



Brunswick Nuclear Plant
P.O. Box 10429
Southport, NC 28461-0429

AUG 12 1994

SERIAL:BSEP 94-0287
10CFR2.201

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
REPLY TO A NOTICE OF VIOLATION

Gentlemen:

On July 18, 1994, the Nuclear Regulatory Commission (NRC) issued a Notice of Violation for the Brunswick Steam Electric Plant, Units 1 and 2. The basis for the violation is provided in NRC Inspection Report 50-325/94-16 and 50-324/94-16. Carolina Power & Light Company finds the inspection does not contain information of a proprietary nature. Enclosure 1 provides Carolina Power & Light Company's response to the Notice of Violation in accordance with the provisions of 10CFR2.201.

Please refer any questions regarding this submittal to Mr. G. M. Theerling at (910) 457-2038.

Very truly yours,

J. Cowan, Director-Plant Operations
Brunswick Nuclear Plant

GMT/

Enclosures

1. Reply to Notice of Violation
2. List of Commitments

cc: Mr. S. D. Ebnetter, Regional Administrator, Region II
Mr. P. D. Milano, NRR Senior Project Manager - Brunswick Units 1 and 2
Mr. C. A. Patterson, Brunswick NRC Senior Resident Inspector
The Honorable Hugh Wells, Chairman of the N.C. Utilities Commission

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Enclosure
List of Regulatory Commitments

The following table identifies those actions committed to by Carolina Power & Light Company in this document. Any other actions discussed in the submittal represent intended or planned actions by Carolina Power & Light Company. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Manager-Regulatory Affairs at the Brunswick Nuclear Plant of any questions regarding this document or any associated regulatory commitments.

| Commitment | Committed date or outage |
|--|--------------------------|
| A multi-discipline assessment team headed by the Operation Unit conducted a thorough review of equipment control events and provided recommendations for a consistent site standard for the manipulation of equipment/plant components. These are being developed into an Administrative Procedure (AP-013) which will address inconsistencies between the various unit specific procedures. | 8/31/94 |
| NED/BESS Engineers are to complete required reading on the lessons learned from this event. | 8/31/94 |
| NPMP is being revised to require NED MOV engineer involvement in design changes which impact an MOV. | 9/30/94 |

bcc: Mr. T. A. Baxter
SHEEC Training Reference
INPO Records Receipt

ENCLOSURE

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 and 2
NRC DOCKET NOS. 50-325 & 50-324
OPERATING LICENSE NOS. DPR-71 & DPR-62
REPLY TO NOTICE OF VIOLATION

VIOLATION A :

During an NRC inspection conducted on June 4 - July 1, 1994, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

Technical Specification 6.8.1 (a) requires written procedures shall be established, implemented, and maintained covering the activities referenced in Regulatory Guide 1.33 Appendix A, November 1972. Regulatory Guide 1.33, Appendix A, requires procedures for maintaining the Reactor Cleanup System, for equipment control, and for the conduct of surveillance and tests.

Operating Procedure 1-OP-14, Reactor Water Cleanup System, Section 5.2, Rev. 44, Placing a F/D in Service requires that valve 1-G31-2002-34B be closed or verified closed.

Maintenance and Management Manual Procedure 0-MMM-001, Maintenance: Conduct of Operations, Section 3.5.1 requires electricians and I&C technicians perform assigned work in accordance with approved work requests and procedure. Section 5.3.4.4 requires that if additional instructions are required that do not change the original scope of the work request then the responsible maintenance supervisor may enter instructions in the work request.

Maintenance Surveillance Test Procedure, 2-MST-LKDET26R, Reactor Core Isolation Cooling (RCIC) and Reactor Water Cleanup Division I Steam Leak Detection Channel Calibration, Rev. 0, Section 3.0, Prerequisites require obtaining Shift Supervisor approval prior to performing the test.

Contrary to the above, the following are examples of a failure to implement these requirements:

- 1) On June 11, 1994, Operating Procedure 1-OP-14 was not adequately implemented in that the B filter precoat return valve 1-G31-2002-34B was found in the open position.
- 2) On June 3, 1994, the above listed procedures were inadequate in control of plant equipment which would have prevented the de-energization of the Main Stack Radiation Monitor and the resultant ESF actuations on both Units 1 and 2.
- 3) On June 19, 1994, Maintenance Surveillance Test Procedure, 2-MST-LKDET26R, was not adequately implemented in that an I&C technician failed to obtain Shift Supervisor permission prior to performing the procedure which resulted in a RCIC isolation.

This is a Severity Level IV violation (Supplement I).

RESPONSE TO VIOLATION A :

Admission or Denial of Violation

Carolina Power & Light admits this violation

Reason for Violation

- 1) The Reactor Water Cleanup (RWCU) backwash valve event involved an Auxiliary Operator (AO) who did not perform adequate Self-Checking of the RWCU valve position.
- 2) Personnel error was the primary cause of the Main Stack Wide Range Gas Monitor loss of power with the following areas identified as weaknesses: (1) attention to the work control process by maintenance personnel, (2) communications between maintenance and operations personnel, and operation of equipment by maintenance personnel without a clear understanding of the resulting impact. Secondary weaknesses contributing to the event include the detail of the work planning, turnover of information between maintenance crews, and consistent site standards governing the manipulation of plant components.
- 3) The unauthorized Post-Maintenance Test Requirement (PMTR) performed on Reactor Core Isolation Cooling (RCIC) was a series of personnel errors by the technician. The technician started a test which was not part of the authorized work package. During the performance of the test, questions were raised by Operations personnel and the technician was directed to wait for a verification that plant conditions supported the performance of the PMTR. Prior to Operations completing the verification the technician restarted the test and omitted a step that directed Operations to reset the RCIC isolation logic.

Corrective Actions Which Have Been Taken and Results Achieved

The AO involved in the RWCU event was counseled in the need for self-checking and requesting assistance, if necessary.

The Main Stack Radiation Monitor event resulted in the site-wide outage review meeting of June 10, 1994, being used to reinforce management expectations for component manipulation and communication standards. A video was presented to appropriate site Units describing this event with emphasis on teamwork and the barriers that should have prevented the event. Also the Plant General Managers held face to face discussions with individual maintenance crews emphasizing the importance of communications and proper work practices.

The RCIC PMTR event has been reviewed with appropriate Maintenance personnel with emphasis on the following:

- management expectations regarding effective communication,
- procedural adherence requirements,

- work evolutions being fully encompassed in Work Request/Job Order planning, and
- Operations authority regarding plant activities.

Appropriate disciplinary action has been taken with maintenance personnel involved with the RCIC PMTR event.

Corrective Steps Which Will Be Taken to Avoid Further Violations

A multi-discipline assessment team headed by the Operation Unit conducted a thorough review of equipment control events and provided recommendations for a consistent site standard for the manipulation of equipment/plant components. These are being developed into an Administrative Procedure (AP-013) which will address inconsistencies between the various unit specific procedures. This procedure is to be implemented by August 31, 1994.

Date When Full Compliance Will Be Achieved

Carolina Power & Light is in full compliance.

VIOLATION B :

10 CFR Part 50, Appendix B, Criterion III, Design Control, requires that design requirements for safety related structure, system, and components be correctly translated into specifications, drawings, procedures, and instructions. It also requires that design changes be subjected to the same control as the original design.

Contrary to the above, the licensee failed to implement the open torque switch settings of Engineering Calculation BN-MECH-1-SW-V214, Rev. 2 into plant modification PM 91-071. This resulted in the alternate diesel generator service supply to DG 4 failing to operate during surveillance test 2MST-SW-12Q on June 2, 1994.

This is a Severity Level IV violation (Supplement I).

RESPONSE TO VIOLATION B :

Admission or Denial of Violation

Carolina Power & Light admits this violation.

Reason for Violation

The plant modification replacing the Fisher butterfly valves with Jamesbury Wafer-Sphere butterfly valves was approved without taking into account the higher recommended open torque switch settings. The existing version of the Nuclear Plant Modification Procedure (NPMP) did not provide guidance to ensure the Motor Operated Valve (MOV) Engineer's involvement in the design review process. The NPMP also exempts torque switch adjustments from the scope of the modification process, with the intent of keeping the torque switch settings under the control of the MOV Engineers and Maintenance Engineering personnel responsible for MOV setup. This procedural weakness resulted in the exemption being misinterpreted to mean that torque switch values do not need to be considered in the design package. While not formally involved, verbal communication with the MOV Engineer was initiated by the original Lead Engineer. The Lead Engineer left with the misconception that since the same actuator was being used in generally the same application the MOV setup would be identical.

Corrective Actions Which Have Been Taken and Results Achieved

The open torque switch for 1-SW-V682 was adjusted to the current recommended setting of "5" along with the three remaining valves (1/2-SW-681 and 2-SW-V682).

Corrective Steps Which Will Be Taken to Avoid Further Violations

Nuclear Engineering Department/Brunswick Engineering Support Section engineers are to have completed required reading on the lessons learned from this event by August 31, 1994.

NPMP is being revised to require MOV Engineer involvement in design changes which impacts an MOV. This is to be completed by September 30, 1994, and in the interim, NED memorandum (NED-G-8185) provides temporary guidance for MOV Engineer involvement.

Date When Full Compliance Will Be Achieved

Carolina Power & Light is in full compliance.