June 29, 2011: Nebraska Nuke Floods, New Mexico Wildfires: Regulations Inadequate

Markey on Nebraska Nuke Floods, New Mexico Wildfires: Regulations Inadequate to Prevent Nuclear Disasters from Extreme Weather

NRC Commissioners Recently Voted to Reduce Safety, Including Nixing “Near-site” Disaster Command Centers and Increasing Risk from Heightened Reactor Activity

WASHINGTON (June 29, 2011) – The risks to nuclear power plants in Nebraska due to flooding and the wild-fires in the southwest highlight the inadequacy of current regulations and risk assumptions in the face of extreme weather events that may be exacerbated by climate change, Rep. Ed Markey (D-Mass.) asserted today. These incidents, coupled with an unusually active series of tornadoes earlier this spring, highlight the potential for severe weather to cause disasters at nuclear reactors, and the need to update risk assessments and safety regulations following the Fukushima nuclear meltdown in Japan. Rep. Markey also said that the Nuclear Regulatory Commission had taken steps over the last two years to decrease safety at nuclear plants.

The Los Alamos fires that threaten 30,000 barrels of stored plutonium fuel also highlight the need for the Department of Energy, which owns the facility, to consider updating their safety requirements at nuclear labs and other nuclear facilities.

“The floods, fires and tornadoes that have ravaged America this year demonstrate the need to update our nuclear safety regulations, even before the events at Fukushima are considered,” said Rep. Markey, the top Democrat on the Natural Resources Committee. “The steps taken by nuclear regulators at Fort Calhoun show that increased vigilance is the necessary price of safety, but much more must be done to account for the increasingly wild weather that has recalibrated our collective understanding of potential risk. The prudent steps NRC had taken at Fort Calhoun have prevented any serious harm from occurring thus far. They should continue those efforts at facilities nationwide.”

In March 2010, following earlier correspondence with the NRC in which then-chairman Dale Klein dismissed Rep. Markey’s concerns related to the ability of nuclear reactors to prepare for the potential impacts of global warming, Rep. Markey sent a letter to GAO requesting a comprehensive investigation into the adequacy of NRC regulations, including NRC actions taken to prepare for earthquakes, flooding, hurricanes and tornadoes, and other effects of global warming. Many of these effects relate to the loss of off-site electricity, the failure of emergency backup power supplies, and the loss of cooling capabilities, all of which led to the meltdowns and explosions at the nuclear reactors in Japan.

Rep. Markey also released a report in May detailing the regulatory loopholes that have left U.S. nuclear facilities ill-prepared to respond to a catastrophic event involving a loss of off-site power, which include:

- Widespread malfunctions and inoperability of emergency diesel generators at nuclear power plants.
- The absence of emergency back-up power requirements at some spent fuel pools.
- The absence of requirements to prevent hydrogen explosions at reactors and spent fuel pools.
- Outdated seismic safety requirements, even as applications for new licenses and license extensions for many nuclear reactors continue to be processed by the NRC.

Yet, despite the existence of these loopholes, the NRC has continued to approve applications to extend the licenses of several nuclear power plants without first incorporating the lessons of Fukushima into their requirements, and without following the environmental law that requires any “new and significant”
information regarding the environmental consequences of operating the nuclear reactor be included in the application.

Additionally, the Obama administration has yet to implement Rep. Markey’s 2002 law to require the distribution of potassium iodide, an inexpensive medication that has been found to protect individuals, especially children, from the cancer-causing releases of radioactive iodine, to those located within 20 miles of all operating nuclear reactors. A recent Associated Press analysis showed that populations around nuclear power plants have swelled by as much as four and a half times since 1980, highlighting the need to revisit the emergency evacuation plans and 10 mile emergency planning zones that are currently in place at these facilities.

Moreover, the Nuclear Regulatory Commission has recently voted 4-1 (with Chairman Jaczko as the dissenting vote) to weaken nuclear reactor safety:

"Near-site" Emergency Operations Facilities are supposed to be command and control centers for nuclear reactor accidents. In 2004, then-Commissioners Jaczko and McGaffigan voted against a request by Southern Company to put one of these facilities more than 200 miles away from each of the reactors it would serve and require coordination between as many as four different states. But in September of 2010, the NRC voted 4-1 to stop separately considering nuclear reactor licensees’ requests to be exempted from the requirement to locate their emergency facilities near the nuclear reactors where the facilities would be needed.

The NRC has approved “power up-rates” for twenty-two nuclear reactors to produce more electricity. But “power up-rates” also means more radioactive materials, hotter reactor cores, and higher pressures, all of which can make a meltdown more likely in the case of an accident. On February 17, 2011, the NRC’s Advisory Commission on Reactor Safeguards said that the NRC shouldn’t just assume that safety measures to address these riskier conditions were in place and would work. But on March 15, 2011 – 4 days after the Japanese earthquake - the NRC announced a 4-1 Commission vote to ignore its technical advisory group, even though in his dissenting vote, NRC Chairman Jaczko noted the need for a risk analysis that includes the possibility of fires and earthquakes that breach the containment of the reactors.

"With floods, fires and storms that now approach biblical proportions, the NRC should be voting to upgrade safety and improve emergency response capabilities," said Rep. Markey. "Instead, it appears that a majority of Commissioners are turning a blind eye to the risks these reactors face."

Markey also noted that recent press reports have raised concerns about whether the Las Conchas wildfire burning in New Mexico could adversely affect nuclear waste and hazardous materials stored at the Los Alamos nuclear weapons laboratory, saying "Energy Secretary Chu needs to ensure that this wildfire does not result in any release of radioactive or hazardous materials."

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