Deep Crack in Florida Reactor a Sign that Aging U.S. Reactor Fleet Should be Shut Down

Takoma Park, MD – A deep crack just discovered in the concrete containment wall of the Crystal River nuclear reactor on Florida's west coast signals a disturbing trend in ongoing cracking and corrosion and other dangerous wear-and-tear symptoms among the country's fleet of aging reactors, Beyond Nuclear stated today.

Progress Energy, reported to the Nuclear Regulatory Commission on October 7 that maintenance workers had found a deep crack in the concrete containment wall of its single-unit Crystal River reactor. The reactor is of the same pressurized water reactor design as the notorious Three Mile Island Unit 2 that melted down in 1979 as well as the Davis-Besse reactor near Toledo, OH, which was potentially weeks from a core melt accident in 2002 due to severe corrosion that had eaten through the wall of the reactor pressure vessel.

"The crack in Crystal River’s reactor containment building is the latest in a disturbing trend," said Paul Gunter, Director of the Reactor Oversight Project for Beyond Nuclear. "As this country’s reactors age – with many extending their 40-year licenses – there is an ever greater risk to public safety due to cracking, corrosion and other problems of degradation. But historically, the Nuclear Regulatory Commission has simply looked the other way, allowing the reactor owners to operate the plants in a dangerous state rather than mandate an immediate shutdown."

Workers at Crystal River who were cutting through the concrete wall in a maintenance procedure found a half-inch wide crack just nine inches from the outer surface wall of the all important reinforced 42-inch thick concrete dome. The length of the crack has not been reported.

In addition to the age-related problems at Crystal River and Davis-Besse, Beyond Nuclear has tracked similar concerns at the Beaver Valley Nuclear Power Station near Shippingport, Pennsylvania, where corrosion had eaten a rust hole through the reactor steel containment liner. Similarly, at the Oyster Creek reactor on the New Jersey shore, the discovery of reactor containment liner corrosion has become a contentious issue in
federal court. Oyster Creek, the country’s oldest reactor at 40, recently received a 20-year license extension from the NRC. Crystal River is also seeking a 20-year extension.

The specific cause of the Crystal River cracking is now under Nuclear Regulatory Commission (NRC) special inspection. The NRC acknowledges that it is evaluating whether containment cracking is a potential generic issue at other reactors of similar design. The Crystal River nuclear power plant had been shut down for refueling and maintenance. Workers were cutting an opening in the nearly four feet thick containment wall to remove and replace worn steam generators. Workers encountered the gaping crack nine inches from the containment dome’s outer surface and reported the defect to the NRC in a Daily Event Report.

“It’s time the NRC fulfilled its Congressional mandate to look out for public safety instead of risking lives to save nuclear utilities money,” said Gunter. “The Crystal River crack presents the NRC with an opportunity to keep this plant shut down and to seriously re-evaluate whether it should be granted a license extension,” Gunter concluded.