U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report Nos. 50-456/88020(DRSS); 50-457/88020(DRSS)

Docket Nos. 50-456; 50-457 License Nos. NPF-72; NPF-77

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: Braidwood Nuclear Power Station, Units 1 and 2

Inspection At: Braidwood Station

Inspection Conducted: June 20, 1988

Date of Previous Security Inspection: June 6-10, 1988

Type of Inspection: Announced Special Physical Security Inspection

Inspector: Q. Belanger for
T. J. Madeda
Physical Security Inspector
Date: 7-1-88

Reviewed By: Q. Belanger for
James R. Creed, Chief
Safeguards Section
Date: 7-1-88

Approved By: Bruce S. Mallett
Bruce S. Mallett, Ph.D, Chief
Nuclear Materials Safety and
Safeguards Branch
Date: 7/1/88

Inspection on June 20, 1988 (Report Nos. 50-456/88020(DRSS); No. 50-457/88020(DRSS))
Areas Inspected: Included a review of Compensatory Measures and Access Control - Personnel as they related to an NRC identified incident involving an inattentiveness to duty issue of two security officers.
Results: The licensee was found to be in violation of NRC requirements noted below:

Compensatory Measures: The licensee failed on two occasions to ensure adequate implementation of vital area compensatory measures. (Section 4 of Report Details).

Inspection activities showed a decline in the licensee's implementation of their security program.

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DETAILS

~~Civil And Criminal Sanctions.~~

1. Key Persons Contacted

In addition to the key members of the licensee's staff listed below, the inspectors interviewed other licensee employees and members of the security organization. The asterisk (*) denotes those present at the Exit Interview conducted on June 20, 1988.

*R. Querio, Station Manager
*D. O'Brien, Services Superintendent
*F. Willaford, Station Security Administrator
*B. Saunders, Corporate Nuclear Security Administrator
*S. Roth, Assistant Station Security Administrator
*P. Barnes, Supervisor, Regulatory Assurance
*H. Walker, Assistant Security Forces Manager, Burn's Contract Security
*T. Tongue, Senior Resident Inspector, NRC
*T. Taylor, Resident Inspector, NRC
S. Sands, Project Inspector, NRC-H.Q. (Telephonic)

2. Entrance and Exit Interviews (IP 30703)

a. At the beginning of the inspection, the Station Security Administrator of the licensee's staff was informed of the purpose of this visit and the functional areas to be examined.

b. The inspector met with the licensee representatives denoted in Section 1 at the conclusion of the inspection on June 20, 1988. No written material pertaining to the inspection was left with the licensee or contractor representatives. A general description of the scope of the inspection was provided. Briefly listed below are the findings discussed during the exit interview. The details of these findings are referenced, as noted, in this report. Included below is a statement provided by or describing licensee management's response to each finding.

Licensee personnel acknowledged the inspector's comments that a potential violation existed for the licensee's failure to adequately implement compensatory measures for a vital area door that was open and unalarmed in that, on two occasions, guards assigned to monitor an "out-of-service" vital area door were observed to be inattentive to duty (eyes closed and failure to acknowledge personnel) by several NRC personnel. (Section 4)

Licensee management's position was that the two guards were alert and cognizant during the period the NRC inspector observed the guards.

The inspectors stated that, the licensee will be advised of any enforcement action after NRC management review.

3. Clear Functional/Program Areas Inspected (MC0610)

Listed below are the areas which were examined by the inspector within the scope of these inspection activities. These areas were reviewed and evaluated as deemed necessary by the inspector(s) to meet the specified "Inspection Requirements" (Section 02) of the applicable NRC Inspection Procedure (IP) as applicable to the security plan. Sampling reviews included interviews, observations, testing of equipment, documentation review and at times drills or exercises that provide independent verification of your ability to meet security commitments. The depth and scope of activities were conducted as deemed appropriate and necessary for the Program Area and operational status of the security system.

Number	Program Area and Inspection Requirements Reviewed
81064	Compensatory Measures: (02) Employment of Compensatory Measures; (03) Effectiveness of Compensatory Measures.
81070	Access Control - Personnel: (03) Vital Area Access Control; (04) Control of Activities and Conditions in Vital Areas.

4. Compensatory Measures (IP 81064)

One violation was identified and is described below:

Section 7.3.3 of the approved Braidwood Security Plan requires that all points of personnel access to vital areas are controlled. Access doors to vital areas A guard is posted at any or

Figure 5-9 and Table 5-1 of the approved Braidwood Security Plan identifies the

Braidwood Security Procedure BS-PI-12, titled Post Instructions - Compensatory Measures, requires that for a degraded vital area barrier, which includes

Contrary to the above, on June 16, 1988, NRC personnel observed on two separate occasions guards' inattentiveness to duty (eyes closed and failure to acknowledge the presence of the inspectors) at vital area

(50-456/88020-01; 50-457/88020-01).

On June 16, 1988, the NRC Resident Inspector (RI) was conducting a tour of the plant with two NRC Headquarters (HQ) representatives. At approximately 10:40 a.m., while walking down a metal grating stairwell to the 383'0" elevation, the RI observed a security guard who was sitting with his feet up on the lower rung of a safety walkway rail. The guard appeared to be (Note: has been

designated by the licensee as being a vital area door that controls access to the The RI stated that he stood at the bottom of the stairs, a distance of approximately 20 feet from the guard, and observed the guard for approximately one minute. The RI observed no movement from the guard and it appeared his eyes were closed. The RI then approached the guard to a distance of two to three feet and stood and observed the guard for approximately another minute. The RI stated that during this period of observation, the guard's eyes were closed and the guard did not acknowledge his presence. The RI also stated that he did not hear any radio transmissions, nor did it appear that the guard was monitoring the radio. As the RI was observing the guard, the guard opened his eyes and appeared to be startled. His eyes were red "bloodshot" and he looked drowsy. During the period of observation, the RI made no attempt to enter the He indicated it would have been possible to bypass the guard by crawling under or climbing around the guard. When the guard did acknowledge the presence of the RI, the inspector asked the guard for his badge number (No. 1211). The RI felt that the guard was now in a condition to adequately man the post and left the area to report the observation to the licensee. When leaving the area, the RI observed another guard ("Rover-2"). He told the approaching guard to keep the other guard awake. The RI informed the licensee of his observation at 11:05 a.m., and the licensee reported the event to the NRC in the required time period. Inspection results also confirmed that, in addition to the RI's observation, one of the NRC HQ individuals confirmed the RI's account of the event. (Note: this individual was immediately behind the RI during the period of observation. The third HQ individual was further back and, due to space limitations in the area, was not in a good position to observe the guard.)

When licensee security management personnel were advised of the RI's findings, the guard in question was removed from the post (12:15 p.m.). Subsequently, the guard's site access was revoked by the licensee pending security investigation results.

At approximately 12:30 p.m., the RI, accompanied by the same HQ personnel, returned to the same area as part of the tour and to assure that adequate corrective action was taken by the licensee for the inattentive guard. At this time, the RI observed that another guard had been assigned to the post. Observation from a distance of approximately 20 feet showed that the guard was leaning against a scaffolding ladder with his head leaning against his hand and had his eyes closed. The RI stated that he observed the guard for an estimated 30 seconds to one minute time period from a position standing in front of the guard (approximately 10 to 12 inches from the guards face), and that during this time, the guard did not show any any signs of awareness to indicate that he knew the RI was there. At this point, the RI walked passed the guard to the door of the a distance of approximately four feet and stood in front of the open vital area door. The RI stated that he did not enter the vital area; however, since the guard was not alert, the RI felt that he could have entered without being challenged by the guard. The RI further stated after standing in front of the vital area

door for a period of approximately five to ten seconds, the guard did become aware of the RI. As stated in the first event, an NRC HQ personnel confirmed the observation of the RI. Prior to the NRC personnel leaving the area to report their findings to the licensee, the guard opened his eyes. Before leaving the area, the RI assured that the guard was alert. In addition, the RI asked the guard if he was asleep. He responded "No, I was listening to the radio." The RI immediately notified the licensee of his findings and the guard was replaced and his site access was revoked pending licensee investigation results.

During inspection efforts on June 20, 1988, the inspectors determined by observation that the environment at was very noisy; very warm and the general area does experience a level of vibration from plant equipment. The licensee did not have specific figures regarding the environmental factors. However, the licensee stated that it is very unlikely a person would be aware of someone approaching the immediate area until they were physically touched, because of the general area vibrations.

Prior to our onsite inspection activities, the licensee initiated an investigation into the RI's findings. The investigation included interviews with the accused security guards and the RI, and observation of the area by

Licensee interview results showed the following:

Event No. 1:

The security officer posted at the door to the Room stated that he saw three individuals coming down the stairs but did not know they were NRC personnel. He stated that he turned his head away, leaning his head on his left shoulder so he could monitor radio traffic. The mike (receiver) for the radio was clipped to the lapel of his shirt on his left shoulder. He said he was not aware of the RI's approach until he looked up and he was standing beside him, at which time the RI asked for his badge number.

Event No. 2:

The security officer posted at the door to the Room stated that he was standing with his left arm (elbow) on the rung of a ladder and was holding the radio mike to his left ear so that he could monitor radio traffic. His job for that morning was to provide relief for posts and this was his fifth post since coming on duty. He said he was listening to the radio so he would know where to go for his next post. He stated that his head was down, and that his eyes were cast down. He stated that he saw the legs of a person walk by but that he did not look up because the person did not attempt to go into the Room, which he could see since he was facing the door. When the NRC asked him if he was asleep, he stated "No, I was listening to the radio."

The licensee also stated that an independent polygraph operator (employed by the security contractor) had interviewed both guards regarding their inattentiveness to duty as observed by the NRC. These interview results stated that if a polygraph test were given to both guards, the test results for the first guard would be inconclusive, and the test results of the second guard would show that the guard was not asleep. Neither guard has taken or has been requested to take a polygraph test.

On June 17, 1988, the licensee's Site Security Administrator and a senior management individual from the contract security organization interviewed the RI and another NRC individual who was with the RI during the observations. During this interview, the RI stated that he was in the area for five minutes during each event observation. During the first event, the RI said he made the initial observation from the stairs as he was coming down, and that the guard's head was down and there was no movement. In further conversation with licensee personnel, the RI stated that he did not say that the security officer's head was down. He said he then observed the guard from the bottom of the stairs for a couple of minutes and there was no movement by the guard. He then approached to a location near the guard and continued the observation. He said the guard must have sensed him being there because he woke up. During the second event, he stated that the guard was standing and leaning with an elbow on the rung of a ladder with his head in his hand. He stated that he stood in front of the guard and the guard did not look up and that he walked past the officer to the door for the tank room and looked back at the officer. He said the officer had his eyes closed and did not look up as he walked by.

Also prior to our arrival onsite, the licensee had taken the following actions to prevent recurrence: (1) all on-duty security guards were briefed on the events, and it was emphasized that if guards do not appear to be alert, then the perception formed by others is that guards are, in fact, not alert. This was completed by June 17, 1988; (2) posts will be checked by on an and (3) checks will be made with fixed posts on the by the Items 2 and 3 were implemented by 2:00 p.m. on June 16, 1988.

During our onsite inspection activities, the inspector interviewed the RI and telephonically contacted the NRC inspector in Headquarters to review their observations and findings regarding the two events. Their position in both cases, was that the guards eyes were closed; the guards failed to acknowledge the presence of the inspectors; and they were not attentive to duty.

Interviews with licensee senior security personnel confirmed that the licensee's position was that the guards eyes were open, that they were alert, and if the RI had attempted to enter the vital area in an unauthorized manner, the guards would have taken appropriate action. This position was based on their interviews of the two guards. The licensee also developed a sequence of events as documented by the security computer and from

reports that were written by security officers who had first-hand knowledge of information concerning the events. The licensee's sequence showed that the RI's comment that he was in the area for five minutes for the first event was in error. Licensee documentation supported the position that the RI was in the area for approximately two minutes. When confronted with the licensee findings the RI reconsidered the time period and agreed that he was in the area for only approximately two minutes, not the five minutes he originally thought. The licensee also expressed the position that a person walking by a security officer posted at in the direction of (located adjacent to would not necessarily be a concern to the officer at is locked and alarmed. The licensee Station Security Administrator stated that personnel walk past guards on door posts every day, and unless they attempt to enter the door under guard, they are not challenged or otherwise given much attention. The licensee also thought it is important to note that throughout both events, a fan for room ventilation was installed in the doorway into the Room. The fan was not operating; however, a person must work their way around the fan, or push it aside to get into the room. The card reader on the door was functional and is the control device that the security officer is responsible for observing to assure that all personnel using it get the appropriate for access. The guard would not be required to take any action to deny access unless a was received on a key card.

Our inspection results did not identify any undetected or unauthorized access to the vital area in question. The operational status of the plant at the time of the events was such that tampering with the equipment to the vital area had the potential to inhibit safe shutdown.

Based on information obtained during our inspection activities, the guards were inattentive to duty. These failures (inattentiveness) to maintain positive access control to a vital area constitute a violation of the licensee's security plan. The failures were caused when, on two separate occasions, a guard posted to control access at an inoperative vital area door was observed to have his eyes closed and failed to acknowledge the presence of two NRC inspectors. No specific cause could be developed to explain the reason for the inattentiveness issue. Environmental conditions, even though a factor, appear to have limited impact, and both guards had been working a routine shift (8 hours per day) for several days prior to the events.