



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

Report Nos.: 50-325/96-03 and 50-324/96-03

Licensee: Carolina Power and Light Company
P.O. Box 1551
Raleigh, NC 27602

Docket Nos.: 50-325 and 50-324

License Nos.: DPR-71 and DPR-62

Facility Name: Brunswick Steam Electric Generating Plant Units 1 and 2

Inspection Conducted: February 5-9 and February 22, 1996

Inspector: David H. Thompson
David H. Thompson, Safeguards Inspector

3/5/96
Date Signed

Accompanying Personnel: Lori C. Stratton, Safeguards Inspector

Approved by: Paul E. Fredrickson
Paul E. Fredrickson, Chief
Special Inspection Branch
Division of Reactor Safety

3/7/96
Date Signed

SUMMARY

Scope:

A special inspection was conducted in the Fitness for Duty area in response to licensee findings concerning the operations of the on-site drug testing facility.

Results:

Three apparent violations were identified:

Apparent violation 50-325,324/96-03-01: Failure to detect positive pre-screen drug testing results (two examples). As a result, one individual was improperly granted unescorted vital area access and a second individual was also declared eligible for unescorted access but it was not actually granted. One individual subsequently tested positive for drug use (paragraphs 2.1 and 2.3).

Apparent violation 50-325,324/96-03-02: Failure to take required corrective actions in response to seven drug test samples which were suspected of being adulterated due to low specific gravity readings (seven examples) resulting in two individuals being eligible for unescorted access. None of these individuals were granted unescorted access. One individual subsequently tested positive (paragraphs 2.2 and 2.4).

Apparent violation 50-325,324/96-03-03: Failure to ensure that laboratory technicians were fully trained on the licensee's drug/alcohol program and procedure requirements (paragraph 2.5).

REPORT DETAILS

1.0 Persons Contacted

1.1 Licensee Employees

- *A. Brittan, Site Security Manager, Brunswick Nuclear Plant (BNP), Carolina Power and Light Company (CP&L)
- *M. Calloway, Manager, Access Authorization, CP&L
- *W. Hatcher, Director, Nuclear Security, CP&L
- *S. Holth, Security Specialist, BNP
- *G. Honma, Manager, Licensing and Regulatory Programs, BNP
- *R. Kester, Project Manager, Security, BNP
- *W. Levis, Director of Site Operations, BNP
- *R. Lopriore, Plant Manager, BNP
- *S. Tabor, Senior Specialist, Regulatory Affairs
- *J. Thompson, Manager, Security, BNP

Other applicant employees contacted during this inspection included craftsmen, engineers, mechanics, security force members, technicians,

1.2 U.S. Nuclear Regulatory Commission

- *C. Patterson, Senior Resident Inspector
- *M. Janus, Resident Inspector

*Attended Exit Interview

2.0 Fitness For Duty (81052)

The licensee notified the Nuclear Regulatory Commission (NRC) in January 1996, of two events involving the failure of their contractor to comply with 10 CFR Part 26, Fitness for Duty (FFD) Program. A routine security inspection was scheduled for February 5-9, 1996, and as part of the inspection the FFD events were reviewed.

During review of documentation and discussion, the inspector found that on January 8, 1996, at the direction of the licensee, the contractor Bensinger, DuPont and Associates (BDA) began operation of an on-site testing facility to test for drugs in accordance with the licensee's procedures.

2.1 Inadequate Response to Positive Drug Test Results

On January 8, 1996, while transcribing the machine analysis results for a second load of pre-screened specimens to the Specimen Log, the laboratory manager annotated positions No. 5 and No. 6 incorrectly. Sample No. 5 had pre-screened as negative but was posted as suspect positive and sample No. 6, which had pre-screened as suspect positive, was posted as negative. This resulted in the wrong sample (the negative one) being forwarded to the Human Health Services (HHS) certified laboratory for further testing while the suspect positive sample was later discarded on the assumption that it was negative.

From January 9-12, 1996, the individual who had provided sample No.6, and had actually pre-screened positive for illegal drugs, was inappropriately granted unescorted access based on the erroneous negative report. The individual who had provided sample No. 5 was authorized unescorted access (not badged) based on the negative report from the HHS laboratory.

On January 12, 1996, in the course of preparing the week-ending statistical report and log reconciliation, the error of having mixed the samples and having sent the wrong sample off for confirmatory test was found by the contractor and reported to the licensee.

The licensee took the following corrective actions in response to the event:

- At approximately 12:20 p.m., on January 12, 1996, the date that the problem was discovered, the unescorted access of the individual who had provided sample No. 6 was terminated and the access of the individual who had provided sample No. 5 was put in a hold status.
- The licensee directed the contractor to in the future require two individuals to sign off on all machine run sample results, and review all documentation daily before samples are sent to the off-site HHS certified laboratory.

10 CFR 26.24(a)(1) requires that a licensee provide a means to deter and detect substance abuse by implementing chemical testing programs for persons subject to this part. The program shall include testing within 60 days prior to the initial granting of unescorted access to protected areas or assignment to activities within the scope of this part. Section 1, of the Procedure Nuclear Workers Screening Program for Unescorted Access, dated March 20, 1995, states that the licensee will provide high assurance that individuals granted unescorted access to protected and vital areas are trustworthy and reliable and do not constitute an unreasonable risk to public health and safety, including the potential to commit radiological sabotage. Attachment 1, of the Procedure Nuclear Workers Screening Program for Unescorted Access, dated March 20, 1995, states that "one alcohol or drug test failure is not eligible for unescorted access."

The mislabeling of the positive and negative pre-screen samples, which resulted in an individual improperly being granted unescorted access to a vital area from January 9-12, 1996, was identified as an apparent violation of NRC regulations and tracked as Example No. 1 of Escalated Enforcement Issue (EEI) 50-325,324/96-03-01: Failure to detect positive pre-screen drug testing results.

2.2 Inadequate Response to Specific Gravity Test Results

On January 16, 1996, the licensee discovered a second event concerning a laboratory error. The licensee determined that a Specimen Log had been forwarded to the Corporate Office on January 15, 1996, at approximately 7:00 p.m., for posting of the daily drug test results. The clerk at the

Corporate Office noted that the Specimen Log was not complete because the "yes/no" block for dispatch of the results to the HHS was not completed. The clerk stated that verbal confirmation had subsequently been obtained from the laboratory manager that all results were negative. The clerk posted the negative results on the Specimen Log. At approximately 7:00 a.m., on January 16, 1996, another clerk at the Corporate Office reviewed the January 15, 1996, Specimen Log, and noted that one of the individuals had a low specific gravity (1.000) level. The laboratory manager was contacted at approximately 7:00 a.m., and made aware of the error. The laboratory manager stated that he was aware of the low specific gravity results and that a re-collect was needed.

A second specimen was collected from the individual on January 16, 1996, and the specimen was forwarded directly to an HHS laboratory. The result of the specimen was reported back as testing positive for illegal substance and was declared a test failure by the Medical Review Officer. The individual in question had not been granted unescorted access; however, he could have been granted unescorted access.

In response to the second identified event involving laboratory errors, the licensee took the following corrective actions:

- On January 16, 1996, the licensee terminated the on-site laboratory testing operation.
- On January 17, 1996, the licensee started an investigation and an independent review of the laboratory operations.

10 CFR Part 26, Appendix A, Paragraph 2.4(g)(16), states that "All urine specimens suspected of being adulterated or found to be diluted shall be forwarded to the laboratory for testing."

10 CFR Part 26, Appendix A, Paragraph 2.4(g)(17), states that "Whenever there is reason to believe that a particular individual may alter or substitute the urine specimen to be provided, a second specimen shall be obtained as soon as possible under the direct observation of a same gender collection site person. Where appropriate, measures will be taken to prevent additional hydration." Paragraph 5.4, of the Contractor Procedure, Procedure for On-Site Laboratory Chemical Analysis, dated December 27, 1995, states, "The laboratory manager will be notified if: The Ph 5.0 or 8.5, the specific gravity is less than 1.003, or, the urine appears to be adulterated." Paragraph 5.4.1.3, of the Contractor Procedure, Procedure for On-Site Laboratory Chemical Analysis, dated December 27, 1995, states, "The laboratory manager will report to the FFD manager or on-site representative, any specimen that appears adulterated or falls outside of the above requirements for Ph and specific gravity."

The failure to request a re-test and notify the FFD manager in response to a possibly adulterated test sample was identified as an apparent violation of NRC regulations and tracked as Example No. 1 of EEI 50-325,324/96-03-02: Failure to adequately respond to possibly adulterated test sample.

2.3 Second Failure to Detect Positive Test Results

On January 26, 1996, during the review of the laboratory operations, the licensee identified another laboratory error. On January 15, 1996, the laboratory technician had failed to note that a specimen on the load 4 machine run was positive for illegal substance and posted the specimen as negative.

The individual who was a positive for illegal substance could have been granted unescorted access from January 15, 1995; however, records revealed that the individual had not been granted unescorted access to the protected area. The individual was re-tested on January 26, 1996, and confirmed to be positive for illegal substance.

The inspector noted during a review of the January 15, 1996, machine run that the technician's initials were the only ones on the machine print-out even though the licensee had directed the laboratory manager on January 12, 1996, to have two individuals review and annotate each record as corrective action for the January 8 event.

The failure to identify the positive pre-screen and immediately ensure that the individual was restricted from unescorted access to vital plant areas was identified as an apparent violation of NRC regulations and tracked as Example No. 2 of EEI 50-325,324/96-03-01: Failure to detect positive pre-screen drug testing results and deny unescorted access.

2.4 Second Failure to Respond to a Specific Gravity Test Results

A fourth event involving laboratory errors was identified on January 27-28, 1996. The licensee discovered that on January 10, 1996, another individual had been found with a low specific gravity reading and that specimen had not been forwarded to an HHS laboratory for further testing and that a re-collect had not been done.

The failure to request a re-test and notify the FFD manager in response to a possibly adulterated test sample was identified as an apparent violation of NRC regulations and tracked as Example No. 2 of EEI 50-325,324/96-03-02: Failure to adequately respond to a possibly adulterated test sample.

2.5 Training and Qualification

The inspector, while reviewing the qualifications of the two laboratory technicians, noted that they had no previous FFD laboratory experience and that they were only recently trained on the TDx assay system (January 3-4, 1996). Additionally, the inspector noted that only one of the laboratory technicians had been provided limited hands-on training on actual operation of the equipment. The inspector was not provided any documentation to indicate that the technicians had been trained on the licensee's FFD program and procedure requirements.

10 CFR Part 26, Appendix A, Paragraph 2.6(a) states that "...Any licensee testing facility shall have an individual to be responsible for day-to-day operations and to supervise the testing technicians... He or she shall have

training and experience in the theory and practice of the procedures used in the licensee testing facility, resulting in his or her thorough understanding of quality control practices and procedures; the review, interpretation, and reporting of test results; and proper remedial actions to be taken in response to detecting aberrant test or quality control results." In addition, Paragraph 2.6(b) states, "Other technicians or nontechnical staff shall have the necessary training and skills for the tasks assigned."

The failure to adequately train contractor personnel was identified as an apparent violation of NRC regulations and tracked as EEI 50-325,324/96-03-03: Failure to ensure that laboratory technicians were fully trained on the licensee's drug/alcohol program and procedure requirements.

2.6 Corrective Actions

The inspector noted that the licensee had taken very aggressive corrective actions which included:

- Termination of the laboratory operation.
- Immediate action to remove the individuals involved from unescorted access.
- Total program and laboratory operations reviewed by a vice president from BDA.
- A self audit of all FFD samples collected which was extended to the Harris plant FFD samples during their operation. During the investigation of the operation of the Harris on-site testing facility, the licensee determined that five individuals provided samples with low specific gravity, but the samples had not been forwarded to an HHS Laboratory for further testing. The licensee indicated that none of these individuals had been granted unescorted access, however; they were eligible for unescorted access. During retesting all five of the individuals had been negative for illegal drugs.
- Interviewed each laboratory worker to determine if there was any connection between them and the persons whose tests were improperly done.
- Completed a Condition Report No. 96-00255 on all findings.
- The licensee contracted an independent forensic toxicologist to conduct a review of the laboratory operations.
- In conjunction with the contractor, the licensee sent a network bulletin throughout the industry.

Based on their review and investigations of the details the licensee determined that the identified laboratory errors were attributed to:

- Failure to fully affect procedures in compliance with contractual terms and Part 26;
- Individual performance errors by the laboratory manager; and
- Inadequacy of established procedures to detect individual performance errors.

3.0 Exit Interview

The inspection scope and results were summarized on February 9, 1996, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below. On February 9, 1996, the licensee was informed of the possibility that the NRC may address the FFD issues in a separate inspection report. The inspector described three issues identified during the FFD inspection. These were: (1) failure to maintain the integrity of two specimens which resulted in a pre-screened positive being granted access to a vital area, (2) failure of the laboratory personnel to take the required action concerning a low specific gravity finding which afforded the opportunity for a pre-screened positive to be granted unescorted access to a protected area, and (3) failure to properly review laboratory machine runs which resulted in a positive for illegal drugs being provided an opportunity to gain unescorted access to the protected area.

Subsequently, on February 22, 1996, the licensee was informed that the inspection number for the FFD inspection would be 96-03, with an inspection ending date of February 22, 1996. The licensee was also informed that the previously identified apparent violations had been recharacterized as listed below, and were being considered for escalated enforcement. Dissenting comments were not received from the licensee.

<u>Type</u>	<u>Item Number</u>	<u>Status</u>	<u>Description and Reference</u>
EEI	96-03-01	Open	Failure to detect positive pre-screen drug testing results and deny unescorted access (paragraphs 2.1 and 2.3)
EEI	96-03-02	Open	Failure to adequately respond to a possibly adulterated test sample (paragraphs 2.2 and 2.4)
EEI	96-03-03	Open	Failure to ensure that laboratory technicians were fully trained on drug/alcohol program and procedure requirements (paragraph 2.5)

factors in arriving at the appropriate severity level will be dependent on the circumstances of the violation. However, if a licensee refuses to correct a minor violation within a reasonable time such that it willfully continues, the violation should be categorized at least at a Severity Level IV.

D. Violations of Reporting Requirements

The NRC expects licensees to provide complete, accurate, and timely information and reports. Accordingly, unless otherwise categorized in the Supplements, the severity level of a violation involving the failure to make a required report to the NRC will be based upon the significance of and the circumstances surrounding the matter that should have been reported. However, the severity level of an untimely report, in contrast to no report, may be reduced depending on the circumstances surrounding the matter. A licensee will not normally be cited for a failure to report a condition or event unless the licensee was actually aware of the condition or event that it failed to report. A licensee will, on the other hand, normally be cited for a failure to report a condition or event if the licensee knew of the information to be reported, but did not recognize that it was required to make a report.

V. Predecisional Enforcement Conferences

Whenever the NRC has learned of the existence of a potential violation for which escalated enforcement action appears to be warranted, or recurring nonconformance on the part of a vendor, the NRC may provide an opportunity for a predecisional enforcement conference with the licensee, vendor, or other person before taking enforcement action. The purpose of the conference is to obtain information that will assist the NRC in determining the appropriate enforcement action, such as: (1) A common understanding of facts, root causes and missed opportunities associated with the apparent violations, (2) a common understanding of corrective action taken or planned, and (3) a common understanding of the significance of issues and the need for lasting comprehensive corrective action.

If the NRC concludes that it has sufficient information to make an informed enforcement decision, a conference will not normally be held unless the licensee requests it. However, an opportunity for a conference will normally be provided before issuing an order based on a violation of the rule on Deliberate Misconduct or a civil penalty to an unlicensed person. If a conference

is not held, the licensee will normally be requested to provide a written response to an inspection report, if issued, as to the licensee's views on the apparent violations and their root causes and a description of planned or implemented corrective action.

During the predecisional enforcement conference, the licensee, vendor, or other persons will be given an opportunity to provide information consistent with the purpose of the conference, including an explanation to the NRC of the immediate corrective actions (if any) that were taken following identification of the potential violation or nonconformance and the long-term comprehensive actions that were taken or will be taken to prevent recurrence. Licensees, vendors, or other persons will be told when a meeting is a predecisional enforcement conference.

A predecisional enforcement conference is a meeting between the NRC and the licensee. Conferences are normally held in the regional offices and are not normally open to public observation. However, a trial program is being conducted to open approximately 25 percent of all eligible conferences for public observation, i.e., every fourth eligible conference involving one of three categories of licensees (reactor, hospital, and other materials licensees) will be open to the public. Conferences will not normally be open to the public if the enforcement action being contemplated:

- (1) Would be taken against an individual, or if the action, though not taken against an individual, turns on whether an individual has committed wrongdoing;
 - (2) Involves significant personnel failures where the NRC has requested that the individual(s) involved be present at the conference;
 - (3) Is based on the findings of an NRC Office of Investigations report; or
 - (4) Involves safeguards information, Privacy Act information, or information which could be considered proprietary;
- In addition, conferences will not normally be open to the public if:
- (5) The conference involves medical misadministrations or overexposures and the conference cannot be conducted without disclosing the exposed individual's name; or
 - (6) The conference will be conducted by telephone or the conference will be conducted at a relatively small licensee's facility.

Notwithstanding meeting any of these criteria, a conference may still be open if the conference involves issues related to an ongoing adjudicatory proceeding with one or more intervenors or where the evidentiary basis for the conference

is a matter of public record, such as an adjudicatory decision by the Department of Labor. In addition, with the approval of the Executive Director for Operations, conferences will not be open to the public where good cause has been shown after balancing the benefit of the public observation against the potential impact on the agency's enforcement action in a particular case.

As soon as it is determined that a conference will be open to public observation, the NRC will notify the licensee that the conference will be open to public observation as part of the agency's trial program. Consistent with the agency's policy on open meetings, "Staff Meetings Open to Public," published September 20, 1994 (59 FR 48340), the NRC intends to announce open conferences normally at least 10 working days in advance of conferences through (1) notices posted in the Public Document Room, (2) a toll-free telephone recording at 800-952-9674, and (3) a toll-free electronic bulletin board at 800-952-9676. In addition, the NRC will also issue a press release and notify appropriate State liaison officers that a predecisional enforcement conference has been scheduled and that it is open to public observation.

The public attending open conferences under the trial program may observe but not participate in the conference. It is noted that the purpose of conducting open conferences under the trial program is not to maximize public attendance, but rather to determine whether providing the public with opportunities to be informed of NRC activities is compatible with the NRC's ability to exercise its regulatory and safety responsibilities. Therefore, members of the public will be allowed access to the NRC regional offices to attend open enforcement conferences in accordance with the "Standard Operating Procedures For Providing Security Support For NRC Hearings And Meetings," published November 1, 1991 (56 FR 56251). These procedures provide that visitors may be subject to personnel screening, that signs, banners, posters, etc., not larger than 18" be permitted, and that disruptive persons may be removed.

Members of the public attending open conferences will be reminded that (1) the apparent violations discussed at predecisional enforcement conferences are subject to further review and may be subject to change prior to any resulting enforcement action and (2) the statements of views or expressions of opinion made by NRC employees at predecisional enforcement conferences, or the lack thereof, are not intended to represent final determinations or beliefs.

Persons attending open conferences will be provided an opportunity to submit written comments concerning the trial program anonymously to the regional office. These comments will be subsequently forwarded to the Director of the Office of Enforcement for review and consideration.

When needed to protect the public health and safety or common defense and security, escalated enforcement action, such as the issuance of an immediately effective order, will be taken before the conference. In these cases, a conference may be held after the escalated enforcement action is taken.

VI. Enforcement Actions

This section describes the enforcement sanctions available to the NRC and specifies the conditions under which each may be used. The basic enforcement sanctions are Notices of Violation, civil penalties, and orders of various types. As discussed further in Section VI.D, related administrative actions such as Notices of Nonconformance, Notices of Deviation, Confirmatory Action Letters, Letters of Reprimand, and Demands for Information are used to supplement the enforcement program. In selecting the enforcement sanctions or administrative actions, the NRC will consider enforcement actions taken by other Federal or State regulatory bodies having concurrent jurisdiction, such as in transportation matters. Usually, whenever a violation of NRC requirements of more than a minor concern is identified, enforcement action is taken. The nature and extent of the enforcement action is intended to reflect the seriousness of the violation involved. For the vast majority of violations, a Notice of Violation or a Notice of Nonconformance is the normal action.

A. Notice of Violation

A Notice of Violation is a written notice setting forth one or more violations of a legally binding requirement. The Notice of Violation normally requires the recipient to provide a written statement describing (1) the reasons for the violation or, if contested, the basis for disputing the violation; (2) corrective steps that have been taken and the results achieved; (3) corrective steps that will be taken to prevent recurrence; and (4) the date when full compliance will be achieved. The NRC may waive all or portions of a written response to the extent relevant information has already been provided to the NRC in writing or documented in an NRC inspection report. The NRC may require responses to Notices of Violation

to be under oath. Normally, responses under oath will be required only in connection with Severity Level I, II, or III violations or orders.

The NRC uses the Notice of Violation as the usual method for formalizing the existence of a violation. Issuance of a Notice of Violation is normally the only enforcement action taken, except in cases where the criteria for issuance of civil penalties and orders, as set forth in Sections VI.B and VI.C, respectively, are met. However, special circumstances regarding the violation findings may warrant discretion being exercised such that the NRC refrains from issuing a Notice of Violation. (See Section VII.B, "Mitigation of Enforcement Sanctions.") In addition, licensees are not ordinarily cited for violations resulting from matters not within their control, such as equipment failures that were not avoidable by reasonable licensee quality assurance measures or management controls. Generally, however, licensees are held responsible for the acts of their employees. Accordingly, this policy should not be construed to excuse personnel errors.

B. Civil Penalty

A civil penalty is a monetary penalty that may be imposed for violation of (1) certain specified licensing provisions of the Atomic Energy Act or supplementary NRC rules or orders; (2) any requirement for which a license may be revoked; or (3) reporting requirements under section 206 of the Energy Reorganization Act. Civil penalties are designed to deter future violations both by the involved licensee as well as by other licensees conducting similar activities and to emphasize the need for licensees to identify violations and take prompt comprehensive corrective action.

Civil penalties are considered for Severity Level III violations. In addition, civil penalties will normally be assessed for Severity Level I and II violations and knowing and conscious violations of the reporting requirements of section 206 of the Energy Reorganization Act.

Civil penalties are used to encourage prompt identification and prompt and comprehensive correction of violations, to emphasize compliance in a manner that deters future violations, and to serve to focus licensees' attention on violations of significant regulatory concern.

Although management involvement, direct or indirect, in a violation may lead to an increase in the civil penalty, the lack of management involvement may not be used to mitigate a civil penalty. Allowing mitigation in the latter case could encourage the lack of

management involvement in licensed activities and a decrease in protection of the public health and safety.

1. Base Civil Penalty

The NRC imposes different levels of penalties for different severity level violations and different classes of licensees, vendors, and other persons. Tables 1A and 1B show the base civil penalties for various reactor, fuel cycle, materials, and vendor programs. (Civil penalties issued to individuals are determined on a case-by-case basis.) The structure of these tables generally takes into account the gravity of the violation as a primary consideration and the ability to pay as a secondary consideration. Generally, operations involving greater nuclear material inventories and greater potential consequences to the public and licensee employees receive higher civil penalties. Regarding the secondary factor of ability of various classes of licensees to pay the civil penalties, it is not the NRC's intention that the economic impact of a civil penalty be so severe that it puts a licensee out of business (orders, rather than civil penalties, are used when the intent is to suspend or terminate licensed activities) or adversely affects a licensee's ability to safely conduct licensed activities. The deterrent effect of civil penalties is best served when the amounts of the penalties take into account a licensee's ability to pay. In determining the amount of civil penalties for licensees for whom the tables do not reflect the ability to pay or the gravity of the violation, the NRC will consider as necessary an increase or decrease on a case-by-case basis. Normally, if a licensee can demonstrate financial hardship, the NRC will consider payments over time, including interest, rather than reducing the amount of the civil penalty. However, where a licensee claims financial hardship, the licensee will normally be required to address why it has sufficient resources to safely conduct licensed activities and pay license and inspection fees.

2. Civil Penalty Assessment

In an effort to (1) emphasize the importance of adherence to requirements and (2) reinforce prompt self-identification of problems and root causes and prompt and comprehensive correction of violations, the NRC reviews each proposed civil penalty on its own merits and, after considering all relevant circumstances, may adjust the base civil penalties shown in Table 1A and 1B for Severity Level I, II, and III violations as described below.