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November 29, 2006

Lisa M. Regner
Project Manager
Division of Operating Reactor Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: 2.206 Petition – Shearon Harris Fire Safety

Dear Ms. Regner:

As part of the review of our 2.206 Petition on the fire safety issues at the Shearon Harris Nuclear Plant, I would like to draw the review panel's attention to the recently released Draft Regulatory Guide DG-1170. I am attaching the introduction of the Regulatory Guide and page 26 which deals directly with the requirements for the evaluation of compensatory measures. The second paragraph from the bottom of this page states:

Reliance on a compensatory measure for operability should be an important consideration in establishing the "reasonable timeframe" to complete the corrective action process. The NRC would normally expect conditions that require interim compensatory measures to demonstrate operability to be resolved more promptly than conditions that are not dependent on compensatory measures to show operability.

The reliance on compensatory measures for operability can only be determined after conducting the evaluations specified in the middle of the page. This is directly relevant to our Petition in that there has been no direct, or even indirect, evidence that Progress Energy has performed any of the specified evaluations. Therefore, it has not done the preparatory work necessary to ascertain if the many compensatory measures are or are not required for operability. Consequently, it has not conducted the evaluations necessary to justify a prolonged time period to bring the plant into compliance. In other words, Progress Energy is not only in violation of the fire protection regulations, it is also in violation of the steps defined by NRC to justify compensatory measures while non-conforming conditions are remedied.

Template: EDO-001

E-RIDS: EDO-01

Please see that this letter and accompanying attachment are provided to the panel reviewing the Petition.

Thank you for your attention.

Sincerely,

A handwritten signature in black ink, appearing to read "John D. Runkle". The signature is written in a cursive style with a large initial "J".

John D. Runkle
For Petitioners

Enc.

cc. Jim Warren, NCWARN
Paul Gunter, NIRS
David Lochbaum, Union Concerned Scientists.



U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REGULATORY RESEARCH

November 2006

Division 1

DRAFT REGULATORY GUIDE

Contact: R.F. Radlinski
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DRAFT REGULATORY GUIDE DG-1170

(Proposed Revision 1 of Regulatory Guide 1.189, dated April 2001)

FIRE PROTECTION
FOR NUCLEAR POWER PLANTS

A. INTRODUCTION

The primary objectives of fire protection programs (FPPs) at U.S. nuclear plants are to minimize both the probability of occurrence and the consequences of fire. To meet these objectives, the FPPs for operating nuclear power plants are designed to provide reasonable assurance, through defense-in-depth, that a fire will not prevent the performance of necessary safe-shutdown functions, and radioactive releases to the environment in the event of a fire will be minimized.

The regulatory framework that the U.S. Nuclear Regulatory Commission (NRC) has established for nuclear plant FPPs consists of a number of regulations and supporting guidelines, including, but not limited to, General Design Criterion (GDC) 3, "Fire Protection," as set forth in Appendix A, "General Design Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the *Code of Federal Regulations* (10 CFR Part 50); 10 CFR 50.48, "Fire Protection"; Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," to 10 CFR Part 50; regulatory guides; generic communications [e.g., generic letters (GLs), regulatory issue summaries (RISs), bulletins, and information notices (INs)]; NUREG-series reports, including NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" (NUREG-0800 or SRP); and industry standards. Since all of the fire protection regulations promulgated by the NRC do not apply to all plants, this guide does not categorize them as regulations. Licensees should refer to their plant-specific licensing bases to determine the applicability of a specific regulation to a specific plant.

This draft regulatory guide is organized as shown on the following pages.

This regulatory guide is being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. It has not received staff review or approval and does not represent an official NRC staff position.

Public comments are being solicited on this draft guide (including any implementation schedule) and its associated regulatory analysis or value/impact statement. Comments should be accompanied by appropriate supporting data. Written comments may be submitted to the Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Comments may be submitted electronically through the NRC's interactive rulemaking Web page at <http://www.nrc.gov/what-we-do/regulatory/rulemaking.html>. Copies of comments received may be examined at the NRC's Public Document Room, 11555 Rockville Pike, Rockville, MD. Comments will be most helpful if received by **December 24, 2006**.

Requests for single copies of draft or active regulatory guides (which may be reproduced) or placement on an automatic distribution list for single copies of future draft guides in specific divisions should be made to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Reproduction and Distribution Services Section, or by fax to (301)415-2289; or by email to Distribution@nrc.gov. Electronic copies of this draft regulatory guide are available through the NRC's interactive rulemaking Web page (see above); the NRC's public Web site under Draft Regulatory Guides in the Regulatory Guides document collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>; and the NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>, under Accession No. ML063100359.

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Section B, "Discussion," provides a brief history and discussion of the development and application of fire protection regulations and guidelines in the U.S. commercial nuclear power industry. The discussion includes summaries of the applicable regulations, the primary fire protection objectives, the varied licensing and design bases, and the primary assumptions relative to postulated fire events for nuclear power reactors.

Section C, "Regulatory Position," identifies staff positions and guidance relevant to providing an acceptable level of fire protection for nuclear power plants. The positions and guidance provided are a compilation of the fire protection requirements and guidelines from the existing regulations and staff guidance. In addition, as appropriate, this section offers new guidance where the existing guidance is weak or nonexistent.

Section D, "Implementation," describes how the NRC staff will use this guide.

The NRC staff developed this regulatory guide to provide a comprehensive fire protection guidance document and to identify the scope and depth of fire protection that the staff would consider acceptable for nuclear power plants. The original issue of this guide addressed only plants operating as of January 1, 2001. This revision provides guidance for new reactor designs. In addition, this revision incorporates the guidance previously included in Branch Technical Position (BTP) SPLB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants (Formerly BTP CMEB 9.5-1)." This regulatory guide may be used for licensee self-assessments and as the deterministic basis for future rulemaking.

Many existing nuclear plants are adopting risk-informed, performance-based FPPs in accordance with 10 CFR 50.48(c) and National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light-Water Reactor Electric Generating Plants," 2001 Edition. While much of the guidance provided here has been incorporated in the FPP of these plants and will continue to be appropriate for a risk-informed, performance-based FPP, the guidance provided in Regulatory Guide 1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," will take precedence over the guidance provided in this regulatory guide for plants that adopt a risk-informed, performance-based FPP in accordance with 10 CFR 50.48(c).

Risk-informed and performance-based alternatives to the guidance presented in this document that are in accordance with Regulatory Guide 1.205 may be acceptable to the NRC staff for plants that do not modify their licenses in accordance with 10 CFR 50.48(c). Licensees that do not adopt a program based on NFPA 805 may use risk-informed, performance-based methods to determine the acceptability of a plant change; however, licensees should submit the methodology, including acceptance criteria, for NRC review and approval as a license amendment request in accordance with 10 CFR 50.90, "Application for Amendment of License or Construction Permit," before implementing the change.

Regulatory Guide 1.191, "Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown," provides specific criteria and guidelines for FPPs for shutdown and decommissioning of nuclear power plants.

The NRC issues regulatory guides to describe to the public methods that the staff considers acceptable for use in implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific problems or postulated accidents, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations, and compliance with regulatory guides is not required. The NRC issues regulatory guides in draft form to solicit public comment and involve the public in developing the agency's regulatory positions. Draft regulatory guides have not received complete staff review and, therefore, they do not represent official NRC staff positions.

This regulatory guide contains information collections that are covered by the requirements of 10 CFR Part 50, which the Office of Management and Budget (OMB) approved under OMB control number 3150-0011. The NRC may neither conduct nor sponsor, and a person is not required to respond to, an information collection request or requirement unless the requesting document displays a currently valid OMB control number.

1.5 Compensatory Measures

Temporary changes to specific fire protection features that may be necessary to accomplish maintenance or modifications are acceptable, provided interim compensatory measures, such as fire watches, temporary fire barriers, or backup suppression capability, are implemented. For common types of deficiencies, the technical specifications or the NRC-approved FPP generally note the specific compensatory measures. For unique situations or for measures that the approved FPP does not include, the licensee may determine appropriate compensatory measures. A licensee may opt to implement an alternative compensatory measure, or combination of measures, to the one stated in its FPP. A licensee may implement such alternative measures without prior approval of the Commission if all of the following are available:

- a. a documented evaluation showing the impact of the new compensatory measure
- b. a documented evaluation comparing the new compensatory measure to the compensatory measure required by the licensee's FPP
- c. evaluations showing that the new compensatory measure(s) will not adversely affect the ability of the plant to achieve and maintain safe shutdown in the event of a fire

Any change to the FPP must comply with the GDC and the requirements of 10 CFR 50.48(a) and must be retained as a record pursuant to 10 CFR 50.48(a). The licensee's change to the FPP is subject to inspection by the NRC.

The evaluation of the alternate compensatory measure should incorporate risk insights regarding the location, quantity, and type of combustible material in the fire area; the presence of ignition sources and their likelihood of occurrence; the automatic fire suppression and fire detection capability in the fire area; the manual fire suppression capability in the fire area; and the human error probability where applicable.

The licensee may implement compensatory measures for degraded and nonconforming conditions. In its evaluation of the impact of a degraded or nonconforming condition on plant and individual SSC operation, a licensee may decide to implement a compensatory measure as an interim step to restore operability or to otherwise enhance the capability of SSCs important to safety until the final corrective action is complete. Reliance on a compensatory measure for operability should be an important consideration in establishing the "reasonable timeframe" to complete the corrective action process. The NRC would normally expect conditions that require interim compensatory measures to demonstrate operability to be resolved more promptly than conditions that are not dependent on compensatory measures to show operability; such reliance suggests a greater degree of degradation. Similarly, if an operability determination is based upon operator action, the NRC staff would expect the nonconforming condition to be resolved expeditiously. (See Regulatory Position 1.8.5 for additional guidance on operability assessments.)

NRC Inspection Manual Part 9900, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety" provides additional guidance on operability assessments that the Reactor Oversight Process will apply when conducting inspections. This guidance supersedes the guidance provided in Revision 1 of GL 91-18, "Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability."