

## Conclusion of NRC's Review of Security Issues at the Shearon Harris Nuclear Plant

This refers to the Nuclear Regulatory Commission's (NRC) review of security activities at the Shearon Harris Nuclear Plant. On March 22, 2006, the NRC published a summary 'For the Record' which summarized the results of the agency's review of concerns regarding security activities at the Shearon Harris Nuclear Plant. This summary indicated the NRC continued to review the status of several issues at the site.

The NRC has conducted numerous on site activities including an investigation conducted by the NRC Office of Investigations to review all concerns.

Given the sensitive nature of the NRC's review, the information provided below is limited. While we remain fully committed to our goal of increasing public confidence by communicating with the public, the NRC must balance that goal with our commitment to ensuring the continued safe and secure operation of the nuclear facilities in our country. The public should be assured that the NRC has taken appropriate actions to address any potential security-related concerns that were identified and revealed during the course of our review. The following information provides a final status of the NRC activities and observations regarding the security-related issues:

- The NRC reviewed Progress Energy's vehicle search practices at the Harris plant. Interviews of plant security officers by the NRC site team identified reports that on occasion, Progress Energy non-managerial employees expressed their displeasure with the amount of time being taken during vehicle searches. Similar actions by plant management were not identified. None of the security officers interviewed, however, indicated that vehicle search procedures were ever circumvented in order to appease or satisfy disgruntled employees.
- The NRC also reviewed Progress Energy's requirements and practices regarding the presence of protective forces in the protected areas at the plant. Our review determined that on one occasion, an item was lifted by crane onto a structure inside the protected area without the licensee mandated security coverage. In response to this incident, the licensee's staff took appropriate action by stopping the crane work, removing the item from the structure, and dispatching two security officers to the crane operation site to provide security coverage for the work being performed. The NRC site team assessed the impact that this activity would have had in the area of the structure and concluded that no regulatory requirement was violated. Because no requirement was violated, there was no requirement to report it to the NRC.
- Regarding door security, the NRC resident inspectors found on four occasions, beginning on October 5, 2005, that doors which were required to be locked were not secured because the locks did not function properly. In addition, the licensee identified and repaired another malfunctioning locked door. The licensee has repaired each of the doors that were found to be malfunctioning. Subsequent routine sampling of door operations by the NRC resident inspectors has not identified any additional malfunctioning security doors. During the site team's review of licensee work requests

on security doors, they found that work was completed on 14 vital area doors that did not lock. Based on the residents review of security records, the malfunctioning vital area doors were compensated by stationing a security officer until the repairs were completed. To address the longstanding door maintenance problems, the licensee has implemented a revised door maintenance program. The program will include modifications to some security doors, continued weekly checks of door operability, and verification of door operation by security officers during their security rounds. The NRC resident inspectors will monitor the implementation and effectiveness of the maintenance program during their routine inspection. In addition, licensee security personnel check doors as part of their routine security rounds.

- The inspection, which also reviewed site management's response to concerns regarding security-related doors, did not identify any instances wherein which an unsecured door was reported to management and no action was taken. While there was some evidence that a report of an unsecured door was brought to the attention of management, the door in question was not a security-related door.
- The NRC reviewed intruder detection equipment. The NRC site team's review of maintenance and testing records for calendar year 2005 found that none of the protected area perimeter intrusion detection system microwave units was non-functional for an extended period of time. Interviews of Progress Energy security officers did not identify any concerns with the operability of this equipment. The absence of the balanced magnetic switches (BMS) on some gates was noted, however, BMS's were not an integral part of the gate security and, therefore, does not constitute a degradation of the physical protection system at Shearon Harris.
- The NRC reviewed the licensee's fitness-for-duty program in relation to the security officers. Based on the team's assessment, each security officer was knowledgeable, conscientious about their job, and unaware of any instances of inattentiveness. Many of the security officers stated that they believed that any officer who was caught sleeping on duty would be terminated. In addition, the team did not identify inattentive security officers or inadequate supervision. The NRC site team did not observe televisions on guard posts or security officers listening to music. However, Shearon Harris permits security officers to listen to the radio while on post and has equipped some security posts with radios. Licensee procedures stipulate that listening to a radio must not interfere with the assigned security officer's ability to respond to voice, radio, telephone or other communications. NRC baseline inspections at Shearon Harris have not identified any adverse effects from the use of radios. The NRC also reviewed the practice of officer call-ins to report their status and determined that security officers were responsive to their assigned duties.
- The NRC site team also reviewed an issue involving non-security personnel being permitted to fire blank ammunition from an AR-15 rifle in the protected area during an employee familiarization demonstration of the Multiple Integrated Laser Engagement System (MILES). The three day plant familiarization effort was conducted by the Harris Nuclear Security Plant Training Staff. The purpose of the exercise was to introduce members of station management and station employees to the MILES gear and familiarize them with the sound of live fire (blank ammunition) within the Protected and Owner Controlled Areas. The use of MILES firearms inside the protected area is

permitted by 10 CFR Part 73. Demonstrations such as the one described here are necessary because security exercises and drills involve an increased level of realism. Controls were in place to ensure a high level of safety, including: (1) barricading off the demonstration area; (2) a discussion of stand off distances and individual safety; (3) loading of all magazines and rifles by members of the security training staff with blank ammunition; (4) visual inspection of magazines to ensure that live ammunition was not inadvertently introduced during the demonstration; and (5) direct supervision of participants by a certified firearms instructor.

- The NRC site team's interviews of security personnel included a review of whether the licensee had accurately documented overtime worked by security force personnel. These interviews did not identify instances in which overtime was not documented. In addition, the interviews did not reveal the use of other means, such as retail gift cards, to inappropriately compensate for overtime and show compliance with work hour limits.
- During the inspection, the NRC staff interviewed Progress Energy security officers regarding training for certain plant activities such as use of lifts. Interviews conducted during the inspection did not identify any instances in which individuals operated plant equipment such as lifts without the proper training.
- Shearon Harris informed the NRC that at approximately 8:30 a.m., on November 4, 2005, a licensee security patrol on routine mobile patrol duties within the owner controlled area reported a black flag tied to a communications tower. Licensee security personnel that identified the flag appropriately notified management which led to an investigation. Review of the event showed that the security patrols functioned as expected. A review of the event did not indicate any noncompliance with the site security plan.
- Security switches had been tampered with and vandalism had occurred to railway signs on a rail line that carries various materials to the plant. However, this incident occurred at a distance of approximately 4.5 miles from the owner controlled area and is viewed as malicious mischief. Nonetheless, the licensee installed padlocks on the loading track rail switches.
- A telephone pole fire occurred and telephone communications capability in two security guard stations was affected by the fire. The officers whose guard stations were affected by the fire continued to maintain effective contact with other parts of the security/operations staff and were not otherwise adversely impacted. Despite the damage caused by the fire, telephone capability was maintained because of redundant systems. The licensee also informed the NRC of corrective actions that have been implemented in response to this event, including the installation of uninterruptible power supplies (UPS), with an automatic backup capability in their security and two-way communications system.
- A security officer was found to have live ammunition rounds in his tactical vest during a pat-down search prior to being issued equipment for a security exercise. The licensee's procedures for the safe conduct of a Force-on-Force training exercise were successfully implemented as planned. Upon conclusion of the exercise, the discovery of the live ammunition was briefed to all exercise participants as a lesson learned and documented

in the licensee's corrective action program. Additional safety measures were in place that also would have prevented live rounds from being chambered into the barrel of an exercise weapon.

- Information obtained from the NRC site team's interviews and review of condition reports indicated that four accidental weapons discharge incidents had occurred in 2005. These incidents did not cause any personnel injury or equipment damage. The team determined there was no regulatory requirement for the licensee to report accidental weapons discharges to the NRC. The team did not identify evidence to suggest a licensee coverup of these occurrences.
- A fire alarm sounded at the emergency service-water intake structure for several hours. The records that the team reviewed indicated that, since this fire alarm malfunctioned several times during a 24-hour period, Site Operations personnel contacted security and reported the fire detector defective and informed security that they could enter the building if necessary. Licensee security management advised that it had communicated to security officers, that they could enter the emergency service-water intake structure to verify security while the fire alarm was sounding. The NRC resident inspectors confirmed that the security officers completed the required building security checks despite the alarm condition. The residents also reviewed the licensee's investigation of this matter which determined that operations staff did not fully comply with procedures to silence the alarm in a timely manner. The licensee took appropriate actions in response to this incident.
- The NRC also conducted an onsite baseline physical security inspection in September 2005. This inspection resulted in the identification of one finding of very low safety significance and a non-cited violation for having expired gas mask canisters. During the inspection, the NRC staff reviewed the licensee's investigation into expired gas mask canisters, which found that approximately 36% of the gas mask canisters in service were past the indicated expiration dates. The licensee has replaced the expired canisters, including those in storage. The licensee entered this issue into their corrective action program and plans to identify and address the circumstances that contributed to having expired gas mask canisters.
- During the onsite baseline security inspection conducted in September 2005, the protective vest maintenance program was inspected to verify that licensee procedures were in place to appropriately maintain and inspect the vests for serviceability. The licensee's investigation into the condition of the vests revealed that approximately 33 ballistic vests in service at Shearon Harris had exceeded the vest manufacturer's specified five-year warranty. Information obtained during the inspection indicated that the specified warranty does not address protective capability. Nonetheless, the licensee was purchasing and outfitting the security officers with new protective vests due to the age of the older protective vests. The team determined that the each security officer inspects their vest before donning them. In addition, since 2005, each security platoon leader conducts a monthly equipment inspection that includes evaluating the condition of the vests. If a vest is found to be "unserviceable," the vest is replaced.
- An investigation of security officers cheating on annual re-qualification examinations was completed on September 27, 2006 by the Region II Office of Investigations (OI).

The investigation found that two contract security supervisors deliberately failed to properly administer the annual written security re-qualification testing by providing answers or coaching to contract security officers during the administration of the testing. Additionally, the investigation substantiated that a third contract security supervisor deliberately provided answers to security officers during the administration of Plant Access, Radiation Worker and Respiratory Protection computer based testing. Enforcement action has been taken against the three contract security supervisors as well as against Progress Energy and Securitas Security Services.

- The NRC reviewed concerns among plant safety and security personnel that Progress Energy and security contractor Securitas Security Services expect workers not to report workplace injuries, and that they aggressively carry out reprisals against those who do file injury reports. An NRC inspector conducted interviews of Progress Energy personnel on December 6 and 7, 2006. No information was collected that would indicate that the licensee expected workers to not report workplace injuries or that the licensee carried out reprisals against those who do file injury reports. The NRC has not received any information during multiple on-site inspection activities or from any concerned individuals to substantiate this concern.
- The NRC reviewed the safety conscious work environment in the security organization, specifically with regard to the willingness of individuals to report concerns to the NRC or other outside organizations without fear that adverse actions will be taken against them. None of the security officers interviewed by an NRC on-site inspection team during the week of January 9, 2006 indicated that they had been threatened or harassed for bringing allegations or concerns to the news media or any other external organization. Many did state however, that Progress Energy security management had attended shift briefings to advise that the disclosure of safeguards information to unauthorized persons was a violation of federal law that could subject violators to prosecution. Additionally, an inspection was conducted in July and August 2007, and the inspectors concluded that based on interviews of a number of security officers, in general, the safety conscious work environment at the site appeared to be adequate, where people felt free to raise issues without fear of retaliation. The inspectors interviewed approximately 20 officers regarding their willingness to raise issues to their management, and to use the corrective action program (CAP) and the employee concerns program (ECP). All interviewed stated that they felt free to raise issues and would do so without fear of retaliation. None of the security officers interviewed by the NRC inspection team indicated that they had been threatened or harassed for bringing allegations or concerns forward. The inspectors concluded that employee's felt comfortable bringing up issues with management, and were aware of the other venues available for reporting safety concerns, such as the ECP. In addition, the inspectors determined that licensee management encouraged employees to promptly identify nonconforming conditions. In specific, it was noted that the security organization had implemented an excellence plan which emphasized the importance of a safety conscious work environment through staff training and other actions. Lastly, the NRC has not received any information in other on-site activities from any concerned individuals to substantiate this concern.