NRC Approves Changes to Reactor Oversight Process

The Nuclear Regulatory Commission approved changes today to the agency’s Reactor Oversight Process, adjusting the criteria for subjecting a nuclear power plant to additional oversight and directing the staff to develop new guidance to help identify weaknesses in a licensee’s performance.

The Commissioners approved a staff recommendation to require three low-to-moderate safety significance (white) inspection findings or performance indicators to push a reactor into the “degraded cornerstone” category of regulatory oversight, often known as Column Three of the Reactor Oversight Process Action Matrix. Column One represents a reactor receiving normal oversight and Column Five is reserved for reactors ordered to shut down due to unacceptable performance.

The ROP, initiated in 2000, assesses a nuclear power plant’s performance across seven aspects of facility operation, called cornerstones. Inspection findings are color-coded as green, white, yellow or red, in increasing order of safety significance. Performance indicators are objective data regarding licensee performance in the different cornerstones. These safety-significant numbers are compiled by licensees and reported to the NRC; they are color-coded in a similar manner. The current criteria would move a plant to Column Three based on two white inputs in the same cornerstone or a single yellow input. A staff assessment determined that from a risk-informed perspective, three white findings, not two, are more closely equivalent to a single yellow input. Moving from Column Two to Column Three involves a significant increase in resources for both the NRC and the plant: Column Two involves about 40 hours of additional inspections, while Column Three requires 200 hours. The change to three white inputs in the same cornerstone better aligns the safety significance to the additional level of inspection.

“The Reactor Oversight Process is a mature and effective program,” said Bill Dean, director of the NRC’s Office of Nuclear Reactor Regulation. “For the past 15 years, it has helped us provide appropriate oversight of the nation’s commercial nuclear power plants. These adaptations will help us target our oversight more precisely on those plants with significant performance issues.”

In the Staff Requirements Memorandum approving the criteria change, the Commission also directed the staff to include additional resources and guidance for inspectors to review a licensee’s common cause analyses for two white inputs in the same cornerstone. The guidance will help identify potential programmatic weaknesses in a licensee’s performance.

The changes will take effect in January, and do not alter the current oversight status of any plants. The staff’s proposal and assessment of the criteria were spelled out in SECY-15-0108, which was made public in August.