

## **Nuclear Energy Information Service**

## Illinois' Nuclear Power Watchdog since 1981

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Mr. James Borchardt Executive Director for Operations U.S. Nuclear Regulatory Commission Washington, DC 20555-0001 By email: Hearing.Docket@nrc.gov

RE:

TESTIMONY REGARDING REQUEST TO CO-SIGN AND JOINTLY PETITION PER 10 CFR 2.206 SUBMITTED BY BEYOND NUCLEAR APRIL 13, 2011
TO IMMEDIATELY SUSPEND THE
OPERATING LICENSES OF GE BWR MARK I UNITS
PENDING FULL NRC REVIEW
WITH INDEPENDENT EXPERT AND PUBLIC PARTICIPATION
FROM AFFECTED EMERGENCY PLANNING ZONE COMMUNITIES
Submitted by
David A. Kraft, Director

Nuclear Energy Information Service (NEIS) is a 30-year old safe-energy, anti-nuclear environmental organization based on Chicago, Illinois. We submit the following testimony in support of the 2.206 Petition titled above.

NEIS has monitored the activities of Illinois' nuclear utilities and federal and state regulators since 1981. Illinois is the most nuclear-reliant state in the U.S., with 11 operating and 3 closed reactors. We posses in our borders the largest standing amount of high-level radioactive wastes (HLRW) of any state. After observing the questionable and at times lackadaisical historic operation and regulation of these reactors, we are extremely concerned about the protection, safety and health of the people and environment in light of the developments surrounding the Fukushima nuclear disaster in Japan.

In light of the explosions, fires and now confirmed meltdowns of the three Fukushima reactors, we express grave concerns about the safety of continued operation of the four BWRs at Dresden and Quad Cities, listed in this Petition, which were built with Mark-I containments and pressure suppression systems. These four Illinois reactors are slightly older, and of the same design type as those destroyed reactors at Fukushima. Even with the claimed modifications that Exelon and NRC state have taken place at these reactors in light of 911, we believe that the currently questioned and improperly verified safety conditions at these reactors warrant acceptance of the contentions in this Petition, and a closure of these reactors -- at the very least until an independent review of these contentions are analyzed and either accepted or refuted.

We submit the following as the basis for our request:

- 1.) EXISTING UNCERTAINTIES INVOLVING VERIFIABLE SAFETY OF REACTORS DEMANDS THAT CAUTION BE EXERCISED: Several uncertainties call into question the current safety status of Quad Cities and Dresden, and all other Mark-I containments:
  - The conclusion of the Petitioners that NRC has not done the proper level of safety analysis in previously granting pre-approvals of the installation of the Mark I containment (Fukushima style reactors) "hardened vent system" as granted in Generic Letter 89-16 (September 1989) under 10 CFR 50.59. We believe that NRC should require all GE Mark I Boiling Water Reactor operators to submit to the formal license amendment process accorded with full public hearing rights.
  - The "lessons learned" from Fukushima have yet to be identified, let alone actionable, due to the sluggish and at times withholding and deceptive nature of information flow from TEPCO, the Japanese government, and the IAEA. Given what is NOT known or currently verifiable in terms of this international nuclear disaster, the Precautionary Principle argues for caution, as the German Government has insisted upon in the closure of its reactors pending thorough inspection.
  - When Southwest Airlines learned of fuselage cracks and skin peeling in its fleet of 737 jets this past year, it
     GROUNDED the jets, pending complete re-inspection, and in many cases repairs. The NRC's current
     approach to allow reactors with Mark-I containments to continue operating post-Fukushima is akin to
     Southwest allowing its jets to continue flying until one crashes before taking action to verify safety. This
     attitude is reprehensible and unacceptable.
- 2.) ILLINOIS UNIQUE "PRECIPITATING EVENTS": While Illinois may not be subjected to tsunamis any time soon, as Exelon's John Rowe quipped recently, Illinois has several unique precipitators for potentially catastrophic events that Japan lacks:
  - O'HARE FIELD the busiest/second-busiest airport in the world is situated outside Chicago. We have
    calculated normal flight times between O'Hare and Dresden to be 9 minutes; and to Quad Cities, 28 minutes.
    An accidental or intentional airliner crash into the currently unprotected spent fuel pool areas of these reactors
    has the potential to sever cooling water piping, or institute other dangerous disruptive events at the reactors.
  - NRC's phlegmatic response after 911 to the issue of airline crashes into reactors and spent fuel pools inspires
    ZERO confidence that NRC takes this risk seriously. With 11 operating reactors in Illinois, we cannot afford
    this level of indifference and negligence. We hope this Petition will correct this enormous deficit in NRC
    imagination.
  - All operating Illinois reactors are on river flood plains. Given what we are currently witnessing in Missouri and Nebraska, the issue of severe flooding, particularly in an impending global warming/climate disrupted world must be taken seriously. The issue also needs to be RE-examined in light of the fact that climate models for Illinois predict greater amounts of precipitation, but also in more violent but less-frequent events each with greater amounts of precipitation.
  - Illinois is also prone to tornadoes, the frequency of which is increasing annually.
- 3.) MARK-I SPENT FUEL POOLS ARE SITED IN A DANGEROUS, POTENTIALLY CATASTROPHIC MANNER: The Fukushima disaster has exposed the unique vulnerability of the Mark-I design – that the spent fuel pools are located OUTSIDE of sufficiently protective reactor containments, and are sited 5 stories above the ground. These flaws were known and pointed out in the 1970s. Neither NRC nor Congress can repeal the Law of Gravity.

Breakage or blockage of cooling water piping resulting in cooling water interruption or draining of the reactor spent fuel pools opens up the possibility of recreating Fukushima in the U.S. Permitting the continued operation of these reactors without correcting these design defects is tantamount to criminal negligence, after seeing what has occurred in Japan.

4.) POTENTIAL DAMAGES TO ILLINOIS: Illinois is a prime agriculture state. A nuclear accident of any kind here in Illinois opens up the possibility of our state becoming the Belarus or Japan of the U.S. The potential economic loss to agriculture here would be devastating, as we have seen after the Chornobyl and now the Fukushima nuclear disasters – where nations impose embargoes on agricultural products coming from these nations as a result of the meltdowns.

For these reasons, and those of our co-petitioners, we request that the NRC accept the contentions of this Petition, and order the closure of the U.S. BWR's using the GE Mark-I containments at least until such time as the requested investigations are completed, and a satisfactory safety result is independently verified.

We thank you for the opportunity to present these contentions, and are available to answer questions or engage in further discussion.