

AGENCY: Nuclear Regulatory Commission

TITLE OF ACTION: Interim Staff Guidance 28, Assessing the Technical Adequacy of the Advanced Light-Water Reactor Probabilistic Risk Assessment for the Design Certification Application and the Combined License Application

LEVEL OF SIGNIFICANCE: Not a major rule

UPCOMING ACTION: Publication of Interim Staff Guidance 28

AGENCY IDENTIFICATION: DC/COL-ISG-028

DATE OF ISSUANCE: November 2016 (estimated)

STATUTORY OR JUDICIAL DEADLINE: None

DESCRIPTION OF ACTION:

By issuance of DC/COL-ISG-028, the staff is proposing specific review guidance for assessing the technical adequacy of the probabilistic risk assessment (PRA) needed for an application for a design certification (DC) of an advanced light-water reactor (ALWR) under Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Licenses, Certifications, and Approvals for Nuclear Power Plants," specifically 10 CFR 52.47(a)(27). This ISG will also apply to an application for a combined license (COL) under 10 CFR 52.79(a)(46). Specifically, this guidance addresses how these applicants can use American Society of Mechanical Engineers/American Nuclear Society (ASME/ANS) RA-Sa-2009, "Addenda to ASME/ANS RA-S-2008 Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," (the PRA Standard), as endorsed by NRC's Regulatory Guide (RG) 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities."

The rule has not resulted in and is not likely to result in:

- (A) an annual effect on the economy of \$100 million or more;

Disposition: This ISG is applicable to ongoing and future PRA assessments during reviews of DC and COL applications. This guidance applies to one existing review and to the estimated three new applications that may be submitted to the NRC for review in the next three years. Based on an assumed \$100 per hour rate, each applicant would save an estimated 680 hours in effort, for a total savings of \$68,000 per applicant. This cost savings results from an expected reduction in Requests for Additional Information (RAIs). Currently, RAIs add a significant burden to each applicant's effort, because the current regulatory guidance does not specifically address how to use the guidance for these applications. The savings to industry to perform these reviews following this additional guidance is estimated to be \$68,000 per application times four applications for a total savings over three years of \$272,000. The savings to industry per year is

\$272,000/3 years which equals \$90,666 per year. Based on the NRC fee rate of \$274 per hour, the NRC would save an estimated 280 hours in review effort for a total savings of \$76,720 per application.

Consequently, the staff has determined that the proposed ISG-028 is not a major rule in accordance with the Congressional Review Act.

- (B) a major increase in costs or prices for consumers, individual industries, or geographical regions; or

Disposition: The main purpose of DC/COL-ISG-028 is to provide supplemental guidance to DC and COL applicants and the NRC staff on specific regulatory requirements of 10 CFR, Part 52. The NRC does not anticipate any major increase to costs or prices for consumers, individual industries, or geographical regions. In fact, this supplemental guidance represents a reduction in cost (i.e., a cost savings to the applicant). This determination is based on an assessment of past license applications, and estimates that the proposed ISG will reduce the burden on the applicant — the difference between each applicable task's current burden and the amount of time necessary to perform that revised task under this ISG — relative to each task's current level of effort.

- (C) a significant adverse effect on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets.

Disposition: The NRC does not anticipate any significant adverse effects due to this guidance being issued. The proposed changes would involve a voluntary change from current practices for applicants that would effectively reduce their overall level of effort and costs, which an applicant would not do unless it were in its best interests. Therefore, the NRC staff does not anticipate any significant adverse effects due to this guidance being issued.

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