

STATEMENT AND QUESTIONS FOR NRC ANNUAL ASSESSMENT MEETING

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Before asking my questions, I want to take a minute to let Administrator Dean know that this local homeowner and involved stakeholder is extremely disturbed and angered by your arrogance and disregard for transparency by an agency that proves over and over again that it has placed its charter responsibility to the public far behind its promotion and protection of the nuclear industry. That NRC could hire a professional moderator who has virtually no knowledge of the issues while writing to me that a public record of public meetings is not a good use of NRC budget is a slap in the face to all the citizens living in reactor communities and is a cowardly and crass attempt to stifle communications so that relevant issues brought to the front by citizen stakeholders will not be known by other communities nor by upper management of the agency. Shame on you sir.

Now my questions:

First, as I am sure you are aware, in August 2011, a 5.8 magnitude earthquake occurred in Virginia with the epicenter approximately 11 miles from the North Anna nuclear plant. That event was felt in New York City and as far north as Rhode Island. I am also sure you are aware that that earthquake created ground wave vibrations that exceeded both design basis and operating basis for the North Anna plant, cracked structures on site and moved some of the massive, multi-ton dry cask storage units.

I assume you are also aware that the Indian Point Nuclear Plant was built in close proximity to the known Ramapo fault, which is mind boggling to begin with, and that Entergy has stated multiple times that Indian Point was built to withstand a 6.1 magnitude seismic event. In 2008, seismologists of the Lamont Doherty Earth Observatory of Columbia University identified a second fault that intersects the Ramapo Fault within a mile of Indian Point and these seismologists estimate potential for as high as a 7.0 magnitude seismic event. My questions are:

- Can you confirm that Indian Point's reactor buildings are based on seismic tremor levels equated to a 6.1 event?
- Can you tell us what the seismic safety standards are for the spent fuel storage structures where over 2700 tons of high level wastes are stored?
- Can you tell us what level of event your new evaluation standards will be since a 7.0 magnitude event is approximately 10 times the force of a 6.0 event and my

understanding is that geological records for earthquake magnitude in this area go back only about 350 years which is a blink in geological terms.

- Can you tell us what steps will be taken to look for smaller, but potentially dangerous levels of damage to things like pipe welds, cracked cement, compromised underground pipes or other internal structures if an earthquake occurs? In other words the seismic issue is not simply that there might be “a big one” – though that is far from a trivial concern. The real threat is that vibrations from a quake can cause unseen, unknown damage to plant internals, weakening piping, fraying wires, loosening welds, creating fissure cracks in some component or another. And everything still looks fine. Then, a year or two or even ten later, there is a problem at the plant and, instead of working as planned or expected, that weakened part cracks.
- Can you assure the public that the high pressure gas lines of the Algonquin Pipeline that circumvent Indian Point can withstand the size events that are estimated by Lamont Doherty? And since there is a proposal to expand those pipelines to 42 inches, will that affect your seismic safety calculations?

Second, in your probabilistic risk modeling of Severe Accidents, does the NRC include the outside environment and economic data should the unexpected happen? Specifically, does the agency use the same set of criteria for each nuclear plant to determine probabilities of a severe accident based on reactor design and output capacity? In plainer terms, does 20-million people living or working within the 50-mile radius of Indian Point, and the \$8.5 trillion in real estate value alone carry any additional weight in your probabilistic modeling compared to the Wolf Creek Generating Station in Burlington, KS or the Cooper Nuclear Station in Brownville, NE both of which have sparse population and relatively little economic assets within 50-miles? If so can you explain the weighting system?

Finally, since no nuclear plant in the US was ever designed for indefinite storage of nuclear waste, how far above original design basis is currently stored in the spent fuel pools? Since the spent fuel can be moved into dry cask storage after just a few years, and a 2003 report, co-authored by the current NRC Chairman Macfarlane concludes that the spent fuel storage is safer in separated dry casks than the overcrowded wet storage of the pools, why has such a small percentage of eligible fuel assemblies been moved into the safer storage containers.? And exactly how many times above what the pools were designed for is currently stored in the spent fuel pools?