Palisades one of 12 U.S. nuclear power plants most at risk for early retirement, study finds

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on July 17, 2013 at 2:50 PM, updated July 17, 2013 at 7:04 PM

Update: Entergy Corp. responds to study placing Palisades on list of reactors most at risk for shutdown.

COVERT TOWNSHIP, MI – Palisades is one of 12 U.S. nuclear power plants deemed most at risk for early retirement, according to a study released July 17.

Mark Cooper, senior fellow for economic analysis at the Institute for Energy and the Environment at Vermont Law School, examined 11 risk factors that might lead to reactors being shut down early and found 38 of the country’s 104 reactors had four or more risk factors.

Palisades had six, including cost, age, long-term shut down and multiple safety risks. Other Michigan reactors on the list included the Enrico Fermi Generating Station in Frenchtown Charter Township and the Donald C. Cook Generating Station near Bridgman, each of which had five risk factors.

The Covert Township reactor, which is owned by Entergy Corp., by no means had the most risk factors of the 12 cited in the study. The Pilgrim reactor in Plymouth, Mass., which is also owned by Entergy, had nine, while the Davis-Besse reactor in Oak Harbor, Ohio, owned by FirstEnergy, had eight.

Palisades did not immediately respond to a request for comment from the Kalamazoo Gazette.

Cooper said he used three reports from Wall Street analysts -- Moody's, Credit Suisse and UBS -- as well as analysis of past early retirements to identify risk factors that appear to have caused the early retirements in the past year in his study, "Renaissance in Reverse: Competition Pushes Aging U.S. Nuclear Reactors to the Brink of Economic Abandonment."

"More nuclear capacity has been retired early than in any year in history of U.S. nuclear program," said Cooper in a Thursday press conference.

So far this year, he said, four reactors have closed and five major up-rates have been canceled.
Last year, he said, the load factor for the nation's nuclear plants was the lowest at any time in the past decade.

"The bottom line: The tough times nuclear power faces today are only going to get tougher," said Cooper.

The four reactors whose retirements have been announced in 2013 had five or six risk factors each, according to the study. Those include the two reactors at the San Onofre power plant in California whose decommissioning was announced earlier in July, Kewanee in Wisconsin and Crystal River in Florida, each of which had one reactors.

"I'm not making predictions here, and I really want to stress that," said Cooper.

What he could say, he added, is that, with a sizable number of reactors poised on the "razor's edge," a number of key factors could push them over the edge. The list of most vulnerable plants, he said, came directly from Wall Street analysis.

Cooper said the point of his report was not designed to predict which reactor would be "the next to go."

"The historical analysis shows that it is generally a combination of factors that leads to the retirement decision. However, the vulnerability of large numbers of reactors suggests that there will be future early retirements and uprates will be slow to come," wrote Cooper, who said his analysis was primarily economic. "All of the reactors have significant economic issues. If anything goes wrong, any of these could be retired early."

Across the U.S., a number of factors, including the declining cost of natural gas, increased operating costs for nuclear plants and the expense of safety retro-fits, are leading to an increased likelihood of early retirements, Cooper said.

Lower cost-alternatives are squeezing the cash margins of older reactors, such as Palisades, "to the point where they no longer cover the cost of nuclear operation. In the mid-term, things get worse because the older reactors get, the less viable they become," he wrote.

In the study, Cooper cited local opposition as a particularly intense challenge facing the Palisades reactor.

"No U.S. nuclear plant has ever closed because it reached the end of its licensed life. Instead, cost challenges to their continued profitability has usually been the cause of shutdowns," said Peter Bradford, adjunct professor at the Vermont Law School, a former member of the U.S. Nuclear Regulatory Commission and a former utility commission chair in New York and Maine.

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