REGULATORY ANALYSIS

REVISION 1 TO REGULATORY GUIDE 1.205, "RISK-INFORMED, PERFORMANCE-BASED FIRE PROTECTION FOR EXISTING LIGHT-WATER NUCLEAR POWER PLANTS"

Continued Applicability of the 10 CFR 50.48(c) Regulatory Analysis

The NRC staff did not prepare a separate regulatory analysis for this regulatory guide, because the regulatory analysis supporting the rulemaking for the amendments to 10 CFR Part 50, "Voluntary Fire Protection Requirements for Light-Water Reactors; Adoption of NFPA 805 as a Risk-Informed, Performance-Based Alternative," dated June 16, 2004 (69 FR 33536), also supports this revision to Regulatory Guide 1.205. A copy of the regulatory analysis is available for inspection and may be copied at the NRC's public Web site under Regulatory Guides document collection of the NRC's Electronic Reading Room at http://www.nrc.gov/reading-rm/doc-collections and through the NRC's Agencywide Documents Access and Management System (ADAMS) at http://www.nrc.gov/reading-rm/adams.html, under Accession No. ML092730342. In addition, this regulatory analysis is available at the NRC's Public Document Room (PDR), which is located at 11555 Rockville Pike, Rockville, Maryland. The PDR's mailing address is USNRC PDR, Washington, DC 20555-0001. The PDR can also be reached by telephone at (301) 415-4737 or (800) 397-4205, by fax at (301) 415-3548, and by e-mail to PDR@nrc.gov.

- The regulatory analysis prepared for 10 CFR 50.48(c) estimated the consequences of a licensee opting to implement a fire protection program based on NFPA 805. None of the key elements of Revision 1 to Regulatory Guide 1.205 significantly alter the cost or benefits evaluated in the regulatory analysis for the underlying rulemaking.

In addition, Revision 1 of Regulatory Guide 1.205 provides additional guidance and clarifying guidance on an acceptable approach for complying with 50.48(c), which address ambiguities in the original guidance, or reduce unnecessary burden on licensees attributable to conservative guidance in the regulatory guide. These ambiguities and unnecessary burdens were identified during staff review of the pilot plant license amendment requests to implement NFPA 805. The improved guidance in Revision 1 does not change the nature or amount of effort that a licensee must expend in order to comply with the regulation, but seeks to foster scrutable compliance with the rule. These changes should result in greater clarity after a licensee implements NFPA 805. Examples of additional and clarifying guidance include:

- Clarified that the *plant change evaluation* (NFPA 805, Section 2.4.4) and the *fire risk evaluation* (NFPA 805, Section 4.2.4.2) have different uses in the rule.
- Expanded the discussion regarding how an existing fire protection licensing basis may carry over to meet NFPA 805 requirements.
- Added transition license conditions to ensure full implementation of NFPA 805 (e.g., completion of committed modifications) on the proposed schedule.

Examples of reducing unnecessary burden on licensees include:

- Provided clearer guidance regarding probabilistic risk assessment (PRA) methods for risk evaluations.

- Clarified that Regulatory Guide 1.200 is the appropriate guidance for fire PRA quality.
- Defined "primary control station" (used in the NFPA 805 definition of "recovery action") to include certain actions taken at dedicated or alternative shutdown panels. This reduces the number of operator actions that are recovery actions as defined in the rule.
- Added guidance to allow certain performance-based changes to NFPA 805 fundamental fire protection program and design elements without prior NRC review and approval.

There were several changes in the draft Revision 1 of Regulatory Guide 1.205 that were characterized by stakeholders in the public comments as being changes in position from the initial issuance of the Regulatory Guide:

- Added guidance that certain recovery actions, whether or not previously approved by NRC, must be evaluated using a performance-based approach.
- Changed the baseline to use for change in risk calculations performed using the fire risk evaluation performance-based method.

Both of the changes above were required to address requirements in the regulation. In the case of recovery actions, the initial Regulatory Guide 1.205 did not consider the case of recovery actions that had been previously approved by NRC. The baseline change was a clarification to ensure licensees meet the regulation.

In summary, the Regulatory Analysis prepared for 10 CFR 50.48(c) continues to apply to Revision 1 of Regulatory Guide 1.205.

Backfit Rule Considerations

This regulatory guide describes one acceptable approach for implementing the requirements of 10 CFR 50.48(c). That regulation sets forth the requirements governing a risk-informed fire protection program in accordance with NFPA 805. A current nuclear power plant licensee may voluntarily choose to comply with § 50.48(c) and the provisions of NFPA 805 as their approach to satisfy the requirements of § 50.48(a) and General Design Criterion 3 as an alternative to their current compliance approach and the licensee's current fire protection program. As of this date, there are no licensees who have been approved by the NRC to implement NFPA 805 under the requirements of § 50.48(c).

The regulatory guide represents a new staff position for compliance with § 50.48(c) and NFPA 805. Accordingly, the staff evaluated the regulatory guide to determine whether issuance of the regulatory guide constitutes "backfitting," as defined in 10 CFR 50.109(a)(1), the Backfit Rule. The staff believes that issuance of the regulatory guide would not constitute backfitting. There are two reasons for the staff's conclusion. First, the regulatory guide provides non-binding guidance as to one acceptable way of complying with the requirements of § 50.48(c). Applicants that seek to transition to NFPA 805 are free to choose alternative approaches for complying with the requirements of § 50.48(c) and NFPA 805. Second, there are no licensees who have been approved to use NFPA 805 under the provisions of 50.48(c) and therefore no licensees to whom the Backfit Rule applies. Finally, the regulatory guide applies to current and future applicants seeking approval to use NFPA 805. The Backfit Rule does not protect current or future applicants from regulatory changes. In as much as the issuance of this regulatory

guide does not constitute backfitting, the staff has not prepared a backfitting analysis or documented evaluation in support of the issuance of the regulatory guide.

The staff presented the new staff position to the NRC's Committee to Review Generic Requirements (CRGR) on July 13, 2009 for its determination as to whether Revision 1 contains any backfitting. The CRGR concluded that, as written, the proposed draft regulatory guide does not contain any backfitting as it only describes one acceptable approach for implementing the requirements of 10 CFR 50.48(c) and does not impose any legally-binding requirements on licensees.