U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-272/90-10
50-311/90-10
50-354/90-07

Docket Nos. 50-272
50-311
50-354

License Nos. DPR-70
DPR-75
NPF-57

Licensee: Public Service Electric & Gas Company

Facility Name: Artificial Island Nuclear Generating Station

Inspection At: Hancocks Bridge, New Jersey

Inspection Conducted: March 12-15, 1990

Type of Inspection: Initial, Fitness-for-Duty

Inspectors: Ronald J. Albert — 05-14-90
R. J. Albert, Physical Security Inspector — date

L. L. Bush, Jr., Chief, Program Development and Review Section, NRR/RSGB — 5/15/90 date

A. Della Ratta — 5-14-90
A. Della Ratta, Safeguards Auditor — date

G. L. Pirtle — 5/16/90
G. L. Pirtle, Plant Protection Analyst, RIII — date

Approved by: Ronald R. Bellamy for — May 18, 1990
R. R. Keimig, Chief, Safeguards Section — date
Division of Radiation Safety and Safeguards

Approved by: L. L. Bush — 5/15/90
L. L. Bush, Jr., Chief, Program Development and Review Section, NRR/RSGB — date

Inspection Summary: Initial, Fitness-For-Duty Inspection (Combined Inspection Report Nos. 50-272/90-10, 50-311/90-10, and 50-354/90-07)

Areas Inspected: Written policies and procedures; program administration; training, key program processes and onsite testing facility.

Findings: Based upon selective examinations of key elements of PSE&G's fitness-for-duty program, the objectives of 10 CFR Part 26 are being met. Management support for this program was evidenced by the quality of the facilities and the staff who administered the program. However, there were some weaknesses in the implementation which can be expected for a new program. The more significant of these are as follows:

1. Although policies were included in staff procedures provided the individuals affected by the FFD program, there was no written policy on drugs which met the requirements of 10 CFR 26.20(a). By letter dated April 17, 1990, PSE&G forwarded to the NRC a written policy statement that met the requirements. (Reference paragraph 4.) This is a non-cited violation.

2. The licensee permitted flexibility in scheduling random tests, allowing a supervisor to request postponement of the test until later in the day if it would be a significant inconvenience or an interruption of important work. This program feature has the potential for abuse that could result in a delay of 8-12 hours in testing. (Reference paragraph 7a.) This is an unresolved item.

3. Several corporate and contractor personnel who have infrequent unescorted access were not subject to random testing while not working at the site and are not routinely rescreened after more than 60 days absence. (Reference paragraph 7a.) This is an unresolved item pending evaluation of corrective action initiated by the licensee.

4. The licensee did not collect specimens over the weekends and between 7:00 p.m. and 6:00 a.m. on weekdays. This predictable gap in scheduling diminishes the deterrent effect of random testing. (Reference paragraph 7b.) This is a non-cited violation.

5. Custody of blood specimens was not properly maintained. The licensee took immediate corrective action by changing the procedure. (Reference paragraph 7b.) This is a non-cited violation.

DETAILS

1. Key Persons Contacted

The following personnel attended the exit meeting on March 15, 1990:

Licensee

D. Coles, Medical Services Supervisor
G. Connor, General Manager-Nuclear Services
T. Crimmins, Vice President Nuclear Engineering
B. Espinosa, Manager-Nuclear Human Resources and Administrative Services
R. Fisher, Screening Supervisor
J. Fleming, Senior Staff Engineer-QA
A. Giardino, Manager-QA Programs and Audits
W. Grau, Senior Staff Engineer-Licensing
E. Hall, Employee Relations Manager
M. Ivanick, Senior Security Regulatory Coordinator
L. Krajewski, Site Access Administrator
J. Lawrence, Legal Intern
R. Mack, Medical Director-Nuclear
R. McCarthy, Psychological Services Administrator
S. Miltenberger, Vice President CNO
P. Moeller, Manager-Site Protection
B. Preston, Manager-Licensing and Regulations
L. Reiter, Manager-Nuclear Engineering Projects
D. Renwick, Nuclear Security Manager
C. Rokes, Licensing Engineer
C. Sauder, Personnel Affairs Manager
B. Thomas, Associate Engineer
M. Walton, Medical Administrator-Nuclear
N. Wetterhahn, Attorney
J. Zupko, Jr., General Manager-QA/NSR

USNRC

T. Johnson, Senior Resident Inspector
R. Keimig, Chief, Safeguards Section-Region I
S. Pindale, Resident Inspector
G. Tracy, Resident Inspector

The inspectors also interviewed other licensee and contractor personnel who did not attend the exit meeting.

The following Battelle personnel, who are under NRC contract, participated in the inspection:

N. E. Durbin, Research Scientist
J. Olson, Senior Research Scientist

2. Entrance and Exit Meetings

The inspectors met with the licensee representatives, as indicated above, at the Salem/Hope Creek site on March 13, 1990, to summarize the scope and purposes of the inspection and on March 15, 1990, to present the inspection findings.

3. Approach

The inspection team evaluated the licensee's Fitness-for-Duty (FFD) Program using an NRC draft Temporary Instruction, Fitness-For-Duty: Initial Inspection of Program Implementation. This evaluation included a review of the licensee's written policies and procedures and program implementation, as required by 10 CFR 26, in the areas of: management support; selection and notification for testing; collection and processing of specimens; chemical testing for illegal drugs and alcohol; FFD training and worker awareness; the employee assistance program; management actions including sanctions; appeals; audits; and maintenance and protection of records. The review of the program implementation involved interviews with key FFD program personnel and a sampling of the licensee's employees and contractor employees with unescorted plant access, a review of relevant program records, and observation of key processes, such as specimen collection and onsite screening processes.

4. Written Policies and Procedures

The licensee has recently undertaken significant changes in its Fitness-for-Duty policy and programs in order to comply with the requirements under 10 CFR 26. The NRC was notified that the program had been fully implemented by letter on January 3, 1990. The inspection team compared the licensee's written policies and procedures to those required under 10 CFR 26 to assure that the required policies and procedures had been developed, that their content was in compliance with the rule, and that their quality and level of detail provided for an effective program. The inspection team had the following observations:

- While the licensee had communicated its drug policy through training, higher level management and implementing procedures, licensee staff could not produce a copy of an official policy statement on the use of illegal drugs on the part of individuals covered by the rule, as required by 10 CFR 26.20(a), "Written policy documents must be in sufficient detail to provide affected individuals with information on what is expected of them, and what consequences may result from a lack of adherence to the policy." The licensee issued a policy on alcohol in November 1989, which made reference to a corporate policy on drugs, as amended by the Nuclear Division. The corporate policy which had been issued in 1985, did not cover the policies that all licensees committed to develop in response to the NRC's Policy Statement published in the Federal Register on August 14, 1986. The expected

written policies appeared to be included in written procedures developed by the various staff elements administering the FFD program, however, these documents are not provided to the affected individuals. The licensee agreed to develop a written policy statement that included all applicable aspects of 10 CFR 26, which was forwarded to the NRC by letter dated April 17, 1990. Although this was a violation of 10 CFR 26.20(a), the violation is not being cited because the criteria specified in Section V.A. of the Enforcement Policy were satisfied.

- Procedures were not developed to a reasonably consistent level of quality. Specifically, higher order procedures (Vice President - Nuclear ADP-12 and NC-NA-AP.ZZ-0042) assigned responsibilities and established broad program objectives which covered the several areas required by the rule. However, detailed implementing procedures for the appropriate departments, in some cases, were not available, as required by Section 8.2.2 of Procedure VPN-ADP-12. Examples include elements of the selection and notification process, the appeals process (in draft format), and the process for evaluating program performance. Interviews disclosed that no specific procedures had been developed by the Nuclear Employee Relations Manager to address the assigned FFD program implementation functions, including those relative to the FFD appeal process as described in Section 3.7 of Procedure NC-NA-AP.ZZ-0042. Additionally, no specific procedure had been developed by the Personnel Affairs Manager for the FFD appeal process, as described in Section 3.11 of the above procedures. In some of these areas, the licensee expressed an intention to develop detailed procedures in the near future. A detailed review appears warranted to assure that departmental procedures have been prepared to assure responsibilities assigned by the higher tier documents are addressed.

- The licensee's procedure (NC-NA-AP.ZZ-0042) did not clearly reflect the requirement that the licensee will notify the NRC of certain performance problems in its Department of Health and Human Services (HHS)-certified laboratory, as required by 10 CFR 26, Appendix A, 2.8.(e)(4) and (5). The licensee stated that it would revise its procedures to address this issue.

- In some cases, existing procedures and current practices were not clear. These include the procedure to use security staff to conduct "for cause" testing during the back shift (generally limited to breath analysis testing) and Section 5.14.1.3 of Procedure NC-NA-AP.ZZ-0042 which mandates that misuse of prescription and over-the-counter drugs will result in the same sanctions as use of illegal drugs. In practice, the Medical Review Officer (MRO) uses judgement as to whether "misuse" warrants imposition of a sanction.

- While most staff members involved in the FFD program were found to be performing their jobs at a high level of proficiency, the possibility of inadvertent errors in the discharge of these duties is increased

by the lack of detailed procedures for some functions. The inspectors found that Section 8.2.2 of Vice President - Nuclear Procedure ADP-12, Revision 1, requires that appropriate procedures for the FFD program be developed and utilized by those departments with specific program responsibilities.

5. Program Administration

Following are the inspectors' findings with respect to the administration of key elements of the licensee's FFD program.

a. Delineated Responsibilities

Overall program responsibilities have been clearly delineated by the licensee's primary FFD program procedures (NC-NA-AP.ZZ-0042). In general, major FFD program functions have been assigned to appropriate staff elements.

b. Management Awareness of Responsibilities

With the exception of the licensee's responsibility to report to the NRC performance problems at the HHS-certified laboratory, managers of the program functions appeared to be aware of their responsibilities, as described in procedure NC-NA-AP.ZZ-0042.

c. Program Resources

Program resources currently appear adequate. FFD program staff with assigned program functions report that upper management, both at the site and corporate levels, have been very supportive in providing the necessary program resources. The licensee staff reported very little additional impact because of the rule requirements. The exception is the Medical Department where both workload and staff have expanded substantially. While resources in the Medical Department appear to be keeping up with demand, the occurrence of three scheduled outages in 1990 and the resulting increase in the number of drug and alcohol screens may place a strain on the staff. The licensee plans to increase its FFD staff to cope with the workload. The physical facilities available for the FFD program are new, spacious, well-maintained, and excellent housekeeping practices were noted. The onsite FFD testing area, the laboratory facility for preliminary screening tests, the medical support area, the facilities for the Medical Review Officer (MRO), the several classrooms, and security's access processing operations are all located in one building. This contributes to timely and efficient coordination of operations among the various personnel responsible for implementing most elements of the program. The facilities available to support the FFD program may well be a model for other utilities.

The laboratory facility was adequate in size, locked at all times, and visitor access controlled and recorded on an access log. Physical security upgrades were planned to compensate for some structural vulnerabilities identified during a February 1990 audit by the licensee. The security upgrade project is scheduled to be completed by the end of April 1990.

d. Management Monitoring of Program Performance

It appears that management monitoring of program performance will be adequate, with the following:

- The fitness-for-duty program administrator was also the manager of Nuclear Human Resources and Administrative Services. While it is desirable to assign management responsibilities to someone with the authority to take action to assure program success, the inspectors had some concerns that the program administrator was at a level with so many disparate responsibilities that the administrator was not sufficiently aware of the day-to-day operation of the program to be able to effectively monitor and coordinate program performance and identify program weaknesses.

- A strategy for assessing program performance and analyzing program performance data has not yet been developed. While the medical department has begun to trend and analyze data from the chemical testing program, workload pressures and other factors have inhibited the staff from pursuing its plan to develop an approach designed to identify program weaknesses, as required by 10 CFR 26.71(d).

e. Measures Undertaken to Meet Performance Objectives of the Rule

The licensee has provided more than adequate resources and personnel to meet the performance objective of the FFD rule. However, some areas of concern were identified:

- Although the searching of persons, packages, and vehicles entering the protected area contributes to achieving the performance objective of a drug-free workplace, as stated in 10 CFR 26.10(c), the licensee does not conduct searches of the workplace with drug detection dogs which could contribute to achieving that performance objective.

- The licensee has not yet devised a method of random testing of personnel granted unescorted access who are seldom onsite. (This is discussed in more detail in paragraph 7a).

- The licensee's practices did not include certain actions that could be taken in response to confirmed positive test results. These actions could include an attempt to identify the sources of the drugs consumed, and a review of previous work.

f. Sanctions

The licensee's procedures establish sanctions as set forth by the FFD rule, except for sanctions on misuse of legal drugs. According to Section 5.14.1.3 of the licensee's nuclear administrative procedure NC-NA-AP.ZZ-0042, the misuse of legal drugs shall be subject to the same sanctions as those for illegal drugs. However, the Medical Review Officer stated that he exercises judgment as to what constitutes enforceable misuse of legal drugs. The "shall" in the procedure is appropriately "may" in practice; the licensee should make the appropriate revision to that procedure.

As permitted by the FFD rule, PSE&G permits contractor employees who have been denied access based upon the first confirmed positive test to regain their unescorted access status on the condition that they provide evidence of rehabilitation and abstinence, are free of substances, and undergo follow-up testing for three years.

g. Employee Assistance Program

The licensee's implemented Employee Assistance Program (EAP) appeared adequate in meeting the requirements of the rule. In some cases, the licensee has gone beyond normal expectations, in that insurance coverage is provided for employees who lack the coverage and need rehabilitation treatment, and EAP services are provided for "permanent" contractors. The staff and adequate facilities were available on site to address FFD referrals.

6. Training

The licensee's FFD training program did not achieve some of the desired objectives. The inspectors' evaluation was based on comments by resident inspectors who attended the training, and on interviews with licensee and contractor personnel, as follows:

a. Program Awareness

While personnel interviewed were aware of FFD testing, they did not appear to understand fully the scope of the program and its intended positive impact on the workplace.

b. Worker Perceptions

It appeared the licensee had not adequately allayed employees' apprehension toward false positives. Nor did it appear that the licensee provided information to assure that test results would be valid and reliable, and that any employee could be tested randomly at any time. The workers conveyed to the inspectors:

- Strong convictions, particularly by contractor employees, that employment would be terminated because of a false positive.

- A perception that consumption of poppy seeds was a means of circumventing the program.

- A perception that the large volume of people tested reduces the odds of being randomly selected for an immediate retest.

c. Supervisor and Escort Understanding of Responsibilities

Supervisors and escorts appeared knowledgeable of their functions, but there were concerns expressed that training on drug recognition and behavioral observation needed to be more indepth.

Supervisors may not be sufficiently sensitive to various impairing conditions of the workers and to the potential adverse impacts on the work schedules when these conditions are ignored. Some examples:

- Although several workers had reported taking prescription or over-the-counter medication which caused drowsiness (such as codeine), these individuals apparently were put to work in potentially hazardous situations.

7. Key Program Processes

a. Selection and Notification for Testing

Selection for random testing was conducted by use of a computer generated list. The computer software is designed to prevent access to or tampering with the random selection process and, once the selection process is initiated, the computer is not affected by manipulation. Additionally, names could not be added to or deleted from the random selection process once it was initiated.

Notification of personnel selected for testing was accomplished by a FFD staff member, a medical clerk who contacted FFD coordinators for the appropriate department and advised them of the personnel scheduled for chemical testing and made an appointment for the test. The supervisor is permitted to request postponement of the test until later in the day if it would be a significant inconvenience or an interruption of important work. The FFD coordinators, supervisors and the Medical Clerk coordinated to reschedule the test for later the same day. However, abuse of this program feature could result in a delay of 8 to 12 hours in the test - sufficient time to avoid detection of the abuse of some substances, particularly alcohol. In addition, the current FFD program does not limit the time between when a person is advised he or she was selected for testing and his or her scheduled test time.

In practice, the staff attempts to limit the time between notification and the test. However, the program, as currently administered, could allow a person to be advised at 7 p.m. that he or she has been selected for FFD testing and the actual testing could conceivably not occur until 6 a.m. or later the following day. This vulnerability has been somewhat compensated for by attempting to test personnel on backshifts either before going to work or after work. This issue is considered an unresolved item (272/90-10-01; 311/90-10-01; 354/90-07-01).

Approximately 1000 personnel authorized unescorted access (issued a key card badge) are assigned to various categories of jobs or locations that are not onsite and infrequently have access. Collection of specimens is generally limited to when they are onsite, and therefore these individuals are seldom tested when randomly selected. The "predictability" of testing under this approach significantly reduces the deterrent effect of random testing because it allows the personnel involved to perceive a means to avoid random testing. As the licensee's program is implemented, personnel having infrequent access could be chemically tested at a lower frequency than the onsite workers. In addition, other categories of personnel may perceive that testing criteria is inequitable. The licensee's February 1990 Quality Assurance audit issued a finding pertaining to this observation; corrective actions were being considered and were scheduled for resolution by March 31, 1990. Subsequent to the inspection, the inspectors were informed that the licensee had taken corrective action. This issue is considered an unresolved item (272/90-10-02; 311/90-10-02; 354/90-07-02).

Provisions had been established to accomplish "for cause" testing of backshift personnel when needed. Testing for alcohol abuse would be performed by designated and trained security force personnel. Laboratory personnel would be called in to collect and test urine specimens and to draw blood if requested by the individual for further confirmatory testing for alcohol abuse. Sufficient breath analysis equipment was available onsite to perform initial and confirmatory tests.

The selection and notification process files contained, among other things, copies of the random selection list, record of telephone calls made for notification and scheduling purposes, and written verifications pertaining to reasons for not testing a person who was randomly selected. The files reviewed were generally complete, accurate, and well maintained. However, in some cases, the form used to obtain written verification from management of the reasons why a selected person was excused from random testing was not received by the medical department until a week or more after the scheduled test date. More timely responses appear warranted to allow followup on any problems encountered with persons excused from testing situations.

b. Collection and Processing of Specimens

The inspectors evaluated collection and processing of specimens by observing another inspector, who was subjected to the breathalyzer and who actually gave a urine sample, go through the screening process. Those specimens were properly identified, positively controlled, and processed according to the licensee's procedures and the rule.

However, while processing the simulated blood specimen provided by the inspector, the chain of custody was not properly maintained, in that the onsite testing laboratory technician had temporary custody without signing the chain-of-custody form. The licensee took immediate corrective action by changing the procedure to take the blood specimen directly to secure storage pending shipment to the HHS-certified laboratory. Although this is a violation of Section 2.4(d) of Appendix A to 10 CFR Part 26, the violation is not being cited because the criteria specified in Section V.A. of the Enforcement Policy were satisfied.

The licensee does not test between 7:00 pm and 6:00 am on weekdays and over the weekends. The licensee had explored the possibility of testing during the off-hours, but the effort was not considered productive for several reasons:

a. It required three people to administer the testing, roughly equivalent to the number of workers tested.

b. The people on these shifts may be tested early or late during their shift; plus they rotate shifts and are subject to behavioral observation.

c. No positives have resulted, to date, and there is a low-positive rate for the entire workforce.

This predictable gap in scheduling diminishes the deterrent effect of random testing. Although this is a violation of 10 CFR 26.24, the violation is not cited because the criteria in Section V.A. of the Enforcement Policy were satisfied.

c. Development, Use, and Storage of Records

A system of files and procedures to protect personal information contained in FFD related records had been developed. Such records were used and stored in an appropriate manner. Medical-related records were routinely stored within a fire retardant storage room in the medical services area which was routinely locked during non-working hours. Access to such records was limited to medical and clerical staff members who had job-related "need to know" responsibilities. Results of quality control and confirmatory tests from the HHS laboratories were routinely delivered by express mail to the Laboratory

Supervisor or by electronic transmission to a terminal located within the secured laboratory facility. The Laboratory Supervisor collects the results of the onsite testing and the laboratory report, which are then provided to the MRO. Adequate controls were also implemented for computer related information. Passwords were required for access to the data, and personnel with access capabilities had a work-related need for such access. Interviews disclosed that the computer programmer had been subject to the same type of psychological evaluation and background investigation as the FFD staff members.

The Quality Assurance department noted in its February 1990 audit that some FFD related records (such as continuous behavioral observation records) needed to be included and/or identified as part of the FFD record files. The audit findings were scheduled to be resolved by March 31, 1990.

One practice noted during the inspection detracted from the generally stringent controls for FFD-related records. By practice, presumptive positive test results noted during the initial onsite screening test (pre-access) were given to a nurse for storage in her desk until the confirmatory test results were received from the HHS laboratory. A clerk within the Medical Department was also advised of the presumptive positive test results for applicants for unescorted access so an administrative hold could be placed on issuing a security badge (the reason for the administrative hold did not appear in the computer data.) Since a presumptive positive is identified only as an administrative hold and there are many other reasons for administrative hold, the licensee's staff believed that individual rights were protected. Retaining presumptive positive test results within the laboratory until confirmatory test results are received appears to be a more appropriate control of access to the information, provides a more secure storage location, and prevents subsequent administrative action on such presumptive positive test results.

d. Audit Program

The licensee had completed Quality Assurance (QA) audits of the FFD program implementation and audits of the two HHS laboratories that are used to perform testing services and redundant quality checks. The scope and depth of the audits were excellent and addressed all major elements of the FFD program. Audit findings were technically correct and well defined. Initial responses to the audit findings were scheduled to be completed by March 31, 1990. The audit findings were generally consistent with the observations of the NRC team members.

8. Onsite Testing Facility

The onsite testing facility was centrally located, modern, spacious, well-equipped, and adequately staffed by persons who displayed a high level of proficiency. Aside from some minor concerns, such as a considerable amount of personnel traffic, some of which criss-crossed during the specimen collection process, the facility more than adequately meets the intent of the FFD rule.

a. Written Procedures

Written procedures had been developed for key functions and processes. The testing facility procedures were not reviewed by the inspectors, therefore no conclusions are made concerning their adequacy or whether they meet regulatory requirements.

b. Practices

Practices were in accordance with the general intent of the FFD rule.

c. Quality Controls

The inspectors verified that the licensee followed the blind performance test procedures. The quality control measures met the intent of the FFD rule.

To help assure that test results are valid, the licensee splits all urine specimens and the licensee sends all presumptive positive preliminary tests and blind performance test specimens to two separate HHS-certified laboratories for further testing.

d. Security

The licensee self-identified a physical security weakness that exists in the testing facility, and has initiated corrective action, as described in paragraph 5c, above.