NRC to Increase Oversight of Pilgrim Nuclear Power Plant Based on New Inspection Finding

The Nuclear Regulatory Commission has finalized an inspection finding of low-to-moderate safety significance and an associated violation for the Pilgrim nuclear power plant. The decision will result in increased NRC oversight at the Plymouth, Mass., facility.

Specifically, the enforcement action will move the plant into the Repetitive Degraded Cornerstone Column, or Column 4, of the NRC’s Action Matrix. The plant transitioned into the Degraded Cornerstone Column, or Column 3, in late 2013 as a result of unplanned shutdowns and unplanned shutdowns with complications that year. During an inspection in December 2014, the NRC found that Entergy, the plant’s owner and operator, had not adequately evaluated the causes of those shutdowns and that some corrective actions had not been completed as intended or were closed out prematurely.

Although the NRC found during a subsequent inspection in early May of this year that the issues had been satisfactorily addressed, the latest finding was identified during a Special Inspection at the plant following a storm-induced unplanned shutdown in January 2015. The more recent finding, which involved the performance of the plant’s safety relief valves, occurred while the plant was in Column 3. This will now result in the plant shifting to Column 4.

“The most recent finding highlights the continuing weaknesses in the implementation of Entergy’s program for identifying, evaluating and resolving problems at Pilgrim,” NRC Region I Administrator Dan Dorman said. “Our increased oversight will focus on understanding the reasons for those weaknesses and the actions needed to achieve sustained improvements.”

Dorman said the NRC will also determine the need for additional regulatory action and examine the extent of equipment, human performance and procedure quality issues that have contributed to or complicated the unplanned shutdowns in 2013 and 2015.

The latest inspection finding stems from a determination that Entergy could have prevented a Jan. 27, 2015, problem involving safety relief valves at the plant if it had properly identified, evaluated and corrected a condition that caused one of the valves to fail to operate correctly after a plant
shutdown on Feb, 9, 2013. This failure to identify and correct the valve condition also constituted a violation of NRC requirements.

All of the safety relief valves were replaced with valves of a different design during a refueling and maintenance outage at the plant this spring.

Prior to making a final enforcement decision, the NRC offered the company the opportunity to accept the finding without any formal response or to provide additional information in a Regulatory Conference or in writing. The company opted for a Regulatory Conference, which took place on July 8. During that session, Entergy stated that, among other things, two of the safety relief valves remained fully operable during the event while two others would have functioned at high pressure levels. The company also noted the availability of redundant safety equipment that provides alternative means of achieving the function of the valves. As such, the finding should have been classified as very low safety significance, the company asserted.

After considering all of the available information, the NRC has concluded the finding is appropriately characterized as low-to-moderate safety significance. This is based, in part, on the determination that the as-found and historical degradation of the valves indicated there was an increased likelihood that the valves would not properly function when needed.

The NRC’s letter discussing the finalization of the inspection finding will be posted in the agency’s ADAMS electronic documents system.