4. NUCLEAR: U.S. industry likely to feel financial impact of Japan disaster *(Greenwire, 03/14/2011)*

Hannah Northey, E&E reporter

The nuclear crisis in Japan and renewed concerns over the safety of nuclear power could have serious financial repercussions for the U.S. nuclear industry, according to a scholar who is researching the probability of nuclear accidents and their impact on the cost of nuclear energy.

Major nuclear incidents in the past have increased regulations and lengthened the time of power-plant construction and permitting duration, said Mark Cooper, a senior fellow for economic analysis at the Institute for Energy and the Environment at the Vermont Law School.

"When there's an incident, policymakers, regulators, they pause ... they decide they need more safety so they increase the direct cost of the reactors," Cooper said in an interview today. "They increase the length of time it takes to build reactors, some that are put on hold. Wall Street looks at this stuff and says, 'Wait a minute, these are riskier investments than we thought,' so they increase the financing costs."

Cooper acknowledged that the events in Japan are still unfolding and questions of what happened there could rage for years. But he said there is a correlation between the rise in cost of nuclear plants and accidents, and that the process reflects regulators focusing on safety and Wall Street on its investments, both of which lead to higher cost for nuclear plants.

The "overnight construction costs" for nuclear power plants were about $2,600 per kilowatt between the 1979 partial core meltdown at Three Mile Island in Pennsylvania and the 1986 accident at the Chernobyl power plant in Ukraine, which then was part of the Soviet Union, Cooper said. But costs rose to about $5,000 per kilowatt after Chernobyl.

"The simple fact of the matter is, cost of the reactors increase with the number of incidents," Cooper said. "Capital markets, it's their job to evaluate the risk of assessment."

But Phil Kasik, a senior nuclear engineer with in Alexandria, Va.-based MPR Associates, said cost impact of recent events should take into account that newer plants have already built into them newer safety features. Conclusions on costs should also take into consideration differing designs and where the plants are sited.

While Cooper is looking into the large-scale financial impacts of such events, industry and technical groups like the nonprofit American Nuclear Society are urging caution, asserting that although there are risks associated with operating nuclear plants and other industrial facilities, "the chances of an adverse event similar to what happened in Japan occurring in the U.S. is small."

Questions from Congress

Congress is preparing to ask federal nuclear regulators probing questions on Capitol Hill this week.

Rep. Fred Upton (R-Mich.), a proponent of nuclear power, is calling for a measured approach and questions directed toward the head of the Nuclear Regulatory Commission to better understand the implications of the events in Japan.

Upton has repeatedly called on NRC to provide more certainty and transparency in its license renewal process, specifically pointing to the slow pace of relicensing the Pilgrim Nuclear Power Station in Massachusetts and the Vermont Yankee power plant in Vermont.

On the other side of the aisle, Rep. Edward Markey (D-Mass.) sent a letter to President Obama yesterday calling for an immediate ban on all new reactors in seismically active areas until U.S. officials conduct a "top to bottom" review of design resiliency, emergency response, backup power to prevent meltdown during power outages and evacuation plans.

Markey also sent Obama another letter this weekend, flagging concerns that the United States does not have a "coordinated plan" to deal with a nuclear disaster on par with the events unfolding in Japan.

Data released under a Freedom of Information Act request indicate that NRC and the Federal Emergency Management Agency, part of the Department of Homeland Security, disagree about which agency would take the lead in responding to and cleaning up a large-scale radiation release caused by an accident at or attack on a nuclear reactor, Markey said.

"I am concerned that it appears that no agency sees itself as clearly in command of emergency response in a nuclear disaster," Markey said. "In stark contrast to the scenarios contemplated for oil spills and hurricanes, there is no specificity for emergency coordination and command in place for a response to a nuclear disaster."

Under the federal government's nuclear accident response plan, DHS is responsible for responding to and recovering from terrorist attacks, major disasters and other emergencies. But the plan also indicates that the coordinating agency may be the Department of Energy, the Department of Defense, U.S. EPA, NRC or the U.S. Coast Guard, depending on the type of radiological incident, Markey said.

NRC did not return a call seeking comment on Markey's letter before deadline.

Markey is asking NRC not to approve the design of the AP1000 reactor design, which the agency has said could be approved within months. Markey has raised concerns that Westinghouse Inc. based assumptions that the reactor could withstand a strong earthquake on faulty information.

Meanwhile, NRC has sent two experts on boiling water reactors to Japan and is assuring U.S. citizens that weather conditions and distance will prevent "any harmful levels of radioactivity" from venting of radioactive steam at the damaged reactors from reaching the United States.

"Given the thousands of miles between the two countries, Hawaii, Alaska, the U.S. territories and the U.S. West Coast are not expected to experience any harmful levels of radioactivity," NRC said.