic melt down in the event of station blackout lasting more than 7 days with no outside resupply of fuel. Please do not tell me you have adequate plans in place to deal with this. I saw the testimony of Bill Borchardt, executive director for operations at the NRC, before the Senate Energy and Natural Resources Committee, on 3-29-2011. Where Mr. Brochardt stated:

“the dislocation of any alternating current to power the coolers could be relieved by valve motions relying on stored air or off a D.C. battery power supply. Once the coolers are running, designs allow natural processes like gravity will create a water flow to keep the cores cool.”

**But under questioning, Mr. Borchardt acknowledged that none of the country's 104 nuclear plants have these design features in place now.**

Once I saw how ill prepared the NRC was to deal with a long term SBO event I began an exhaustive search of the internet for anyone who did not have their head in the sand in this issue. The only person I could find was Thomas Popik, head of the New Hampshire based Foundation for Resilient Societies. The Foundation is not an anti-nuclear organization, and does not rely on studies by advocacy groups, only the US Government's own research and academics in the nuclear field. On 2-6-2011, the Foundation filed a draft petition for rule change

with the NRC, well before the Japan disaster. The petition asks the NRC to change its rules regarding defending against solar flares. Currently there is no defense and if one hits all affected plants will burn and contaminate the surrounding land. In the petition the foundation outlines simple low cost measures that , if implemented will immediately reduce the risk to these plants, and would allow them to operate unattended for several years if necessary. The foundation has no financial interest in seeing these measures implemented. The final draft of this petition was filed with the NRC 3-14-2011 and was given docket number PRM-50-96.

I hereby request that you post this petition for public comment with all haste, and then force all plants in the US to adopt the preventive measures outlined in this petition. Since I am bring in this issue to your attention I also request that Plant Hatch and Plant Vogtle of Georgia be made first on the list to receive upgrades that will allow their cooling systems to be operated without outside power and unattended by operators. The docket # for this petition is PRM-50-96. I am recording this letter and the date it was sent. In the event of a long-term power outage or an absence of operators event at a nuclear plant that causes an accident I will send this letter to all local and national media outlets, I believe they will find it interesting that the NRC was warned of a problem but did nothing to solve it. Especially since just one accident at a nuclear facility can cause mass casualties and render large sections of the United States uninhabitable.

I consider myself a reasonable person, upon reading this petition I believe that there is a major flaw in the NRC rules. Also in the petition on page 64-65 I notice that even in the overly optimistic calculations of the petitioners plant Vogtle in Georgia is the plant most likely to experience a spontaneous Zirconium fire in it's spent fuel pool in the event of large scale damage to the commercial grid. This study was in no way focused on Georgia or Vogtle, in light of this the NRC should seriously reconsider allowing two new reactors being built at Vogtle. In addition while I understand that the NRC in not required to make nuclear plants resistant to foreign attack such as EMP or cyber warfare it would be a nice goodwill gesture towards the citizens the NRC is suppose to be protecting if the commission would move to protect these plants from theses situations. At very least the NRC has a duty to protect from the natural phenomenon known as solar flare that can disrupt outside power for years. Thank you for your consideration and prompt action on this matter.

Yours Truly

Trent Sikes

## Rulemaking Comments

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**From:** Bladey, Cindy  
**Sent:** Tuesday, May 10, 2011 2:41 PM  
**To:** Rulemaking Comments  
**Subject:** FW: Comments for Docket PRM-50-96  
**Attachments:** Long term loss of power danger!; Post petition prm-50-96 for public comment; Danger to plants from long term power outage.htm; Vulnerability to US plants from long term massive US powergrid failure.

**From:** Bladey, Cindy  
**Sent:** Tuesday, May 10, 2011 2:39 PM  
**To:** Ngbea, Evangeline  
**Cc:** Gallagher, Carol  
**Subject:** Comments for Docket PRM-50-96

Hi Van,  
Please add these four emailed comments to Docket PRM-50-96.  
Thanks,  
Cindy

Cindy Bladey, Chief  
Rules, Announcements, and Directives Branch  
TWB-05-A01  
301-492-3667  
[cindy.bladey@nrc.gov](mailto:cindy.bladey@nrc.gov)