## U.S. NUCLEAR REGULATORY COMMISSION

### **REGION III**

Docket Nos: License Nos:	50-266; 50-301 DPR-24; DPR-27			
Report Nos:	50-266/99003(DRS); 50-301/99003(DRS)			
Facility:	Point Beach Nuclear Power Plant, Units 1 & 2			
Location:	6610 Nuclear Road Two Rivers, WI 54241			
Dates:	January 11-15, 1999			
Inspector:	James L. Belanger, Senior Physical Security Inspector			
Approved by:	James R. Creed, Chief, Plant Support Branch 1 Division of Reactor Safety			

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### EXECUTIVE SUMMARY

## Point Beach Nuclear Power Plant, Units 1 and 2 NRC Inspection Reports 50-266/99003; 50-301/99003

The inspection included a review of plant support activities relating to the physical protection of the facility. The inspector assessed and evaluated performance for the following elements of the security program: testing and maintenance, security program procedures, security force knowledge, quality assurance in security and safeguards activities, and follow-up on previous inspection findings. The inspection was conducted January 11-15, 1999. The following observations were made:

- The inspector concluded that management support for the ongoing security system replacement program was good. Close coordination and communication between security management and the security systems engineer were noted. (Section S2.1)
- The licensee's security system testing and maintenance programs ensured that security equipment met regulatory performance requirements and objectives. The security organization and the plant maintenance staff communicated well on matters affecting security system maintenance. The inspector identified that the licensee did not have a testing program in place to verify compliance with the security plan protected area lighting commitment. The inspector considered this a minor weakness which the licensee adequately addressed prior to the conclusion of the inspection. (Section S2.2)
- The licensee's security implementing procedures and guidelines were generally adequate to perform the functions required by the security plan, and were consistent with regulations and security plan commitments. Guidance in the area of access authorization operating processes was deficient, a fact also identified by the licensee's quality assurance staff in their last annual security audit. The licensee was tracking corrective action for this issue through their condition report corrective action system. (Section S3.1)
- The most recent annual quality assurance audit of the security system was thorough and complete in terms of uncovering weaknesses in the security system, procedures and practices. The QA staff identified that the licensee granted unescorted access to an individual without completing the psychological assessment process. This is a noncited violation. The event has some safety significance because it had the potential to grant unescorted access to an individual who may be untrustworthy or unreliable. (Section S7.1)
- Self-assessments conducted by the security organization were of high quality and were instrumental in identifying program weaknesses in procedures and practices. (Section S7.2)

## **Report Details**

### IV. Plant Support

### S2 Status of Security Facilities and Equipment

## S2.1 Security System Replacement Review

### a. Inspection Scope (IP 81700)

The inspector interviewed the security supervisor and the security system engineer assigned to the security system replacement project to determine the scope of the replacement program, schedules, and current status.

### b. Observations and Findings

The licensee approved a major security equipment upgrade program to replace aging equipment and resolve Y2K computer concerns. The security systems engineer advised the inspector that the security system replacement program consisted of an "Access Control Replacement Project" and a "Perimeter Replacement Project".

The access control project included:

- Installation of new security computers and software
- New security multiplexers
- New alarm station consoles with new monitors, video switcher, video capture, and printer
- Magnetic locks, dual card readers, conventional locksets, emergency egress buttons and emergency ingress key switches to all access control doors
- New fiber optic communication link between computer and multiplexers
- Hand geometry at protected area ingress locations

The perimeter project included for example:

- Straighten protected area fence lines and increasing height of fence to ten feet
- Installation of outside nuisance fence
- New perimeter alarm system
- Installation of new high mast lighting

The security systems engineer stated that approvals were needed for the door and electric strike modifications and they would meet with local fire officials to discuss these changes. The licensee indicated that the access control project would be in the design phase until June 30, 1999 and that installation would take place from June 30 to December 1, 1999 followed by testing and acceptance from January 1 to April 13, 2000. Regarding the perimeter replacement project, the security systems engineer

indicated that they would be in the design and bid specification phase from January through June 1999. Project completion is scheduled for February 2001.

The inspector's discussions with the security supervisor and the security systems engineer indicated that the projects were on schedule. These discussions also indicated that the security organization worked closely with engineering in these projects. Both individuals stated that they had good management support.

#### c. <u>Conclusions</u>

The licensee was engaged in a major security equipment replacement project that was on schedule and was supported by plant management.

### S2.2 Security System Testing and Maintenance Program

### a. Inspection Scope (IP 81700)

The inspector reviewed and evaluated the testing and maintenance programs. This included a review of the procedures that guided implementation of the programs, a review of recent monthly security reports which tracked equipment performance, interviews with the maintenance supervisor and the security operations supervisor responsible for coordinating between the security organization and the plant maintenance staff, a review of open security-related maintenance work requests, and a review of records which documented completion of security system tests.

### Observations and Findings

The licensee's security maintenance program was detailed in a procedure titled "Point Beach Nuclear Plant Security Equipment Maintenance Program" (SEMP), Revision 6 dated September 8, 1998. The inspector's review of this document showed that the procedure was comprehensive in that it covered all the equipment as identified in the Point Beach Security Plan and adequately described equipment monitoring methods, with one exception.

The inspector identified a minor weakness in the procedure relating to protected area lighting. The procedure addressed a weekly inspection by security force personnel to check for burnt light bulbs, but lacked a method to assure protected area lighting levels, as specified in the security plan. The Security Supervisor agreed with this observation and directed that a periodic lighting survey be conducted to verify security plan commitment levels. The inspector indicated that the periodic surveys, although not required by security plan commitments, were important to identify possible lighting deficiencies in the protected area caused by new construction, trailers, and other factors affecting lighting levels. The Security Supervisor added lighting surveys at a specified frequency, to the preventive maintenance call-up computer generated program, and indicated to the inspector that the testing procedures would also be revised. A walking tour of the protected area during hours of darkness by the NRC inspector identified no dark areas in which observation was restricted.

The inspector's review of the open security work orders and a discussion of these details of the open requests showed a total of fifteen Priority 5 and one Priority 6 requests. None of these open requests required the use of compensatory measures involving the use of security force members. There were no Priority 3 open work requests. The latter requires the use of security force members as compensatory measures. A review of Priority 3 work requests generated since the last NRC security inspection showed that most requests were closed the same day that the request was initiated.

Interviews with the Maintenance Supervisor and the Security Operations Supervisor indicated good communication between the security organization and the maintenance organization relative to requests for security maintenance. The Maintenance Supervisor expressed a strong commitment to supporting the security program. The inspector's review of the Point Beach Nuclear Plant Security System Tracking Report for the month of December 1998 showed high availability of security equipment. For example, the average available of the perimeter alarm zones for 1998 was 97.6% and camera availability for the same period was 99.1%. Additionally, monthly loggable events related to mechanical issues for the whole security system averaged 12.5 per month in 1998, compared to 17.3 in 1995, 14.0 in 1996 and 14.4 in 1997. This performance decline in the number of loggable events demonstrated improving equipment.

The inspector's review of security system related test records showed that the licensee tested their system in accordance the frequency and methodologies stated in the security plan and established security procedures. The inspector's review of the testing procedures showed that they were adequate to demonstrate system operability and effectiveness. The records reviewed were complete and accurate. Records were reviewed for the month and quarter preceding this inspection. No discrepancies were noted.

### c. <u>Conclusions</u>

The licensee's security system testing and maintenance programs ensured that security equipment met regulatory requirements and objectives. The security organization and plant maintenance staffs communicated well on maintenance issues. The inspector identified that the licensee did not have a testing program in place to verify compliance with the security plan lighting commitment. The inspector considered this a minor weakness which the licensee adequately addressed prior to the conclusion of the inspection.

## S3 Security and Safeguards Procedures and Documentation

## S3.1 Adequacy of Security Program Procedures

### a. Inspection Scope (IP 81700)

The inspector reviewed a sample of implementing procedures to verify that the procedures were consistent with security plan commitments.

#### b. Observations and Findings

The inspector reviewed the following implementing procedures/security guidelines:

- Point Beach Plant Administrative Procedures
- Point Beach Nuclear Plant Security Guidelines
- Point Beach Nuclear Plant Security Equipment Maintenance Program

The inspector selected security activities to determine compliance with the associated procedures and guidelines. Specifically, the inspector's observation of protected area ingress search and Central Alarm Station activities indicated compliance with these procedures and guidelines. A root cause evaluation (RCE 98-152) conducted by the licensee in response to a quality assurance audit finding (See Section S7.1) identified that current access authorization procedures did not contain adequate detail as to how the access review process is performed or tracked. At the time of this inspection, the licensee was tracking a long term corrective action (Condition Report 98-0986 No. 6) as an action to create and implement guidelines for processes and tasks associated with the access authorization program. The action was due June 30, 1999. Interviews with the Security Supervisor indicated that the security organization expected to complete the AA guidelines by that date.

#### c. <u>Conclusions</u>

The inspector concluded that the licensee's security implementing procedures and guidelines were generally adequate to perform the functions required by the security plan and were consistent with regulations and security plan commitments except in the access authorization area. The licensee identified the lack of adequate guidance in the implementation of the access authorization program and was taking action to correct this weakness.

## S7 Quality Assurance in Security and Safeguards Activities

## S7.1 Effectiveness of Quality Assurance Program in Security

## a. inspection Scope (IP 81700)

The inspector reviewed the most recent annual quality assurance audit of the security program. This audit is required by security plan commitments and 10 CFR 73.55(g)(4).

### b. Observations and Findings

The inspector reviewed Quality Assurance Audit Report No. A-P-98-08 dated August 28, 1998 which documented the results of the annual audit of the Point Beach Security System. This audit also covered the fitness for duty program, the Personnel Access Data System (PADS), the safeguards information program, and security for the Independent Spent Fuel Storage Installation.

The inspector's review of the documented results showed that the audit was effective in terms of uncovering weaknesses in the security system, procedures, and practices. Identified deficiencies resulted in a total of sixteen Quality Condition Reports (QCR), six of which related to physical security, three to the access authorization (AA) program, two to Safeguards Information Protection, four to fitness-for-duty program performance, and one addressed the failure to obtain required signatures on security training documents. None of the identified deficiencies were considered safety significant by the inspector with the exception of one issue involving access authorization.

The Quality Assurance auditors identified in June/July 1998 that a Wisconsin Electric employee temporarily assigned work at the Point Beach Nuclear Plant was granted access without completion of the required psychological screening process. The employee was administered a psychological test in Milwaukee. The vendor who screened the test, phoned in the results to the Point Beach access authorization staff as "Release of Treatment Summary" because they required additional information from the employee. An AA staff member documented this information in a log book which was later incorrectly entered into the computer as a "pass". The employee was badged at Point Beach between March 1997 and February 1998, when the work assignment was completed. The licensee logged the event in accordance with 10 CFR Part 73.

The security organization initiated a Root Cause Evaluation (RCE) (See Section S3.1) which identified that the major causes for the error included the lack of procedural guidance for AA review requirements, inadequate AA file reviews, reliance by AA group staff members on verbal phone results versus hardcopy fax or mailed results, incorrect transfer of data from a written log to a computer database, and a lack of program monitoring. They also identified immediate and long term corrective actions to prevent recurrence to include an independent means of verifying access elements, the development of AA process guidelines, self-assessments in the AA area. Some of the corrective actions to prevent occurrence were ongoing at the time of this inspection. The failure to complete a psychological evaluation prior to the granting of protected area unescorted access is a violation of 10 CFR 73.56(b)(ii) and Section 1.0 of the Point Beach Nuclear Plant Security Plan which required a psychological assessment for an individual prior to the granting of unescorted access. This event was potentially safety significant because the failure to determine psychological acceptability could allow a potentially unreliable individual to have unescorted access to the protected area. This licensee-identified and corrected violation is being treated as a Non-Cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-266/99003-01; 50-301/99003-01)

In the RCE, the staff identified that the security organization should evaluate and document whether the AA staff needs to pursue acceptable documentation for an individual who did not have the appropriate psychological screening and who no longer has access to the Point Beach Nuclear Plant. The inspector discussed this issue with the security supervisor who indicated they determined completion of the psychological screening was not appropriate because the employee had left the site six months before the event was identified, and because the psychological test was over a year old and the test was no longer valid for determining acceptability for unescorted access. The security supervisor stated that any nuclear utility would have to administer a new psychological test for the individual if he should request unescorted access.

#### c. Conclusions

The most recent quality assurance audit was thorough and complete in terms of uncovering weaknesses in the security system. The QA staff identified that the licensee granted unescorted access to individual without completion of the psychological assessment process. This is a Non-Cited Violation. The act of not completing a psychological assessment was of safety significance because of the potential of granting unescorted access to an unreliable/untrustworthy individual.

## S7.2 Security Organization Self-Assessments

#### a. Inspection Scope (IP 81700)

The inspector reviewed and evaluated the security organization's self-assessment program.

### b. Observations and Findings

Discussions with the Security Supervisor showed that the security organization followed the self-assessment program detailed in Nuclear Power Business Unit Procedures Manual, "Self Assessment Process" NP13.1.1, Revision 2 dated December 17, 1997. This procedure required plant organizations to conduct a minimum of three self-assessments annually. In 1998, the security organization conducted three self-assessments.

The inspector reviewed the following security self-assessment reports:

- Assessment Number 98-01 (June 1-4, 1998): Compensatory Measures, Maintenance and Testing, Personnel Training and Qualification. The assessment found that the overall effectiveness of these areas was adequate. Three findings and four observations were identified.
- Assessment Number 98-02 (October 12-15, 1998): Access Authorization. The overall effectiveness was found to be adequate. Two findings and 10 observations were identified.

Assessment Number 98-03 (November 9-12, 1998): Contingency Response. Overall effectiveness of the program was found to be adequate. Six observations were noted.

The inspector's review showed that the above self-assessments were of good quality, and that the findings and observations were valid. None of findings or observations rose to the level of a violation of security plan commitments but were indicative of weaknesses in the program. For example, in access authorization self-assessment, the assessment team, through the interview process, identified that employees were unclear of to whom they should report an arrest and in what time frame it should be reported. The team's review of guidance documents showed conflicting information. The team recommend that all nuclear procedures and forms state who an arrest should be reported to and in what time frame.

Each of the self-assessments was conducted by a team composed of security officers and security force supervisors. The Security Supervisor stated that all findings resulted in the initiation of Condition Reports. She also indicated that assessment report observations were also tracked and addressed. She stated that involvement by security force members as assessment team members had the added benefit of improving security force morale and fostering program ownership.

c. Conclusions

The security organization's self-assessments were of good quality and effective in identifying program weaknesses.

## S8 Miscellaneous Security and Safeguards Issues

S8.1 (Closed) Follow-up Item 50-98016-02; 50-301/98016-02: Potential weaknesses in the licensee's defensive strategy required the use of compensatory measures over a long period of time. There was a lack of plant management support in getting operational analysis to resolve whether the compensatory measures were indeed required.

The inspector interviewed the security supervisor regarding the status of security equipment that required compensatory measures. In one instance, further analysis showed that compensatory measures were not needed if certain other equipment was available, and compensatory measures were removed on July 28, 1998. In the second instance, further evaluation resulted in the determination that the location requiring compensatory measures would be a permanent response post position. A review of the use of compensatory measures subsequent to the last inspection showed that there were no instances of long term use of compensatory measures similar to the two instances. The inspector concluded that management support resulted in the resolution of these issues.

## V. Management Meeting

## X1 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management on January 15, 1999. The licensee acknowledged the findings presented. The inspector asked the licensee whether any of the materials examined during the inspection should be considered as proprietary. No proprietary information was identified.

## PARTIAL LIST OF PERSONS CONTACTED

#### Licensee

- C. L. Andrews, Security Orientation Specialist
- B. D. Augustine, Security System Engineer
- S. D. Bowe, Maintenance General Supervisor, I&C
- M. A. Fencl, Security Specialist
- F. A. Flentje, Senior Regulatory Compliance Specialist
- M. P. Findlay, Emergency Response Manager
- V. A. Kaminskas, Regulatory Services and Licensing Manager
- J. E. Knorr, Regulatory Compliance Manager
- B. K. Kopetsky, Security Specialist
- R. P. LaRhette, Nuclear Assurance Section Manager
- J. E. McCullum, Security Supervisor
- R. G. Mende, Manager, Point Beach Nuclear Plant
- R. A. Mrozinsky, Security System Engineer
- M. E. Reddemann, Site Vice President
- J. G. Thorgersen, Quality Verification Manager

### NRC

- F. Brown, Senior Resident Inspector
- P. Simpson, Resident Inspector

#### INSPECTION PROCEDURES USED

IP 81700 Physical Security Program for Power Reactors

### ITEMS OPEN, CLOSED, AND DISCUSSED

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50-266/301/99003-01	NCV	Failure to conduct a psychological screening for individ granted protected area unescorted access.				
Closed		· · · · · · · · · · · · · · · · · · ·				
50-266/301/98016-02	IFI	Security management was deficient in resolving some security related problems in a timely manner				
50-266/301/99003-01 NCV		Failure to conduct a psychological screening for individu granted protected area unescorted access.				

# LIST OF ACRONYM USED

- CFR Code of Federal Regulations
- CR **Condition Report**
- Division of Reactor Safety DRS

FFD Fitness for Duty

- Inspection Followup Item IFI
- NCV Non-Cited Violation
- Nuclear Regulatory Commission Quality Assurance NRC

QA

- Quality Condition Report Root Cause Evaluation QCR
- RCE

### DOCUMENTS REVIEWED

Licensee Security Related Condition Reports

Point Beach Security System Tracking Reports

Security Event Logs

Security Weapons Test Record (SEC-72)

Annual Card Reader Testing (SEC-90)

Security Equipment Tests (SEC-85a)

Communications Checklist (SEC-64)

Door Intrusion Alarm Test (SEC-88)

Protected Area Intrusion Alarm Test (SEC-88b)

Exterior Building & Lighting Inspection ((SEC-86)

Point Beach Nuclear Plant Security Administrative Procedures

Point Beach Nuclear Plant Security Guidelines

August 1998 to January 1999

October 1998 to December 1998

August 1998 to January 1999

1998

1998

December 1998

January 3-9, 1999

December 1998

December 1998

December 1998