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Licensee: Boston Edison Company

Facility: Pilgrim Nuclear Power Station

Location: Plymouth, Massachusetts

Dates: September 16-20, 1996

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EXECUTIVE SUMMARY

Pilgrim Nuclear Power Station NRC Inspection Report No. 50-293/96-09

On April 25, 1991, the Commission published the Personnel Access Authorization Requirements for nuclear power plants, 10 CFR 73.56 (the rule), requiring power reactor licensees to implement an Access Authorization Program (AAP) by April 27, 1992, and to incorporate the AAP into the licensee's physical security plan. The objective of the rule is to provide high assurance that individuals granted unescorted access are trustworthy and reliable, and do not constitute an unreasonable risk to the health and safety of the public, including a potential to commit radiological sabotage.

The licensee's Access Authorization Program was inspected during the period September 16-20, 1996. It was found to meet the above stated objective. However, two violations were identified involving the failure to perform audits of the access authorization program within 12 months of its effective date of implementation and at least every 24 months thereafter and the failure to audit properly the contractor/vendor access authorization programs accepted by the licensee.

Report Details

P8 Miscellaneous Security and Safeguards Issues

P8.1 General

On April 25, 1991, the Commission published the Personnel Access Authorization Requirements for nuclear power plants, 10 CFR 73.56 (the rule), requiring power reactor licensees to implement an Access Authorization Program (AAP) by April 27, 1992, and to incorporate the AAP into the licensee's physical security plan. The objective of the rule is to provide high assurance that individuals granted unescorted access are trustworthy and reliable, and do not constitute an unreasonable risk to the health and safety of the public, including a potential to commit radiological sabotage.

A February 27, 1992, letter from the licensee to the NRC forwarded Revision 10 to its physical security plan. Additional clarification of certain commitments was deemed necessary as a result of NRC review. The licensee was notified of the results of that review during a telephone conversation and agreed to resubmit the revision with the necessary clarifications. The licensee forwarded Revision 10a to the NRC by letter, dated April 24, 1992, which stated, in part, that all elements of Regulatory Guide 5.66, "Access Authorization Program for Nuclear Power Plants," have been implemented to satisfy the requirements of 10 CFR Part 73.56. By letter, dated May 19, 1992, the NRC informed the licensee that the changes submitted had been reviewed and were determined to be consistent with the provisions of 10 CFR 50.54(p) and that the revision would be acceptable for inclusion in the NRC-approved security plan.

This inspection, conducted in accordance with NRC Inspection Manual, Temporary Instruction 2515/127, "Access Authorization," dated January 17, 1995, assessed the implementation of the licensee's AAP to determine if it was commensurate with regulatory requirements and the licensee's physical security plan.

P8.2 Access Authorization Program and Administration Organization

a. Inspection Scope

The inspectors reviewed organizational charts, applicable procedures and conducted interviews to assess the licensee's access authorization program and administration Organization.

b. Observations and Findings

The Boston Edison Company (BECO) AAP requirements are contained in two documents. The Pilgrim Nuclear Power Station Procedure No. 1.3.60, Revision 9, titled "Access Authorization Process," dated August 23, 1994, defines the overall requirements for the program. The fitness-for-duty and behavior observation portions of the AAP are contained in the Fitness-For-Duty Medical Department Procedure, revised September 11, 1996.

The responsibility for implementation of the AAP is vested in the Protective Services Department Manager, who reports to the Nuclear Services Group Manager. The access screening and fitness-for-duty personnel report to the Security Services Supervisor who reports to the Protective Services Department Manager. The FFD functions of the AAP are performed in the Medical Building and the personnel screening functions are performed in the Support Building.

c. Conclusions

The inspectors' review of the applicable AAP and Medical Department Manuals disclosed that both manuals were comprehensive and contained sufficient detail to provide adequate guidance to implement the AAP in accordance with regulatory requirements.

P8.3 Background Investigations (BI) Elements

a. Inspection Scope

The inspectors reviewed records and conducted interviews to determine the adequacy of the program to verify the true identity of an applicant and to develop information concerning employment history, educational history, credit history, criminal history, military service, and character and reputation of the applicant prior to granting unescorted access to protected and vital areas.

b. Observations, Findings and Conclusions

The inspectors reviewed the results of 55 background investigations (BIs) representing a cross-section of licensee and contractor employees. The BIs are performed by the licensee's Site Access Specialists. The scope and depth of the BIs reviewed were found to meet the licensee's program commitments and provided adequate information on which to base a determination for access authorization.

The 55 BI reports also contained the information on which temporary access was granted or denied. The records of those abbreviated scope and depth investigations permitted by the rule contained information on which to base a determination regarding temporary access pending completion of the full BI, and fulfilled the program requirements to which the licensee had committed. The inspectors noted that any matter of questionable or suspect information was thoroughly evaluated and documented prior to granting or denying temporary access.

In accordance with 10 CFR 73.57, the licensee is responsible for initiating criminal history checks on individuals applying for unescorted access authorization, and for considering all information received from the U.S. Attorney General. Among the records reviewed by the inspectors were those of eight individuals whose fingerprint records had been returned with derogatory information. The inspectors determined that the information had been properly evaluated and appropriate action had been implemented as a result of the derogatory information.

P8.4 Psychological Evaluations

a. Inspection Scope

The inspectors reviewed the licensee's psychological testing program procedures and interviewed the individuals who administer and proctor the psychological tests.

b. Observations, Findings and Conclusions

The licensee has contracted with a licensed psychologist to provide oversight of the psychological testing program and to perform the requisite evaluations. All individuals seeking unescorted access to the site are required to complete the psychological questionnaire administered by licensee personnel that have been trained and qualified as examination proctors. The answer sheets for the psychological questionnaire are forwarded to the psychologist for evaluation and, if the need for a clinical interview is indicated, the psychologist conducts the interview and recommends either access or denial to the licensee. In all cases reviewed, the licensee took the psychologist's recommendation.

The inspectors determined that procedures were clear and that the proctors demonstrated a sound knowledge of their duties.

The inspectors determined that the licensee's psychological evaluation program was being effectively administered.

P8.5 Behavioral Observation Program (BOP)

a. Inspection Scope

The inspectors reviewed the Behavioral Observation Program (BOP) training procedures and lesson plans and conducted interviews to determine the effectiveness of the licensee's program. Additionally, the BOP was reviewed to determine whether the licensee had a training and retraining program to ensure that supervisors have and maintain awareness and sensitivity to detect behavior changes in employees that could adversely affect their trustworthiness and reliability, and to report such changes to appropriate management for further evaluation and action, if deemed necessary.

b. Observations and Findings

The program was instituted as part of, and is an element in common with, the licensee's Fitness-for-Duty (FFD) Program. Interviews conducted throughout the inspection with various individuals, representative of a cross-section of both supervisory and non-supervisory employees, indicated a knowledge of program requirements. The supervisors interviewed also demonstrated an awareness and

sensitivity to detect and report adverse changes in behavior. The effectiveness of the BOP training was further evidenced by employees who had been referred to the employee assistance program and had been FFD for-cause tested as a result of changes in behavior that were identified through the BOP.

c. Conclusion

The inspectors concluded that the training program and lessons plans were adequate to support the program. The inspectors also concluded that the BOP training and retraining were effective and that the BOP was being effectively implemented.

P8.6 Grandfathering, Reinstatement and Transfer of Access Authorization

a. Inspection Scope

The inspectors reviewed a cross-section of records to evaluate the licensee's application of the provisions for Grandfathering, Reinstatement and Transfers of Access Authorizations.

b. Observations and Findings

- "Grandfathering"

Included in the records selected at random by the inspectors were records of personnel who did not meet the criteria for "grandfathering," i.e., those who did not have uninterrupted, unescorted access authorization for at least 180 days on April 25, 1991, the date of publication of the NRC's access authorization rule.

- Reinstatement

The licensee's criteria for reinstatement of access authorization was reviewed. The criteria provided for reinstatement of unescorted access authorization if one had been previously granted, that authorization was terminated under favorable conditions no more than 365 days prior to the reinstatement request, and FFD program requirements were met.

- Transfer of Access Authorization

The licensee incorporated the provision for the transfer of access authorization, both receipts in and transfers out, into its program. The records selected at random for review by the inspectors included several examples of each.

c. Conclusions

The inspectors determined that the requirements for grandfathering, reinstatement and transfers of access authorizations were being met and that these portions of the AAP were being implemented satisfactorily. No discrepancies were noted.

P8.7 Temporary Access Authorization

a. Inspection Scope

The inspectors reviewed records that included the results of abbreviated scope investigations, which are used as the basis for granting temporary unescorted access authorization, as permitted by the rule.

b. Observations, Findings and Conclusions

The records of the abbreviated scope investigations were determined to contain adequate information (character and reputation from a developed reference, past year's employment history, and a credit check) on which to base temporary access authorization. The inspectors noted that, in these records of abbreviated scope investigation, there were no instances in which rescission of access authorization was necessitated following receipt of the full 5-year investigation.

P8.8 Denial/Revocation of Unescorted Access

a. Inspection Scope

The inspectors reviewed the licensee's provisions for the review of appeals of denial or termination of access authorization.

b. Observations and Findings

The inspectors determined that an individual is informed of the basis for denial or revocation of access authorization, is provided the opportunity to provide additional information for consideration and can have the decision, and any additional information, reviewed by the Appeal Committee, which consists of representatives from the Employee Relations and Legal Departments. After that review, the decision on the appeal is final.

c. Conclusion

The inspectors concluded that this aspect of the program was in accordance with the rule and was being adequately implemented.

P8.9 Audits

a. Inspection Scope

The inspectors reviewed the most recent quality assurance audit of the security and access authorization programs (Audit No. 93-11 conducted October 11-November 19, 1993).

b. Observations and Findings

The inspectors' review of the audit report disclosed that the audit identified no findings and one observation concerning the independence of the evaluations of accepted self-screening contractor and vendor programs.

The Pilgrim Nuclear Power Station Physical Security Plan Issue 2, Revision 11, dated December 22, 1993, Section 5.1.1, states, in part, that the requirements for unescorted access shall include conformance to all elements of Regulatory Guide 5.66 to satisfy the requirements of 10 CFR 73.56. NRC Regulatory Guide 5.66, states, in Section 13.0, paragraph 13.1, that an independent evaluation of the unescorted access authorization program and its conformance must be made within 12 months of the effective date of implementation of the access authorization program. Thereafter, an independent evaluation must be conducted at least once every 24 months. The utility shall retain all reports of evaluation for a period of three years. The Code of Federal Regulation, 10 CFR 73.56(g)(1), states, in part, that licensee's shall audit its Access Authorization Program within 12 months of its effective date of implementation of this program and at least every 24 months thereafter to ensure that the requirements of this section are satisfied.

The inspectors determined during a review of the documentation associated with the licensee's audit program and discussions with security management, that the licensee failed to audit its access authorization program within 12 months of the access authorization program's implementation (April 27, 1992). The first audit of the program was conducted between October 11 - November 19, 1993, 19 months after the program was implemented. At the time of this inspection, the licensee had not performed another audit of the access authorization program but has performed limited surveillances of the program's elements as a substitute for conducting an audit. Therefore, the requirement to perform an audit of the program at least 24 months thereafter to ensure that the requirements of the program were being satisfied was also not met. This is a violation of NRC requirements. (VIO 50-293/96-09-01)

The inspectors' review also found that the audit conducted was very limited in scope and depth. The sample size consisted of the records of only two individuals as a basis for evaluating program effectiveness.

Additionally, the inspectors reviewed the audit program requirements for contractor/vendor approved access authorization programs accepted by the licensee. At the time of this inspection, the licensee had accepted nine contractor/vendor programs.

NRC Regulatory Guide 5.66, states, in Section 13.0, paragraph 13.2, that the utility or its designated representative shall conduct annual audits of contractor or vendor access authorization programs to ensure compliance with these guidelines. Other utilities may accept the originating utility's audit and need not reaudit the same contractor or vendor for the same period of time providing the scope of the audit meets the minimum auditing criteria contained in Attachment A. A copy of the audit report to include findings, recommendations, and corrective action must be provided to the sharing utility.

The Code of Federal Regulation, 10 CFR 73.56(g)(2), states, in part, that each licensee who accepts the access authorization program of a contractor or vendor shall have access to records and shall audit contractor/vendor programs every 12 months to ensure that the requirements are satisfied. Licensees may accept audits of contractor/vendor program conducted by other licensees. Each sharing utility shall maintain a copy of the audit report, to include findings, recommendations and corrective actions.

The inspectors determined during a review of the documentation associated with the licensee's audit program and discussions with security management, that the licensee failed to conduct audits of accepted contractors and vendor access authorization programs every 12 months and could not produce a copy of another utility's audit of the same contractor or vendor. This is a violation of NRC requirements. (VIO 50-293/96-09-02)

Apparently, no one in the licensee's organization had tracked the audit requirements associated with the AAP. The licensee agreed to perform an audit of its AAP prior to its scheduled outage in February 1997, and to correct the audit weaknesses associated with the accepted contractor/vendor programs.

c. Conclusion

Two violations of NRC requirements were identified. Both were related to the licensee's auditing of the access authorization program as required by NRC regulations. The one audit of the program that had been conducted was very shallow in depth and limited in scope.

P8.10 Record Retention

a. Inspection Scope

The inspectors reviewed the onsite record retention program for the AAP records.

b. Observations and Findings

Records are stored in locked file cabinets, accessible only to authorized personnel. The inspectors noted that the records were very well organized and complete.

c. Conclusions

The inspectors determined that the storage facilities provided adequate security, and that access to those records was adequately controlled to protect personal information from unauthorized personnel.

X1 Exit Interview

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on September 20, 1996. At that time, the purpose and scope of the inspection were reviewed and the preliminary findings were presented. The licensee acknowledged the preliminary inspection findings.

X2 Updated Final Safety Analysis Report (UFSAR) Review

A recent discovery of a licensee operating its facility in a manner contrary to the UFSAR description highlighted the need for a special focused review that compares plant practices, procedures, and parameters to the UFSAR description. Since the UFSAR does not specifically include security program requirements, the inspector compared licensee activities to the NRC-approved physical security plan, which is the applicable document. While performing the inspection discussed in this report, the inspectors reviewed Section 5.3.4 of the Plan, Issue 2, Revision 11, dated December 22, 1993, titled, "Package and Vehicle Access," and observed package and vehicle searches. The review disclosed that package and vehicle searches were being performed in accordance with the Plan and security program procedures.

PARTIAL LIST OF PERSONS CONTACTED

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