



AUG 14 2001

SERIAL: HNP-01-122

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
FIRE BRIGADE EVALUATION

Dear Sir or Madam:

From November 1, 1999 through November 5, 1999, the NRC performed a fire protection inspection at the Harris Nuclear Plant (HNP) as documented in NRC Inspection Report No. 50-400/99-13. That inspection identified three unresolved items regarding fire barriers in areas served by safety-related equipment. During investigation into the significance of these issues, the NRC communicated to HNP that the HNP Site Fire Brigade was being considered as "moderately degraded" for evaluation under the significance determination process. HNP would like to take this opportunity to provide a basis that the HNP Site Fire Brigade should be considered in the "normal operating state" instead of being considered "moderately degraded".

If upon consideration of the enclosed information, the NRC continues to find HNP's Site Fire Brigade "moderately degraded", HNP requests a dialogue regarding the basis for the NRC's determination. This communication is necessary to ensure that any degraded condition is appropriately identified in the HNP corrective action program and to establish a consistent understanding of the operational readiness of the Site Fire Brigade.

Enclosure 1 provides a description of the basis for HNP's determination that the Site Fire Brigade should be considered at the "normal operating state".

Your cooperation in this important matter is appreciated. Any questions regarding this submittal may be referred to Mr. J. R. Caves at (919) 362-3137.

Sincerely,

R. J. Field
Manager, Regulatory Affairs
Harris Nuclear Plant

A006

MSE/mse

Enclosures:

1. Fire Brigade Evaluation

c: Mr. J. B. Brady, NRC Sr. Resident Inspector
Mr. R. J. Laufer, NRC Project Manager
Mr. L. A. Reyes, NRC Regional Administrator

SHEARON HARRIS NUCLEAR POWER PLANT
NRC DOCKET NO. 50-400/LICENSE NO. NPF-63
FIRE BRIGADE EVALUATION

Background

From November 1, 1999 through November 5, 1999, the NRC performed a fire protection inspection at the Harris Nuclear Plant (HNP) as documented in NRC Inspection Report No. 50-400/99-13. That inspection identified three unresolved items regarding fire barriers in areas served by safety-related equipment. During investigation into the significance of these issues, the NRC communicated to HNP that the HNP Site Fire Brigade was being considered as “moderately degraded” for evaluation under the significance determination process.

Criterion for Degradation

NRC Inspection Manual Chapter 0609 Appendix F provides the following guidance with respect to fire brigade rating:

The normal operating state category reflects full compliance with existing regulations and regulatory guidance. Specified by the existing regulations and regulatory guidance is the need for fire protection systems and features to meet fire protection industry codes and standards. A fire protection system or feature is considered to be in a normal operating state when its design conform with the minimum design, installation, and performance criteria specified by the code-of-record.

Attachment 2 of Inspection Manual Chapter 0609, Appendix F states:

The following are examples of observed conditions that may represent a moderate impact (degradation) on the ability of the fire brigade to effectively carry out its manual fire fighting control and suppression function:

- Fire fighting (pre-fire plans) are less than comprehensive and do not establish the minimum guidance needed to support the necessary fire fighting operations.
- Fire brigade equipment not state-of the-art or good practice, specialized fire fighting agents not provided for special hazards or adequately staged, response and transport schemes for fire fighting equipment not well defined, and noted weaknesses in the material condition of fire brigade equipment.

The following are examples of observed conditions represent indicators of effective fire brigade performance (normal operating state):

- Drill scenario was well planned and the observed fire brigade performance was satisfactory when evaluated against the guidance above.
- No apparent weakness in fire brigade equipment or the staging of this equipment, specialized fire extinguishing agents for special hazards are maintained in the appropriate areas of concern.
- Fire fighting (pre-fire plans) strategies are comprehensive and exceed minimum NRC guidance.

Basis for consideration of the fire brigade in the Normal Operating State

Appendix F again states the following:

The normal operating state category reflects full compliance with existing regulations and regulatory guidance. Specified by the existing regulations and regulatory guidance is the need for fire protection systems and features to meet fire protection industry codes and standards. A fire protection system or feature is considered to be in a normal operating state when its design conform with the minimum design, installation, and performance criteria specified by the code-of-record.

To be considered not in the normal operating state, the fire brigade would have to be degraded below full compliance with existing regulations and regulatory guidance. NRC Inspection Report (IR) 50-400/99-13 documented that the NRC reviewed the fire brigade drill program, observed fire brigade response associated with an unannounced fire brigade drill, and reviewed selected audits of the fire protection program performed by the Harris Nuclear Assessment Section (HNAS). The inspection team witnessed an unannounced fire brigade drill for an operations shift, on November 3, 1999. The fire scenario involved a simulated fire in the Battery Charger 1A-SB located in the B train 1B-SB Switchgear Room (Fire Area 1-A-SWGR-B). The inspectors stated that the brigade demonstrated good fire fighting tactics, the proper use of the pre-fire plan and fire fighting equipment, and adequate recovery operations. The fire brigade leader's direction and performance was also good. Additionally, the inspection report notes that the critique of the drill was effective in identifying a pre-fire plan area of improvement. This improvement involved noting in the pre-fire plan the availability of fire hose stations for use when accessing the switchgear rooms. The NRC noted that the area of improvement had no significant effect on fire brigade operation. Overall, the NRC determined that the fire brigade drill performance was judged to have been satisfactory. The NRC stated that no findings were identified and documented in relation to the fire brigade drill performance.

The NRC (in IR 50-400/99-13) observed that the drill critique data for shift fire drills conducted during the past three-year period indicated that effective response by the fire brigade may have been somewhat reduced throughout several years. The inspectors reviewed selected HNAS assessment reports and noted that a number of issues had been identified concerning fire brigade drill deficiencies and the quality and use of pre-fire plans. Also, the NRC identified a concern regarding the lack of fire brigade drills scheduled in the switchgear areas. Until recently, no fire drills had been scheduled within the switchgear areas in the past seven years.

In identifying these areas for improvement, the NRC did not reach a determination that the HNP Site Fire Brigade was not in full compliance with existing regulations and regulatory guidance. The concern was characterized as "effective response by the fire brigade may have been somewhat reduced throughout several years." This level of reduction was not quantified by the NRC, as not being in full compliance with regulation and regulatory guidance. Additionally, there were no findings issued concerning fire brigade performance in IR 50-400/99-13. With respect to not performing fire drills in the switchgear room, HNP has performed numerous fire drills in other non-safety related switchgear rooms. These rooms present similar fire fighting hazards as the safety related switchgear rooms. Additionally, the HNP fire brigade consists of licensed and non-licensed plant staff. The brigade leader is a licensed operator who is cognizant of the important safety related and safe shutdown equipment located in the safety related switchgear rooms. This ensures that fire fighting efforts will protect required safety related equipment in the switchgear rooms. Fire drills were not previously performed in safety related switchgear areas due to a concern about potential inadvertent impact on safety related equipment as a result of fire protection personnel and equipment in the area for the drill. HNP has since initiated fire drills in these areas with increased oversight and control to reduce the potential for inadvertent impact on safety related equipment. It should also be noted, as documented in the inspection report, that HNP has recently performed successful drills in these switchgear areas. There were no significant deficiencies identified during these drills. Therefore it is reasonable to conclude that fire brigade effectiveness would have been satisfactory for these safety related switchgear room areas in the past.

Attachment 2 to Appendix F again states:

The following are examples of observed conditions that may represent a moderate impact (degradation) on the ability of the fire brigade to effectively carry out its manual fire fighting control and suppression function:

- Fire fighting (pre-fire plans) are less than comprehensive and do not establish the minimum guidance needed to support the necessary fire fighting operations.
- Fire brigade equipment not state-of-the-art or good practice, specialized fire fighting agents not provided for special hazards or adequately staged, response and transport schemes for fire fighting equipment not well defined, and noted weaknesses in the material condition of fire brigade equipment.

The following are examples of observed conditions represent indicators of effective fire brigade performance (normal operating state):

- Drill scenario was well planned and the observed fire brigade performance was satisfactory when evaluated against the guidance above.
- No apparent weakness in fire brigade equipment or the staging of this equipment, specialized fire extinguishing agents for special hazards are maintained in the appropriate areas of concern.
- Fire fighting (pre-fire plans) strategies are comprehensive and exceed minimum NRC guidance.

The NRC reviewed several HNAS assessments which identified two issues and one weakness with respect to fire brigade and fire pre-plan performance deficiencies. These assessments identified conditions that warranted corrective actions but the assessments did not conclude that minimum standards were not being met. HNAS determined that the overall HNP fire brigade was effective. The NRC has not identified an area where the HNP fire brigade or fire pre-plans have not met minimum requirements. HNP has not self-identified a level of degradation below a minimum required to meet regulatory requirements. The only fire brigade concern identified by the NRC in IR 50-400/99-13 was that drills were not performed in the safety related switchgear room for approximately seven years. It is HNP's position that the fire brigade capability in the subject areas was not degraded during that period based on: (1) numerous successful drills in similar switchgear rooms with similar fire hazards, and (2) fire drills performed in the associated switchgear rooms were successful and did not indicate any significant concern with fire brigade response.

Conclusion

Fire Brigade performance is continually evaluated at HNP through drills, training, procedure reviews, fire fighting equipment surveillance, self-assessments, independent assessments, and NRC inspection. In none of these evaluations has it been determined that overall site fire brigade response was less than required per regulation and regulatory guidance. Therefore, consistent with NRC Inspection Procedure 0609 Appendix F, it is HNP's position that Site Fire Brigade performance should be considered at the "normal operating state".