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Statement of Rep. Henry A. Waxman
Ranking Member, Committee on Energy and Commerce
“The U.S. Government Response to the Nuclear Power Plant Incident in Japan”
Subcommittee on Oversight and Investigations
April 6, 2011

Mr. Chairman, thank you for holding this important hearing. I would like to take a few minutes to follow up on issues Ms. DeGette discussed in her opening statement about the modeling and simulation work NRC has done on the Peach Bottom boiling-water reactor under the NRC’s State-of-the-Art Reactor Consequences Analyses (SOARCA) project.

According to NRC staff, a draft NRC report reveals that the Peach Bottom plant came within one hour of core damage in a severe loss-of-power scenario. That result raises questions about whether our reactors may be as vulnerable as those in Fukushima.

When a simulation purporting to determine the realistic consequences of a severe accident nearly results in a partial meltdown, Congress should be asking tough questions.

The NRC’s simulations do not consider the impact of a disaster event on spent fuel pools. We know from the Japan incident that uncovered spent fuel was a major source of radiation and radioactive contamination. At crucial points in the Japanese response effort, radiation from uncovered spent fuel rods has been a significant obstacle. We need additional analysis to account for these potential risks.

The NRC terminated its models two days after the simulated loss of power. According to NRC staff, the assumption was that response efforts would only get more numerous and more effective after two days.

There is a lot we still don’t know about what went wrong at the Fukushima plant. But we can safely conclude two days is not enough time to know whether a reactor will meltdown and release radioactive contamination into the environment after a major disaster. Stopping the analysis after just two days means that NRC may be overlooking important consequences.

There are also questions the Committee should explore about whether the new equipment and procedures ordered after the September 11 attacks are actually in place and would be effective. The new equipment and procedures made an important difference in the NRC’s modeling. With the new equipment and procedures, a meltdown is narrowly avoided in a

complete loss-of- power scenario. Without the new equipment and procedures, a simulated meltdown results, even when the backup battery power is still operational.

The starting point for the NRC models is a major earthquake, flood, or fire that leads to a loss of power at the reactor. In the briefing NRC provided my staff, the agency indicated that it assumes that critical backup equipment would survive the earthquake or flood or fire and be fully operational. That is a big assumption.

Internal NRC emails described in a memo the Union of Concerned Scientists (UCS) is releasing today also indicate that there were disagreements among NRC analysts as to whether the new equipment and procedures – known as “B5b measures” – that allowed Peach Bottom to narrowly avoid a meltdown would actually work. According to the UCS memo, one NRC staff e-mail summarized concerns of NRC senior reactor analysts who work in NRC’s regional offices as follows:

“One concern has been that SOARCA credits certain B5b mitigating strategies ... that have really not been reviewed to ensure that they will work to mitigate severe accidents. Generally, we have not even seen licensees credit these strategies in their own PRAs [probabilistic risk assessments] but for some reason the NRC decided we should during SOARCA.”

This e-mail specifically raises concerns about the Reactor Core Isolation Cooling system. This is the exact system that NRC staff told us allowed Peach Bottom to avert core damage in the simulated full loss-of-power scenario.

These emails and the results of the NRC’s draft report raise questions about the safety and preparedness of nuclear reactors in the U.S. The review initiated by NRC is an important first step. NRC should absolutely conduct a thorough review of safety at U.S. plants and what changes should be made in light of the events in Japan. But this Committee has an independent obligation to conduct oversight. We need to gather the facts so that we can determine whether the laws and regulations governing these reactors are adequate and effective.

Americans are asking whether U.S. nuclear plants are safe. That’s a reasonable question that deserves a thoughtful answer. I look forward to working with my colleagues to conduct the bipartisan oversight necessary to answer that question.

Mr. Chairman, I’d like to ask unanimous consent to enter into the record the UCS memo and a supplemental memo prepared by the Democratic staff.