NRC Increases Oversight of Watts Bar Nuclear Plant for Flood-Related Violations

The Nuclear Regulatory Commission staff is increasing its oversight of the Watts Bar nuclear power plant after citing the plant for violations of requirements for analyzing and preparing for potential flooding.

The Watts Bar plant, operated by the Tennessee Valley Authority, is located on Watts Bar Lake about 60 miles southwest of Knoxville. The lake is part of the Tennessee River system and TVA must account for potential flooding in the plant design and emergency procedures. No actual flooding event that would have affected the plant’s safety equipment has occurred.

The NRC staff held a conference with TVA officials in late April to discuss the risk significance of preliminary inspection findings in the flood protection area.

After reviewing the NRC inspections and information presented by TVA at the conference, the NRC staff concluded that the Watts Bar staff would have been unable to implement some of their flood mitigation procedures within the time specified in those procedures. As a result, the NRC concluded that the plant’s flood mitigation strategy had been inadequate until July 2012 when the plant took compensatory measures. The NRC staff has classified that violation as yellow, meaning it has substantial safety significance.

The NRC staff also found that TVA did not establish adequate flood protection for the potential failure of upstream dams. The NRC staff has classified that violation as white, meaning it has low to moderate safety significance.

The Watts Bar plant was also cited for a violation because TVA did not notify the NRC within eight hours after discovery that the potential failure of the upstream dams and subsequent potential onsite flooding resulted in an unanalyzed condition affecting plant safety.

“TVA has taken adequate compensatory measures at the Watts Bar plant to ensure that the flooding issues are not a current safety concern, but we want to be certain they appropriately address flooding scenarios that could affect important plant safety equipment on a more long-term basis,” said NRC Region II Administrator Victor McCree.

The NRC will schedule an inspection to evaluate TVA’s corrective actions for the yellow and white issues, and TVA must respond in writing with their corrective actions for the reporting violation.

The NRC also identified a similar violation for the potential upstream dam scenario and the reporting violation at TVA’s Sequoyah nuclear plant. The news release for the flooding issues at the Sequoyah plant can be found on the NRC website.