DD-07-03

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

J. E. Dyer, Director

In the Matter of	)	Docket No. 50-400
	)	
CAROLINA POWER & LIGHT COMPANY	)	License No. NPF-63
	)	
	)	
Shearon Harris Nuclear Power Plant, Unit 1	)	

DIRECTOR'S DECISION UNDER 10 C.F.R. 2.206

I. Introduction

By letter dated September 20, 2006, as supplemented by documents dated September 21, October 30, and November 29, 2006, and February 8, 2007, Mr. John D. Runkle, on behalf of the North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Services, the Union of Concerned Scientists, NC Fair Share, and Students United for a Responsible Global Environment (the Petitioners) filed a petition pursuant to Title 10, Section 2.206, of the *Code of Federal Regulations* (10 CFR). The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC):

1) Take an immediate enforcement action in the form of an order revoking the operating license for Shearon Harris Nuclear Power Plant (SHNPP or the Licensee) Unit 1, Docket No. 50-400, License No. NPF-63, or impose maximum fines for each violation for each day the plant has been in violation of fire protection regulations.

2) Participate in open and public proceedings with the Petitioners; the Licensee, Carolina Power & Light; and other external stakeholders in the vicinity of SHNPP during deliberations on the petition.

3) Resolve all violations of federal regulations before accepting a license renewal application from Carolina Power & Light for SHNPP.

As the basis for this request, the Petitioners discussed several fire safety violations at SHNPP that they believe could affect the safe operation of the plant and safe shutdown of the plant in emergency situations. The Petitioners' concerns primarily focused on noncompliances, the risk associated with the noncompliances, reliance on compensatory measures, the NRC's policy on the use of enforcement discretion regarding certain fire protection issues, and intentional acts of sabotage or terrorism.

On October 10, 2006, the NRC's Petition Review Board (PRB) met to discuss the Petitioners' request for immediate action to revoke the operating license for SHNPP. The PRB denied the Petitioners' request for immediate action based on the staff's determination that operation of the plant posed no immediate threat to public health and safety. The NRC advised the attorney for the Petitioners of this decision by phone on October 17, 2006.

During a public meeting at NRC Headquarters on November 13, 2006, the Petitioners further explained and supported their petition by providing additional information to the PRB. The NRC treated the transcript of this meeting as a supplement to the petition.

In a December 4, 2006, letter, the NRC also informed the Petitioners that it had received their request and referred the issues in the petition to the NRC Office of Nuclear Reactor Regulation for appropriate action as well as to the NRC Office of the Inspector General for consideration of the allegations of NRC wrongdoing.

The NRC staff sent a copy of the proposed Director's Decision (DD) to the Petitioners and to the Licensee for comment by letters dated April 2, 2007. The NRC staff received

comments on May 1, 2007, from both the attorney for the Petitioners and from the Licensee of SHNPP. The NRC staff considered the comments and addressed them in an enclosure to the transmittal letter for this DD.

All publicly available documents related to this petition are available in the NRC's Agencywide Documents Access and Management System (ADAMS). The petition is under Accession Numbers ML062640550 and ML062830089, the transcript is under ML063210488, and the supplements are under ML062980107, ML063200168, ML063450098, and ML070510497. The comments from the attorney for the Petitioners are under ML071230046 and comments from the Licensee are under ML071270210. The NRC staff's response to comments is under ML071490145 and the final DD is under ML071490145.

These documents are also available at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O1-F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are accessible from the ADAMS Public Electronic Reading Room on the NRC Web site http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737 or by email to pdr@nrc.gov.

The procedure for instituting a proceeding to modify, suspend, or revoke a license or to take other action against a licensee or other person subject to the jurisdiction of the Commission appears in 10 CFR 2.202, "Orders."[1] The administrative procedure used in assessing civil penalties is set forth in 10 CFR 2.205, "Civil Penalties."[2]

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[1] The NRC is authorized to make orders immediately effective if required to protect the public health, safety, or interest, or if the violation is willful.

[2] This regulation provides that the NRC initiate the civil penalty process by issuing a notice of violation and proposed imposition of a civil penalty. The agency provides the licensee or other person an opportunity to contest in writing the proposed imposition of a civil penalty. After evaluating the response, the NRC may mitigate, remit, or impose the civil penalty. The agency will provide an opportunity for a hearing if a civil penalty is imposed. The maximum civil penalty amount is $130,000 per violation per day, adjusted for inflation by the Debt Collection Act of 1996.

Management Directive 8.11, “Review Process for 10 CFR 2.206 Petitions,” issued October 2000 (ML041770328), outlines the procedure used by the NRC to process petition filed under 10 CFR 2.206. This procedure aims to provide appropriate participation by Petitioners in, and opportunities for the public to observe, NRC’s decision making activities related to a 10 CFR 2.206 petition.

II. Discussion

The Petitioners raised several concerns in support of their request for enforcement action. The NRC staff placed these concerns into five categories (noncompliances, risk from noncompliances, compensatory measures, enforcement discretion, and intentional acts) and addresses each in this section. This section also addresses, the Petitioners’ request for NRC staff participation in open proceedings in the vicinity of SHNPP and the request for the NRC to deny the Licensee’s license renewal application for SHNPP.

A. Noncompliances

The Petitioners provided a detailed historical perspective of the fire protection chronology at SHNPP. The Petitioners are primarily concerned with noncompliances associated with fire barriers, use of operator manual actions, and unanalyzed separation of circuits.

Fire Barriers

The NRC’s concern with the performance of fire barriers for protecting electrical cables at nuclear power plants (NPPs) began with the failure of Thermo-Lag to pass performance tests conducted by an NPP licensee in October 1989. The NRC addressed this concern by conducting additional fire testing of Thermo-Lag, and issuing a series of generic communications to NPP licensees, including SHNPP. The generic communications included Information Notice (IN) 91-47, “Failure of Thermo-Lag Fire Barrier Material to Pass Fire Endurance Test,” dated August 6, 1991, as the first in a series of INs issued between 1991 and

1995 on performance test failures and installation deficiencies related to Thermo-Lag fire barrier systems; Bulletin 92-01, “Failure of Thermo-Lag 330 Fire Barrier System to Maintain Cabling in Wide Cable Trays and Small Conduits Free From Fire Damage,” dated June 24, 1992, supplemented on August 28, 1992; Generic Letter (GL) 92-08, “Thermo-Lag 330-1 Fire Barriers,” dated December 17, 1992, requesting that NPP licensees provide information regarding the use of Thermo-Lag fire barriers; and Supplement 1 to GL 86-10, “Fire Endurance Test Acceptance Criteria for Fire Barrier Systems Used to Separate Redundant Safe Shutdown Trains Within the Same Fire Area,” dated March 25, 1994.

Based on the NRC’s generic communications, licensees reviewed their fire protection safe shutdown plans to determine whether corrective actions were needed. By letter dated August 29, 1997, the SHNPP Licensee notified the NRC that it had completed Thermo-Lag resolution activities (corrective actions) for SHNPP.

Subsequently, NRC Inspection Report 50-400/99-13 (ML003685341), dated February 3, 2000, identified issues at SHNPP associated with engineering evaluations for some of the Thermo-Lag fire barriers. By letter dated April 16, 2002 (ML021060517), the NRC issued a violation to SHNPP for the Thermo-Lag issues. In addition to the Thermo-Lag issues, the NRC inspection report included an unresolved item to track questions regarding Hemyc and MT fire barriers installed at SHNPP. The staff addresses Hemyc and MT fire barriers issues later in this section.

In response to the Thermo-Lag fire barrier issues, the Licensee implemented additional corrective actions at SHNPP. The Licensee completed major modifications for many of the corrective actions. For example, the Licensee conducted fire testing, performed engineering evaluations, re-routed safe-shutdown cables to eliminate reliance on some Thermo-Lag fire barriers, installed fire detection in a fire area, and modified an existing wall to a 3-hour-rated fire barrier. NRC regulations provide for the acceptable use of fire detection and suppression to

supplement 1-hour-rated fire barriers as one means to minimize the potential for fire damage in the unlikely event of a fire.

The SHNPP resident inspectors, regional inspectors, and regional specialists performed supplemental inspections as part of the Reactor Oversight Process to ensure that the Licensee was dealing appropriately with identified issues. As part of these supplemental inspections, the NRC reviewed the Licensee's corrective actions to address Thermo-Lag fire barriers at SHNPP. In a series of inspections documented in reports dated August 12, 2002 (ML022250189), September 9, 2002 (ML022530113), October 4, 2002 (ML022800665), January 31, 2003 (ML030350561), and November 18, 2003 (ML033380523), the NRC determined that the corrective actions were appropriate except for one action that resulted in a noncited violation (NCV), as documented in the inspection report dated November 18, 2003. The NCV related to the use of inadequate operator manual actions to correct some of the Thermo-Lag fire barrier issues. The NRC determined that the NCV was of very low safety significance and the Licensee implemented corrective actions by assigning an additional operator to be available to perform safe shutdown actions. The Use of Operator Manual Actions section of this DD contains additional discussion of operator manual actions. In a letter dated May 1, 2007 (ML071270210), the Licensee specified that it had completed plant modifications to resolve the issue with Thermo-Lag fire barriers associated with the NCV. Any use of operator manual actions have been analyzed as adequate.

NRC resident inspectors assigned to SHNPP can review any completed plant modifications and licensee implemented operator manual actions as part of the Reactor Oversight Process. NPP resident inspectors perform several baseline-level, onsite inspections each quarter as part of the Reactor Oversight Process. Additionally, they perform at least six inspections every quarter and spot-check fire protection systems and compensatory measures during routine plant status checks.

In 2004, the NRC amended its fire protection rule in 10 CFR 50.48(c) to allow NPP licensees to voluntarily adopt a risk-informed and performance-based fire protection program. In a risk-informed approach, risk insights, along with other factors such as defense-in-depth, are instrumental in focusing licensee and regulatory attention on design and operational issues commensurate with their importance. To this end, the rule provides for use of fire probabilistic risk assessments (PRAs) to identify risk-significant fire protection issues.

By letter dated June 10, 2005 (ML051720404), the Licensee informed the NRC of its intent to make the transition to 10 CFR 50.48(c) at SHNPP. In this letter, the Licensee stated it would seek a license amendment for the transition with a proposed date of May 2008. By letter dated September 19, 2005 (ML052140391), the NRC designated SHNPP as a transition pilot plant. During the transition of SHNPP to 10 CFR 50.48(c), the Licensee is re-analyzing its fire protection program and is developing a fire PRA. Because this voluntary program necessitates a reanalysis of its existing programs and development of a plant-specific fire PRA, the NRC determined that the Licensee should have an extended period of time to implement 10 CFR 50.48(c). As discussed in the Enforcement Discretion section of this DD, the NRC adopted an enforcement discretion policy for licensees voluntarily adopting 10 CFR 50.48(c). According to current NRC enforcement discretion (71 FR 19905), the Licensee has until June 2008 to submit a license amendment for transition to 10 CFR 50.48(c).

On May 12, 2005, Nuclear Information and Resource Service, et al., submitted a 10 CFR 2.206 petition requesting that the NRC take enforcement actions including the collection of information from NPPs to determine the extent of inoperable fire barriers. On January 20, 2006, the NRC issued DD-06-01, “Director’s Decision under 10 CFR 2.206,” granting, in part, that the NRC would determine the extent of condition of inoperable fire barriers through the use of generic communications. Accordingly, on April 10, 2006, the NRC issued GL 2006-03, “Potentially Nonconforming Hemyc and MT Fire Barrier Configurations,” to

address, among other things, the performance of Hemyc and MT fire barriers at a number of NPPs, including SHNPP.

The Licensee responded to GL 2006-03 for SHNPP by letters dated April 28 and June 9, 2006 (ML061240052 and ML061710062, respectively). In those letters, the Licensee stated that it relies on Hemyc and MT fire barriers and that it plans to disposition any nonconforming conditions in accordance with 10 CFR 50.48(c). The Licensee also stated that compensatory measures will remain in place until it resolves nonconforming conditions.

SHNPP has completed plant modifications to correct some of its fire protection noncompliances. For example, one major corrective action completed by the Licensee involves the replacement of charging system electrical cable with approximately 2300 feet of fire-resistive cable (ML061140227). The Licensee is not required to submit docketed information on the resolution of each fire protection noncompliance during its transition to 10 CFR 50.48(c), but it is required to implement and maintain compensatory measures for remaining noncompliances. Licensees may implement compensatory measures, such as fire watches and operator manual actions, in accordance with their technical specifications, license conditions, and approved fire protection program to enable continued plant operations while corrective actions are completed.

In summary, the Licensee is addressing fire barrier nonconforming conditions at SHNPP through 10 CFR 50.48(c). In the interim, the Licensee will maintain compensatory measures until it resolves nonconforming conditions. The NRC verifies fire barrier compliance and the adequacy of compensatory measures through its Reactor Oversight Process.

Use of Operator Manual Actions

In 2003, the NRC initiated rulemaking that would have amended Appendix R, “Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979,” to 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities,” to allow licensees

to use acceptable operator manual actions in lieu of the separation or fire barrier requirements in paragraph III.G.2 of Appendix R. In 2005, the NRC published a proposed rule for comment that would have allowed the use of feasible and reliable operator manual actions in conjunction with fire detection and automatic fire suppression systems. In 2006, following public comments on the proposed rule, the NRC determined that the rule would not meet the agency rulemaking goal of increased effectiveness and efficiency. On March 6, 2006, the NRC published a notice in the *Federal Register* (71 FR 11196) withdrawing the proposed rule.

On June 30, 2006, following withdrawal of the proposed rule, the NRC issued Regulatory Issue Summary (RIS) 2006-10, "Regulatory Expectations with Appendix R paragraph III.G.2 Operator Manual Actions," describing the staff's expectations for the use of operator manual actions. For operator manual actions used in lieu of required fire barriers, RIS 2006-10 stated that licensees should implement compensatory measures and complete corrective actions for missing or degraded fire barriers as required by regulations.

In Revision 9 to Licensee Event Report (LER) 2002-004, "Unanalyzed Condition Due to Inadequate Separation of Associated Circuits," dated October 28, 2005 (ML053070550), which was submitted before RIS 2006-10, the Licensee reported the use of operator manual actions in lieu of separation (fire barriers) for some control cabling at SHNPP. The Licensee stated that it had initiated corrective actions, such as a complete validation of the safe shutdown analysis. The Licensee implemented compensatory measures, such as a compensatory fire watch and operator manual actions, in the interim while performing corrective actions. Licensees may implement compensatory measures in accordance with the technical specifications, license conditions, and approved fire protection program to enable continued plant operations while they are completing corrective actions. The NRC verifies compliance with the regulations and adequacy of compensatory measures and corrective actions through its Reactor Oversight Process.

In summary, consistent with NRC expectations for the use of operator manual actions, the Licensee initiated corrective actions for the use of manual actions credited in lieu of fire barriers and has indicated that it will maintain compensatory measures until SHNPP is in compliance.

Unanalyzed Separation of Circuits

Beginning in 1997, the NRC staff noticed that a series of industry-wide LERs were identifying plant-specific problems related to potential fire-induced electrical circuit failures. The NRC treated the issue generically and, in 1998, initiated interaction with stakeholders to understand and resolve the issue. The NRC documented these issues in IN 99-17, "Problems Associated with Post-Fire Safe-Shutdown Circuit Analyses," dated June 3, 1999. In 2001, the Electric Power Research Institute and the Nuclear Energy Institute performed a series of cable functionality tests to increase the understanding of fire-induced circuit failures.

The NRC and interested stakeholders worked together to better understand the possible and probable modes of circuit failures. On December 29, 2004, the NRC issued RIS 2004-03, Revision 1, "Risk-Informed Approach for Post-Fire Safe-Shutdown Associated Circuit Inspections," which provided guidance to NRC inspectors on circuit configurations that are likely to fail in a fire and circuit configurations that have little or no likelihood of failing. The NRC also issued RIS 2005-30, "Clarification of Post-Fire Safe-Shutdown Circuit Regulatory Requirements," dated December 20, 2005, which clarified regulatory expectations for post-fire safe-shutdown circuits. The NRC completed cable fire testing in 2006 to increase the understanding of fire-induced circuit failures.

The NRC staff is also currently working with external stakeholders to address the potential for fire-induced circuit failures to cause multiple spurious actuations. As directed by the Commission in the Staff Requirements Memorandum related to SECY-06-0196, "Issuance of Generic Letter 2006-XX, 'Post-Fire Safe-Shutdown Circuits Analysis Spurious Actuations,'"

issued September 11, 2006 (ML063490140), the NRC staff is working to develop or endorse guidelines that address multiple spurious actuations. The Commission provided guidance that immediate regulatory action was not needed because of the availability of several levels of defense-in-depth in fire protection.

When the Licensee reported circuit issues in Revision 0 to LER 2002-004, the Licensee placed these issues in its corrective action program and implemented compensatory measures. The Licensee completed some corrective actions and the remainder are pending the transition to a performance-based, risk-informed fire protection licensing basis at SHNPP, pursuant to 10 CFR 50.48(c). During the transition, the Licensee is reanalyzing fire-induced circuit failures and developing a fire PRA that can evaluate these failures in an integrated fashion. The NRC considers a fire PRA to be an effective tool for identifying risk-significant circuit configurations and prioritizing corrective actions.

In summary, the NRC is working towards generic resolution of the issue of fire-induced circuit failures causing multiple spurious actuations. The Licensee has taken some corrective actions to address fire-induced circuit failures at SHNPP and has indicated it will maintain compensatory measures while it completes corrective actions.

B. Risk from Noncompliances

The Petitioners are concerned about the risk resulting from noncompliances at SHNPP, and point out that the cumulative risk is not known. The Petitioners' supplemental letter dated February 8, 2007, stated that the Licensee erroneously assumed that its fire barriers were 100-percent effective in SHNPP Individual Plant Examination for External Events (IPEEE) results.

NRC inspectors and staff have two tools available for performing risk assessments of operating conditions at NPPs. They can use the significance determination process (SDP) or the accident sequence precursor (ASP) analysis to determine the safety significance of

noncompliances associated with inspection findings.

NRC inspectors used the SDP to determine the risk significance associated with the Thermo-Lag fire barrier inspection finding. They documented the risk assessment in an NRC letter dated April 16, 2002 (ML021060517). In that letter the NRC characterized the finding as "white" (i.e., an issue with low to moderate increased importance to safety, which may require additional NRC inspections). By letter dated October 4, 2002 (ML022800665), the NRC re-evaluated the Thermo-Lag inspection finding by considering some of the completed corrective actions. In that letter, the NRC determined that the risk significance of the inspection finding was reduced to "green" (i.e., very low safety significance). The Fire Barriers section of this DD discusses the Licensee's actions concerning the disposition of the fire barriers.

The NRC staff used an ASP analysis to determine the risk significance associated with the unanalyzed plant conditions identified in Revision 9 to LER 2002-004. An NRC memorandum dated January 27, 2006 (ML060240525) summarized the ASP analysis. According to the NRC ASP Program, which identifies, documents, and ranks events at NPPs, the unanalyzed circuit conditions identified in LER 2002-004 were not significant risk contributors. To address some of the unanalyzed conditions resulting from inadequate separation of associated circuits, the Licensee proposed, and the NRC staff approved by letter dated May 1, 2006 (ML061140227), the use of fire-resistive electrical cables in some fire areas. The Unanalyzed Separation of Circuits section of this DD discusses the Licensee's actions to address fire-induced circuit failures.

As discussed in the Fire Barriers section of this DD, the Licensee is transitioning SHNPP to 10 CFR 50.48(c). As part of the transition process, the Licensee is developing a state-of-the-art fire PRA. The fire PRA is an analytical tool that will enable the Licensee to determine the cumulative risk of fire protection noncompliances, enable a more accurate fire risk assessment than that provided by the IPEEE, and prioritize resources to address risk-significant fire

protection issues.

Since SHNPP is part of the pilot plant effort, the NRC staff is observing the Licensee's progress and efforts in developing the plant-specific fire PRA. The NRC staff documented these observations in trip report summaries available to the public in ADAMS (ML060240605, ML061530462, ML070920043, ML070330336). The NRC staff has opened to the public the technical meetings between the NRC staff and industry experts whenever possible (public meetings were held on May 31 and June 1, 2007).

In summary, NRC has determined that the risk significance associated with the Thermo-Lag fire barrier inspection finding was very low and with the unanalyzed conditions resulting from inadequate separation of associated circuits was not significant. The Licensee has completed corrective action to address some of the fire barrier issues and fire-induced circuit failures and will maintain compensatory measures at SHNPP until it has resolved all remaining issues. In addition, the Licensee is developing a fire PRA as part of the SHNPP transition to 10 CFR 50.48(c).

C. Compensatory Measures

The Petitioners are concerned that the Licensee's reliance on compensatory measures at SHNPP contradicts prudent regulatory practices, is not equivalent to compliance, cannot have an indefinite timeframe, and in some cases is unapproved.

The NRC staff agrees that compensatory measures, such as fire watches and operator manual actions, are not a substitute for demonstrating permanent compliance with the regulations. Fire protection at NPPs uses the concept of defense-in-depth to achieve the required degree of reactor safety by using echelons of administrative controls, fire protection systems, design features, and safe shutdown capability. When one echelon is degraded or weakened by a noncompliance or plant condition, an adequate compensatory measure can act as a temporary substitute. When a licensee or an NRC inspector identifies a noncompliance or

other condition, licensees are given the flexibility to implement a compensatory measure in accordance with the technical specifications, license conditions, and approved fire protection program to enable continued plant operations while completing corrective actions. Furthermore, the NRC has determined that enforcement discretion is warranted for noncompliances, provided that compensatory measures are implemented while licensees complete the transition to 10 CFR 50.48(c). A formal policy outlines the conditions for enforcement discretion and the specifies the timeframe (see the Enforcement Discretion section of this DD). The NRC uses guidance in the Inspection Manual, Part 9900, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," Section 7 "Corrective Action" to evaluate a licensee's use of compensatory measures until final resolution of noncompliances.

The Licensee implemented compensatory measures upon discovery of the initial unanalyzed circuit conditions in 2002. The Licensee implemented compensatory measures, including a compensatory fire watch and operator manual actions, as required by its approved fire protection program, to address the noncompliances and conditions (e.g., unanalyzed circuit condition and Hemyc and MT fire barriers). These compensatory measures were in place before the Licensee's transition to 10 CFR 50.48(c). The timeframe for compensatory measures as an interim action is detailed in the interim enforcement discretion policy for plants transitioning to 10 CFR 50.48(c) discussed in *Federal Register* notices dated June 16, 2004; January 14, 2005; and April 18, 2006. During the SHNPP transition to 10 CFR 50.48(c), the NRC is verifying the Licensee's implementation of the fire protection program, including compensatory measures, through the Reactor Oversight Process.

In summary, licensees have the flexibility to implement compensatory measures in accordance with the technical specifications, license conditions, and an approved fire protection program. The Licensee had implemented compensatory measures at SHNPP before transition

began and will continue these measures throughout the transition to 10 CFR 50.48(c). The NRC is verifying implementation of the fire protection program through the Reactor Oversight Process.

D. Enforcement Discretion

The Petitioners are concerned that the NRC's enforcement policy, which allows the NRC to exercise enforcement discretion for certain violations of the requirements in 10 CFR 50.48, "Fire Protection," results in a delay in correcting noncompliances at SHNPP. The Petitioners also state that they did not have an opportunity to comment on the Licensee's reliance on compensatory measures.

The Licensee first reported circuit issues in 2002 in Revision 0 to LER 2002-004. The Licensee placed these issues in its corrective action program and implemented compensatory measures in accordance with SHNPP's approved fire protection program. As stated before, Licensee's may implement compensatory measures in accordance with their fire protection program to enable continued plant operation while corrective actions are completed, an approach that recognizes the concept of defense-in-depth. In addition, the Licensee has already accomplished some corrective actions and the remainder are pending transition to 10 CFR 50.48(c).

The NRC's "Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48(c))" is available on the NRC public Website at http://www.nrc.gov/about-nrc/regulatory/enforcement/enforc-pol.pdf. As stated in that policy, the NRC will normally not take enforcement action for a violation of 10 CFR 50.48(b) (or the requirements in a fire protection license condition) involving a problem related to engineering, design, implementing procedures, or installation, if the violation is documented in an inspection report and it meets certain criteria including the Licensee's voluntary initiative to adopt the risk-informed performance-based fire protection program included under 10 CFR 50.48(c). This

enforcement discretion is allowed for a specified period of time as defined by a revision to the enforcement policy (71 FR 19905). During the reanalysis that is part of the transition process, the NRC staff anticipates that licensees may identify noncompliances of NRC requirements; however, if licensees meet the conditions outlined in the enforcement discretion policy, the NRC may exercise enforcement discretion.

The Licensee has voluntarily initiated adoption of 10 CFR 50.48(c) at SHNPP and is currently transitioning to this new rule. During the transition process, licensees actively reevaluate their fire protection programs and develop fire PRAs. In this way, the transition encourages licensees to identify fire protection issues and determine their risk significance. This reevaluation enables licensees to focus their resources on the most risk-significant issues and resolve those that are low significance. Licensees are not required to identify their compensatory actions to the public; however, the Licensee provided some information in its response to GL 2006-03 (see Fire Barriers section). The NRC provides the results of its reviews of fire issues, including compensatory measures, in its inspection reports.

In summary, the NRC has an enforcement discretion policy applicable to licensees that are transitioning NPPs to 10 CFR 50.48(c) with a defined timeframe for implementation. The NRC published the original policy and subsequent revisions in the *Federal Register* for public comment. The Licensee has initiated, and in some cases completed, corrective actions for noncompliances during its transition to 10 CFR 50.48(c) at SHNPP.

E. Intentional Acts

The Petitioners are concerned about the challenge to fire safety at SHNPP posed by acts of sabotage or terrorism. The Petitioners state that it is reasonable now for the NRC to consider terrorist acts.

The NRC staff is addressing terrorist acts and other industrywide security issues in a proposed rulemaking entitled Power Reactor Security Requirements (RIN 3150–AG63;

71 FR 62664). The staff is also addressing these issues on a plant-specific basis. The NRC is performing a detailed review of each plant's specific plans and strategies for responding to a wide range of events (including the impact of an aircraft) which were required in an order issued in February 2002.

The NRC has indicated in public statements that classified studies have confirmed that commercial NPPs are robust and the likelihood of a radioactive release affecting public health and safety is low. Such studies include analyses of the ability of NPPs to withstand damage to, or loss of, large areas of the plant caused by a range of postulated attacks that could result in large fires and explosions. After examining a number of emergency scenarios involving operating reactors, spent fuel pools, and dry-cask storage installations, the NRC has concluded that the basis used to develop NPP emergency plans remains valid. The agency is confident that the public near those facilities can be adequately protected should an attack occur.

In summary, the NRC is considering terrorist acts and is working toward enhancing strategies to mitigate intentional acts; however, the NRC has concluded that the existing planning basis used to develop NPP emergency plans remains valid and is confident that the public near those facilities will be adequately protected should an attack occur.

F. Open Proceedings

The Petitioners requested open and public proceedings, including hearings in the vicinity of SHNPP, during NRC's deliberations on this petition.

NRC MD 8.11 describes the review process used by NRC staff for petitions filed pursuant to 10 CFR 2.206. MD 8.11 directs the NRC staff in the processing of 10 CFR 2.206 petitions, including meetings between a petitioner and the PRB. Part IV(3) of MD 8.11, states that the NRC staff will convene a technical review meeting whenever it believes that such a meeting would be beneficial to its review of a petition. As part of the 10 CFR 2.206 process, the NRC staff conducted a public meeting at NRC Headquarters on November 13, 2006, with

the Petitioners, the Licensee, and the external stakeholders. The meeting summary and transcript are available in ADAMS (ML063380323 and ML063210488, respectively).

The NRC received letters requesting its participation in a public meeting on March 22, 2007, in the vicinity of the SHNPP from North Carolina State Senator Mrs. Ellie Kinnaird; Mayor of the Town of Carborro, Mr. Mark Chilton; Mayor of the Town of Chapel Hill, Mr. Kevin Foy; and the Chairman of the Board of Orange County Commissioners, Mr. Moses Carey, Jr. The Chairman of the NRC responded to these requests in letters dated March 19, 2007 (ML070660213, ML070660649, ML070740287, and ML070660634, respectively). In those responses, he conveyed information on the NRC's 10 CFR 2.206 process including a discussion of the November 13, 2006, public meeting. Additionally, in accordance with the 10 CFR 2.206 process, the staff provided an opportunity to petitioners, the Licensee, and other members of the public to comment on the NRC's proposed DD. The NRC staff considers all comments received during the 30 day comment period before making its final decision and issuing a final DD.

In summary, the NRC followed MD 8.11 for processing 10 CFR 2.206 petitions. The NRC accepted and considered all information that Petitioners or other members of the public submitted.

G. License Renewal

The Petitioners requested that the NRC not accept the Licensee's application to extend the SHNPP operating license for an additional 20 years.

A petition filed pursuant to 10 CFR 2.206 provides members of the public with the means to request NRC enforcement-related action (i.e., modification, suspension, or revocation of a license, or other appropriate enforcement-related action), as distinguished from licensing or rulemaking actions. Because a licensee applying to extend its operating license is submitting a licensing action, the NRC cannot address the Petitioners' request under 10 CFR 2.206. The

NRC's license renewal process relies on two key principles. The first principle is that the NRC's existing regulatory processes are adequate to ensure the safety of operating plants. The second principle is that the current licensing basis is adequate and carries forward into the period of extended operation.

The NRC relies on current regulatory processes to handle any issues that impact current operation of plants (e.g., the fire protection requirements contained in 10 CFR 50.48), and those regulatory processes carry forward into the renewal term. The Petitioners, if they meet hearing request and intervention criteria, will have an opportunity in proceedings pursuant to 10 CFR 2.309, "Hearing Requests, Petitions to Intervene, Requirements for Standing, and Contentions," to raise issues and concerns relevant to license renewal for SHNPP.

On May 19, 2007, Mr. John D. Runkle, on behalf of the North Carolina Waste Awareness and Reduction Network and the Nuclear Information and Resource Service, filed a petition for leave to intervene and request for a hearing with respect to license renewal of the SHNPP in accordance with 10 CFR 2.309 (ML071430566). The request is pending consideration before the Atomic Safety and Licensing Board.

III. Conclusion

The NRC denies the Petitioners' request for an order that would revoke the SHNPP operating license or impose maximum fines for each violation for each day the plant has been in violation of fire protection regulations. The Licensee continues to have available several levels of defense-in-depth in fire protection and has in place compensatory measures in accordance with NRC expectations to address noncompliances. Additionally, the Licensee is actively identifying and completing corrective actions, including plant modifications and re-analysis efforts associated with its transition to the 10 CFR 50.48(c) licensing basis. The NRC appropriately exercised its enforcement discretion under the NRC's "Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48(c))."

The NRC follows existing regulatory processes, policies and programs (e.g., the Reactor Oversight Process) to verify that the Licensee is properly implementing its fire protection program at SHNPP in accordance with the regulations.

The NRC denies the Petitioners' request to conduct public meetings in the vicinity of SHNPP. As part of the 10 CFR 2.206 petition process, a public meeting may be held to give an opportunity to petitioners to provide additional information to the PRB. The Petitioners and the NRC staff conducted one such public meeting on November 13, 2006, at NRC Headquarters. The NRC issued a proposed Director's Decision for comment on April 2, 2007. Under the 10 CFR 2.206 petition process, the public was given the opportunity to submit comments and supplemental information, without a public meeting. Additional information was received from the Petitioners and the Licensee by letters dated May 1, 2007. The NRC staff considered these comments before making its decision and issuing this final DD. The NRC staff's response to the comments is contained in an enclosure to the transmittal letter for this DD. Based on the above, the staff determined that an additional public meeting was not necessary.

The NRC staff denies the Petitioners' request to not accept the Licensee's application for license renewal at SHNPP. A petition filed pursuant to 10 CFR 2.206 gives members of the public the means to request NRC enforcement-related action (i.e., modification, suspension, or revocation of a license, or other appropriate enforcement-related action), as distinguished from licensing or rulemaking. License renewal applications are licensing actions and are not considered under 10 CFR 2.206. If the Petitioners meet hearing request and intervention criteria, they will have an opportunity in the licensing proceedings pursuant to 10 CFR 2.309 to raise issues and concerns relevant to license renewal at SHNPP.

As provided in 10 CFR 2.206(c), the staff will file a copy of this DD with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the decision will constitute the final action of the Commission 25 days after the date of the decision unless

the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this 13 day of June 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James T. Wiggins, Acting Director
Office of Nuclear Reactor Regulation