

Evaluate and Develop Risk-Informed Regulatory Guidance for New Reactors

The staff continues to address the issue of risk-informed regulatory guidance for new light-water reactors (LWRs). The staff is working to respond to SRM-SECY-12-0081, “Risk-Informed Regulatory Framework for New Reactors,” dated October 22, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12296A158). Specifically, this paper addresses the Commission’s request to give additional consideration to the use of relative risk metrics, or other options, that would provide a more risk-informed approach to the determination of the significance of inspection findings for new reactors, and to provide a notation vote paper as directed in the SRM.

Since the issuance of the SRM, the staff conducted a series of public meetings with stakeholders. The first public meeting was on February 5, 2013 (ADAMS Accession No. ML13059A054). Additional public meetings were held on March 25, 2013 (ADAMS Accession No. ML13100A226) and April 15, 2013 (ADAMS Accession No. ML13126A166). The ACRS subcommittee on Reliability and Probabilistic Risk Assessment (PRA) was briefed on July 22, 2013, and a briefing is scheduled with the ACRS full-committee for September 5, 2013. The response to SRM-SECY 12-0081 is due to the Commission by October 2013.

In addition, as part of SRM-SECY-12-0081, on March 22, 2013, SECY-13-0029, “History of the use and Consideration of the Large Release Frequency Metric by the U.S. Nuclear Regulatory Commission” (ADAMS Accession No. ML13022A207) was submitted to the Commission. This SECY is an information paper to the Commission, reviewing the history of the U.S. NRC’s use and consideration of large release frequency (LRF). Also, this SECY provides pros and cons of requiring the use of LRF, possibly in addition to large early release frequency (LERF), for all operating reactors.