

NRC Response to Comments on the Proposed Director's Decision

This enclosure documents the U.S. Nuclear Regulatory Commission (NRC) staff's response to comments on the proposed Director's Decision (DD) for the petition filed in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.206 by 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) concerning fire safety violations at the Shearon Harris Nuclear Power Plant (SHNPP). The NRC issued the proposed DD on April 2, 2007 (available via the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML070780537), and requested comments on or before May 3, 2007. The agency received comments on May 1, 2007, from both the attorney for the petitioners (ML071230046) and from the Licensee for SHNPP (ML071270210).

The NRC staff has amended the proposed DD to acknowledge the Petitioners' concerns and articulate the rationale for its decision; however, the final DD denies the Petitioners' request for enforcement action. The following provides the agency response to the Petitioners' comments. The letter "P" denotes comments that came from the Petitioners' letter and the letter "L" indicates that the comment came from the Licensee.

P.1. Comment

The Petitioners SUPPORT the NRC staff in the determination that the Shearon Harris Nuclear Power Plant ("SHNPP") has been out of compliance with the NRC fire protection regulations at 10 C.F.R. 50, Appendix R, Section II G.2., and its operating license, as alleged in the 2.206 Petition. The timeline of events in the Proposed Director's Decision ratifies the factual allegations in the 2.206 Petition, and it clearly shows that despite numerous notices by the NRC staff about the failures of fire barriers and need to comply with the Section II G.2. standards, Progress Energy (formerly doing business as Carolina Power & Light Company) has not done so. Instead Progress Energy has made repeated commitments to the NRC that it would come into compliance with the fire protection standard but has not fulfilled those commitments. It has substituted compensatory measures, such as the unassessed and unpermitted operator manual actions, that would do little to protect plant workers and the public when the safe shutdown of the plant is required in emergency situations. Instead of coming into compliance immediately, the current plan apparently is to study the problem for another year or two, seek a license amendment and bring the plant into compliance by 2015.

The Petitioners therefore DISAGREE with the conclusion in the Proposed Director's Decision that denies the Petition to 'revoke the SHNPP operating license or impose maximum fines for each violation for each day the plant has been in violation of the fire protection regulations.' The emergency enforcement action is warranted based on the current public health and safety hazard posed by the continued operation of the SHNPP without reasonable assurance against cable and conduit fires and consequential impairment of the ability of the plant to safely operate, and in particular, to safely shut down in emergency situations. The statement that the "licensee is actively identifying and completing corrective

actions” completely disregards the time period that the licensee already has had to identify the problems with the fire barriers and to correct the numerous problems.

The NRC clearly has authority for action "if the violation is willful" (see Director's Proposed Decision, fn. 1) and in this matter, Progress Energy has repeatedly and wilfully violated the regulations, and at the same time, has made false and misleading statements to the NRC that it had or would correct the problems. As such, the NRC staff has been derelict in its duty to require the licensee to operate in a safe manner. The 2.206 Petition should therefore be GRANTED.

P.1. Response

In the proposed DD, the NRC staff discussed the Petitioners' concerns with fire barriers and the use of compensatory measures. The proposed DD acknowledged the issues associated with fire barriers at SHNPP and described the generic actions taken by the NRC, and the actions taken by the Licensee. The proposed DD also discussed the use of compensatory measures and stated that licensees are given the flexibility to implement compensatory measures in accordance with their technical specifications, license conditions and approved fire protection program to enable continued plant operations while corrective actions are completed.

The Licensee implemented compensatory measures upon discovery of the initial unanalyzed circuit conditions in 2002. The compensatory measures, such as a compensatory fire watch and feasible operator manual actions, were implemented in accordance with 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). This approach recognizes the concept of defense-in-depth. The NRC has reviewed some noncompliances through the Reactor Oversight Process and determined that they were of low risk significance. Finally, the Licensee has implemented several corrective actions to address noncompliances.

The Petitioners' state that the Licensee plans to "...study the problem for another year or two..." which refers to the activities currently underway at SHNPP to transition to a performance-based, risk-informed fire protection licensing basis pursuant to 10 CFR 50.48(c). The Licensee's transition to National Fire Protection Association (NFPA) Standard 805 was acknowledged by the NRC staff and was discussed in the proposed DD. The Licensee stated in a June 10, 2005, letter (ML051720404) that it would seek a license amendment for the transition with a proposed date of May 2008. Pursuant to NRC enforcement discretion policy, the Licensee has until June 2008 to submit a license amendment for transition to NFPA 805 standards. With respect to the 2015 completion date suggested in the Petitioners' comments, the Licensee has stated that it plans to complete modifications in the 2010 fall refueling outage (ML061500468 and ML063210488).

The NRC staff believes that SHNPP may continue operating during its transition to 10 CFR 50.48(c). The NRC has followed and continues to follow existing regulatory processes, policies and programs to verify that the Licensee is properly implementing its fire protection program at SHNPP in accordance with Federal regulations.

P.2. Comment

Fire barriers The Proposed Director's Decision at page 4 erroneously states that "the NRC's concern with the performance of fire barriers at nuclear power plants (NPPs) began with the failure of Thermo-Lag to pass performance tests conducted by an NPP licensee in October 1989." However, the NRC's concern with the performance of fire barriers predated October 1989 by over a decade. On March 24, 1975, the NRC staff sent Bulletin 75-04, "Cable Fire at Browns Ferry Nuclear Power Station," to its licensees and required them to take several specific actions, including

1. Review your overall procedures and system for controlling construction activities that interface with reactor operating activities, with particular attention to the installation and testing of seals for electrical cables between compartments of the reactor building, e.g., control room to cable spreading room.
2. Review the design of floor and wall penetration seals, with attention to the flammability of materials.

This regulatory concern with the performance of fire barriers predates both the date in the Proposed Director's Decision, October 1989, and the date that the NRC issued the operating license for the SHNPP, January 12, 1987.

The Proposed Director's Decision on page 4 does conclude that the NRC was concerned about fire barrier performance in at least as early as October 1989 and described the agency's response:

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," 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...

The Proposed Director's Decision at page 5 states that the licensee claimed to have resolved the Thermo-Lag problems in August 1997, more than six years later:

Based on 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.

Had the owner truly fixed the problem, the SHNPP would be in compliance with fire protection regulations today. But, as the Proposed Director's Decision states at page 5, the licensee's claim in August 1997 was determined to be fraudulent in that:

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.

The licensee then made additional commitments to correct the problems and undertook steps to rectify its safety and regulatory shortfalls. The Proposed Director's Decision at page 5 concludes that "in response to the Thermo-Lag fire barrier issues, the licensee implemented further corrective actions at SHNPP. The licensee completed major modifications for many of the corrective actions."

Had the licensee's fixes to its previously ineffective fixes been successful, the SHNPP would be in compliance with fire protection regulations today. However, the record shows that the corrective actions were not successful and the SHNPP is not in compliance today. Instead, the licensee substituted compensatory measures for compliance and has continued to make promises that it would make progress toward compliance.

At no place in the record, the regulatory docket, or in the Proposed Director's Decision has the NRC given a date certain by which the SHNPP must comply with the fire regulations. Although the Proposed Director's Decision at page 9 states that the "licensee has initiated corrective actions," many of those corrective actions were initiated years ago but have not been completed. Again on page 9, the Proposed Director's Decision states that the "corrective actions should be completed for missing or degraded fire barriers as required by regulations."

Similarly, the Proposed Director's Decision, at page 18, fn. 3, states "SHNPP has completed plant modifications to correct some of its fire protection noncompliances." The word "some" is troublesome because at no place in the record is there any quantification of these modifications; "some" could mean as little as replacing ten feet of fire barriers.

The Proposed Director's Decision at page 13 asserts that "the NRC staff agrees that compensatory measures are not a substitute for demonstrating permanent compliance with the regulations," but it is clear in the record that the NRC has not taken any tangible steps whatsoever to back up this assertion to end the open-ended substitution of compensatory measures for regulatory compliance. The Proposed Director's Decision at page 8 states that it has been at least four years since the NRC staff began to address the question of acceptable operator manual actions ("OMAs") "that would allow the use of feasible and reliable OMAs in conjunction with fire detection." To date, the OMAs at the SHNPP still have not been presented by the licensee, or analyzed and approved by the NRC staff.

This indefinite timetable for corrective actions is further presented on page 10 of the Proposed Director's Decision in that "the NRC staff is also currently working

with external stakeholders to address the potential for fire induced circuit failures to cause multiple spurious actuations."

Apparently, the NRC's message to Progress Energy is that all of this means at some undesignated time, years in the future. As evidenced by the timeline beginning in 1975, this indefinite timetable has allowed Progress Energy to continue to put off corrective actions again and again.

P.2. Response

The Petitioners have repeated their concerns regarding fire barriers, compensatory measures, and noncompliances at SHNPP that were detailed in the original petition.

The Petitioners are correct that the NRC was concerned about fire barriers following the fire at the Browns Ferry in 1975. However, the NRC staff made this statement in the context of fire barriers used to separate redundant trains of safe shutdown equipment located in the same fire area. The requirement for fire separation appeared in Section III.G.2 of 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," for redundant trains located in the same fire area. Appendix R became effective in 1981. As discussed in the proposed DD, the issue associated with the actual performance of fire barriers installed to separate redundant trains of equipment in the same area was identified in 1989.

The Petitioners main concern in their comment appears to be the timing of the Licensee's corrective actions to bring SHNPP back into compliance with the regulations and with the use of compensatory measures during this time period. As stated previously, 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. These compensatory measures were in place before the Licensee's transition to 10 CFR 50.48(c).

Currently, the Licensee is in the process of transitioning to a new voluntary fire protection licensing basis under 10 CFR 50.48(c). During this transition period, the Licensee is revalidating its safe-shutdown analysis and developing a plant-specific, state-of-the-art fire probabilistic risk assessment. This is an effective tool for identifying risk-significant issues and assisting licensees in prioritizing these issues.

This transition period also allows the Licensee to resolve operator manual actions that the Petitioners state have not been "presented by the licensee, or analyzed and approved by the NRC staff." Under the NRC's current enforcement discretion policy the NRC exercises enforcement discretion as long as the criteria outlined in the Enforcement Manual are met. This includes compensatory measures such as operator manual actions put in place because of existing or identified noncompliances. The Licensee plans to submit a license amendment in May 2008 (ML051720404) that will resolve these operator manual actions; further, it has stated that it will complete plant modifications associated with the transition in the fall of 2010 (ML061500468 and ML063210488).

The NRC staff disagrees that the use of compensatory measures is open-ended and that the timetable for corrective actions is indefinite. The proposed DD discussed the use of

compensatory measures in the current fire protection program at SHNPP. The proposed DD also discussed compensatory measures in the context of the transition of SHNPP to 10 CFR 50.48(c) and the related enforcement discretion policy. As stated above, a schedule exists for transition and completion of corrective actions at SHNPP, and as discussed in the proposed DD, the NRC has previously determined that enforcement discretion is appropriate if the criteria are met.

The Petitioners also raise concerns with the NRC's use of the word "some" in fn. 3 on page 18 of the proposed DD, which stated, "SHNPP has completed plant modifications to correct *some* of its fire protection noncompliances..." The Petitioners contend that the record contains no quantification of the modifications completed at SHNPP. The NRC staff agrees that information on the completion of modifications may not appear on the public docket. The Licensee is not required to submit docketed information on the resolution of each fire protection noncompliance; however, the SHNPP resident inspectors examine work associated with fire protection modifications as part of the Reactor Oversight Process.

One major corrective action completed by the Licensee and included on the public docket involves the replacement of safety-related electrical cable with approximately 2300 feet of fire-resistive cable (ML061140227).

P.3. Comment

NRC inspection and oversight - At several places in the Proposed Director's Decision, the NRC staff states that its reactor oversight process monitors fire protection issues. On page 8, for example, the NRC stated that "the NRC verifies fire barrier compliance and the adequacy of compensatory measures through its reactor oversight process." During the November 13, 2006, public meeting on the petition, the Petitioners pursued this point. Our concern was and remains that NRC inspectors cannot verify anything for a facility that is neither in compliance with 10 C.F.R. 50.48, Appendix R, nor the NPFA 805 standards. NRC staff member Suni Weerrakkody responded to the petitioners by stating that "in other words, there is no reason to go and reinspect things like operator manual actions where we believe that the licensee is not in compliance." It is apparent that the NRC's instructions to its inspectors are to not examine areas or programs known to be in noncompliance, such as the OMAs.

The Petitioners maintain that absolutely no assurance can be credited for alleged verifications of areas that are deliberately not examined. Simply put, there is and has been no effective NRC oversight of fire protection at the SHNPP.

P.3. Response

The NRC staff disagrees with the Petitioners' contention that "there is and has been no effective NRC oversight of fire protection at the SHNPP" and that "NRC inspectors cannot verify anything for a facility that is neither in compliance with 10 C.F.R. 50.48, Appendix R, nor the NPFA 805 standards."

The proposed DD discussed in detail the fire protection inspection program at SHNPP. NRC resident inspectors assigned to NPPs (including SHNPP) perform several baseline-level, onsite inspections each quarter as part of the Reactor Oversight Process. The resident inspectors assigned to SHNPP perform at least six inspections every quarter and spot-check fire protection systems and compensatory measures during routine plant status checks. This includes monitoring work in progress, observing the adequacy of fire watch tours, and ensuring Licensee tracking of noncompliances. Resident inspectors, as part of this effort, are able to assess whether licensees are implementing compensatory measures in accordance with enforcement policy criteria during the enforcement discretion period.

Every 3 years (triennial), in accordance with Inspection Procedure (IP) 71111.05T (for plants that are not transitioning to 10 CFR 50.48(c)) or IP 71111.05TTP (for plants that are transitioning to 10 CFR 50.48(c)), an NRC inspection team consisting of fire protection specialists from the NRC's Region 2 office conduct a design-based, plant-specific, risk-informed, onsite inspection of the defense-in-depth elements used to mitigate the consequences of a fire. Specifically, IP 71111.05TTP verifies that the licensee's program includes the following:

- adequate controls for combustibles and ignition sources within the plant,
- adequate fire detection and suppression capability,
- passive fire protection features in good material condition,
- adequate compensatory measures in place for out-of-service, degraded or inoperable fire protection equipment, systems or features,
- procedures, equipment, fire barriers, and systems so that the post-fire capability to safely shut down the plant is ensured,
- feasible and reliable manual actions where applicable as compensatory measures to achieve safe shutdown

The NRC conducted the last triennial fire protection inspection at SHNPP in 2005 (ML052900122); the next will be in 2008.

P.4. Comment

In the 2.206 Petition, the Petitioners challenge the open-ended, informal enforcement discretion that enables the SHNPP to not comply with federal safety regulations year after year. On page 13 of the Proposed Director's Decision, the NRC staff cited, among other things, Inspection Manual Part 9900, as governing its enforcement discretion usage, stating that

The NRC has existing policies (e.g., enforcement discretion) and guidance (e.g., Inspection Manual Part 9900) that address the time frame for compensatory measures as an interim action until final corrective action is completed to resolve the condition or noncompliance.

However, Inspection Manual Part 9900, "Operations - Notices of Enforcement Discretion," contradicts what the staff is doing, and not doing, at Shearon Harris, stating that

The NOED [Notice of Enforcement Discretion] process is designed to address unanticipated temporary noncompliances with license conditions and TS [technical specifications] only. NOEDs are not appropriate to allow planned entries into TS LCOs [limiting conditions for operation] to perform maintenance or other activities. Further, NOEDs are not appropriate for nonconformances with regulations, Updated Final Safety Analysis Reports (UFSARs), or codes. Exemptions from regulations, non-compliance with UFSARs, and reliefs from codes must be processed in accordance with the provisions of Title 10, Code of Federal Regulations (10 C.F.R.) Parts 50.12, 50.59, or 50.55a, respectively, and are not addressed by the NOED policy.

In the present matter, the NRC staff did not apply the NOED policy from Inspection Manual Part 9900, but it was entirely proper for it not to have invoked this policy. But, the NRC staff also did not invoke the applicable exemption process in other NRC regulations, such as 10 C.F.R. Parts 50.12, 50.59, or 50.55a, and allowing noncompliance exemptions without going through this process is improper. As a result, the NRC staff has allowed the noncompliance of the fire protection regulations to linger indefinitely through its misemployed enforcement discretion.

The SHNPP is not in compliance with the existing fire protection regulations (II.G.2) nor is yet in compliance with the "new" fire protection regulation alternative, the NFPA 805. Progress Energy has not placed in the regulatory docket any evaluation identifying the gaps, or deltas, between actual conditions at the SHNPP and either the existing or the "new" regulations. In the interim, the licensee is using compensatory measures consisting of fire watches and OMAs to substitute for compliance. The lack of analysis means that Progress Energy cannot quantify and NRC cannot verify that the various noncompliances, individually and collectively, represent a low hazard.

In addition, because the noncompliances are not identified, it is impossible for Progress Energy to avoid taking steps that make conditions far less safe. For example, consider an existing, but as yet unidentified, noncompliance involving the power cable for emergency pump X. Because this noncompliance is not formally identified, operators might take emergency pump Y, the fully redundant backup to emergency pump X, out of service for maintenance. Had the noncompliance on emergency pump X been known to them, the operators might have deferred the work on emergency pump Y until after the pump X noncompliance was resolved. If the work could not be so deferred, the operators might have removed pump Y from service only after first taking steps to further reduce the challenge to pump X (such as prohibiting ignition sources and transient combustible in the vicinity of the pump X cable non-compliance area). (This "ignorance is bliss" scenario is far from conjecture as evidenced at the

Davis-Besse NPP in 2001. In that case, the licensee sought and obtained permission from the NRC to continue operating the reactor beyond a December 31 deadline for inspection of the control rod drive mechanism (“CRDM”) nozzles. The licensee and the NRC both realized there was an elevated risk of CRDM nozzle leakage leading to a loss of coolant accident until the inspections were conducted, based on CRDM nozzle cracks and leaks at similar reactors. The licensee and the NRC justified this elevated risk at that time on the perception that the CRDM nozzle-initiated loss of coolant accident, should it occur, was within the design capability of the emergency core cooling systems. However, the NRC had been aware since September 1996 of an unresolved safety issue potentially impairing the reliability of that relied-upon emergency core cooling system capability and had initiated Generic Safety Issue 191 (GSI-191) on containment sump concerns. The NRC had labeled this problem a high priority issue by fall of 2001. Yet the regulatory decision to allow the Davis-Besse NPP to continue operating with an elevated risk from a loss of coolant accident happening did not account for the concurrent elevated risk of a key response safety function to a loss of coolant accident. When the deferred inspections were finally performed in 2002, very significant damage was found. In addition, the NRC did not allow Davis-Besse NPP to restart until the containment sump problem was corrected.)

Because compliance with the fire regulations is such an important part of safety at a nuclear power plant, care should be taken to not substitute long-term enforcement discretion for real world modifications and corrective actions. Rather than taking steps to minimize fires by enforcing the regulations, the NRC is basing its findings of safety at the SHNPP on informal, unspecified and unquantified noncompliances.

P.4. Response

The NRC staff believes that the Petitioners may have misunderstood the staff’s reference to the Inspection Manual. Inspection Manual Part 9900, “Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety,” does not govern the use of enforcement discretion but provides technical guidance on the use of compensatory measures until final resolution of noncompliances. Section 7 “Corrective Action” is what the staff was referring to, specifically, the criteria to evaluate the Licensee’s use of compensatory measures. This has been clarified in the DD.

The Enforcement Manual governs the use of enforcement discretion and defines the time-frame for transition to the requirements of 10 CFR 50.48(c). The “Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48(c)),”

available from the NRC public Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforc-pol.pdf>, is a formal policy and the agency expects the Licensee to address any noncompliances in the timeframe specified.

The Notice of Enforcement Discretion is discussed in the Inspection Manual; however, its application in this situation is not appropriate. A NOED is applicable to license conditions, not regulations. The Licensee has stated on the docket that it intends to submit a license amendment within the specified timeframe (ML051720404). When SHNPP applies for a license amendment to transition to 10 CFR 50.48(c), the NRC will ensure that the amendment is processed in accordance with the regulations in 10 CFR 50.90, "Application for Amendment of License or Construction Permit," and other applicable requirements.

The NRC staff agrees with the Petitioners that the Licensee is not in compliance with existing fire regulations nor is it in compliance with NFPA 805 standards; however, enforcement discretion allows for this condition while licensees are completing the transition to the new fire protection standards as specified in the Enforcement Policy mentioned above and discussed in detail in the proposed DD. The Licensee has implemented compensatory measures as required by its approved fire protection program to address noncompliances while in transition to 10 CFR 50.48(c).

The Petitioners also state that "the licensee has not yet placed in the regulatory docket any evaluation identifying gaps, or deltas, between actual conditions and either the existing or the 'new' regulations" and that the "NRC cannot verify that the various noncompliances, individually and collectively, represent a low hazard." As part of the enforcement discretion policy, the Licensee must verify that noncompliances do not pose a high risk. Further, the Reactor Oversight Process continues to inspect the fire protection program. If resident or regional inspectors discover a violation that does not fall under enforcement discretion, the NRC may take enforcement action regardless of the Licensee's intent to adopt the new fire protection program.

The Petitioners state that the ". . . licensee is using compensatory measures . . . to substitute for compliance." As stated in the proposed DD, when a licensee or NRC inspector identifies a noncompliance or other condition, licensees have the flexibility to implement a compensatory measure in accordance with their technical specifications, license conditions, and approved fire protection program to enable continued plant operations while corrective actions are completed. The proposed DD further stated that compensatory measures are not a substitute for demonstrating permanent compliance with the regulations.

The Petitioners conclude by stating ". . . the NRC is basing its findings of safety at the SHNPP on informal, unspecified and unquantified noncompliances." The NRC staff disagrees with this statement. The NRC staff has based its findings on the availability of several levels of defense-in-depth at SHNPP, the Licensee's implementation of compensatory measures in accordance with the approved SHNPP fire protection program and regulatory guidance, the Licensee's actions toward transitioning to 10 CFR 50.48(c) including plant modifications and reanalysis efforts, resident inspector oversight at SHNPP, and the specified time frame associated with SHNPP's transition to 10 CFR 50.48(c). To ensure safety, the NRC continues to verify that the Licensee is properly implementing its fire protection program at SHNPP in accordance with the regulations.

P.5. Comment:

Security and fire protection The Proposed Director's Decision at page 15 states that "the NRC has indicated in public statements that subsequent classified studies have confirmed that commercial nuclear power plants are robust." This reflects the formal statement made by NRC Chairman Dale Klein on January 29, 2007, that

Nuclear power plants are inherently robust structures that our studies show provide adequate protection in a hypothetical attack by an airplane. The NRC has also taken actions that require nuclear power plant operators to be able to manage large fires or explosions - no matter what caused them.

The assertions in the Proposed Director's Decision and by Chairman Klein are contrary to the findings in a long series of studies on security issues that have been undertaken by the NRC since 1982 that show that the plants cannot withstand an aerial attack (Union of Concerned Scientists Issue Brief: THE NRC'S REVISED SECURITY REGULATIONS, February 1, 2007; www.ucsusa.org/assets/documents/clean_energy/20070201-ucs-aircraft-fire-hazards.pdf).

The fire protection regulations, even if met in full and non-exempted, are intended to deal with a single fire in a single room or area. No other equipment damage is presumed to occur, other than the components within that room or area damaged by the single fire itself. The fire protection regulations are not designed for and are not adequate to deal with fires in multiple rooms and areas that can easily result from an aircraft crash.

The noncompliances of the fire protection regulations at the SHNPP would be compounded by acts of sabotage or terrorism. OMAs have not been proven to adequately address one fire, let alone multiple fires in the face of a real threat.

P.5. Response

The NRC staff ensures public health and safety for all fires using defense-in-depth. Adequate protection is provided by the robustness of plant structures, emergency procedures, and backup systems combined with emergency plans developed for a specific NPP. The NRC staff concludes that the existing planning basis used to develop NPP emergency plans in combination with the strength of structures, as well as other safety and security measures provides adequate protection to the public should an attack occur.

The NRC staff recognizes that the protection provided for single-area fires, by itself, may not be adequate to address terrorist attack scenarios at NPPs; therefore, the NRC has addressed and continues to focus on terrorist acts and other security issues industrywide and on a plant-specific basis. The NRC has issued orders requiring NPPs to put in place mitigating strategies to deal with a wide range of events, including fires, due to intentional acts. These strategies include plans, procedures, and pre-staged equipment whose intent is to reduce the effects of

accidents and security-related events. The NRC staff is currently performing a detailed review of the specific plans and strategies each plant has in place to respond to these events.

The NRC has indicated that commercial NPPs are robust and the likelihood of a radioactive release affecting public health and safety is low. Further, the NRC is considering terrorist acts and is working toward further enhancing safety by requiring licensee to develop 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 can be adequately protected should an attack occur.

L.1. Comment:

Page six of the proposed Director's Decision states, "The NCV [non-cited violation] related to the use of inadequate operator manual actions to correct some of the Thermo-Lag fire barrier issues. The NCV was determined to be of very low safety significance and the licensee implemented corrective actions by assigning an additional operator to be available to perform safe shutdown actions." This statement is true and reflects the conservative immediate corrective action of assigning a second operator. Since that time, plant modifications have been completed to resolve the issue with Thermo-Lag fire barriers at the Harris Nuclear Plant associated with this NCV. Additionally, the Harris Nuclear Plant has performed a comprehensive manual action feasibility study to demonstrate that manual operator actions can be accomplished within the required times by a single operator. Currently the Harris Nuclear Plant is operating with one dedicated safe shutdown operator.

L.1. Response

No further response necessary.