



Carolina Power & Light Company

Brunswick Nuclear Plant
P.O. Box 10429
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May 31, 1994

SERIAL:BSEP 94-0201
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 April 28, 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 50-325/94-07 and 50-324/94-07. 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. Thearling 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. R. L. Prevatte, Brunswick NRC Senior Resident Inspector

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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:

During an NRC inspection conducted on March 5 - April 4, 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 Instrument Air System, the fuel storage pool systems and service water system.

Operating Procedure OP-46, Instrument and Service Air System Operating Procedure implements these requirements. Attachment to OP-46, Rev. 77, the Unit 1 Valve Line-up Prestartup Checklist requires valve 1-RNA-IV-2627 to be in the open position.

Special Procedure, 2-SP-91-047, Installation and Acceptance Testing of Supplemental Spent Fuel Pool Cooling System implements these requirements. Attachment A to 2-SP-91-047, revision 3, the Valve Alignment Checksheet - Primary Loop requires valve 2-G42-V011 to be in the closed position.

Plant procedure, 1-OP-43, Service Water System Operating Procedure implements these requirements. Attachment 1 to 1-OP-43, revision 46, the Valve Lineup-Prestartup Checklist requires valve 1-SW-V58 to be in the closed position.

Contrary to the above, the following valves were not in their proper position:

- 1) On February 27, 1994, Operating Procedure OP-46 was not adequately implemented in that, Instrument air Valve 1-RNA-IV-2627 was found in the closed position.
- 2) On March 13, 1994, Special Procedure, 2-SP-91-047 was not adequately implemented in that Spent Fuel Pool Cooling Valve 2-G42-V011 was found in the open position.
- 3) On April 1, 1994, Plant Procedure 1-OP-43, was not adequately implemented in that Service Water Valve 1-SW-V58 was found in the open position.

Since the issuance of the inspection report additional examples were added:

- 4) On April 5, 1994, a special instruction on a clearance was not followed. It required the notification of personnel working inside a Circulating Water Pipe, prior to manually stroking valves inside the clearance boundary.
- 5) On April 8, 1994, a pulled annunciator logic card was moved with a clearance tag attached.
- 6) On April 16, 1994, drain valves used during the chemical decontamination of the Recirculation System piping were unexpectedly found still open, when Operations questioned an unexpected increase in Drywell sump pumpage.
- 7) On April 28, 1994, Emergency Diesel Generator Service Water valve (1/2-SW-V681) was damaged when it was stroked prior to maintenance setting the travel stops.

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

RESPONSE TO VIOLATION:

Admission or Denial of Violation

Carolina Power & Light admits this violation

Reason for Violation

- 1) On February 27, 1994, it was found that Instrument Air Valve 1-RNA-IV-2627 had not been restored to the Operating Procedure line-up position by Plant Modification 91-001 Field Rev. 8 acceptance testing. The field revision mistakenly listed the required position as closed and the error was not detected during design verification or the acceptance test.
- 2) On March 13, 1994, Procedure, 2-SP-91-047 was not adequately implemented in that Spent Fuel Pool Cooling inboard vent valve 2-G42-V011 was found in the open position. An assumption was made that this hard-to-close valve was fully closed, based on the water no longer flowing from the depressurized system. This method of verification was not consistent with the valve operating requirements of the Valve and Electrical Lineup Administrative Controls Procedure (OI-13).
- 3) On April 1, 1994, the 1A Conventional Service Water Pump discharge pressure gauge root isolation valve (1-SW-V58), was found open. This gauge is normally placed in service only to support surveillance testing. No evolutions were identified that would have opened this valve. For information, upon completion of the ongoing replacement of the Service Water pumps the new line-up position will be open.

- 4) On April 5, 1994, a special instruction on a clearance was not followed. It required notifying personnel working inside the Circulating Water pipe prior to manually stroking valves. Inattention resulted in the field personnel not being made aware of the clearance special instructions requiring the notification. A tag in the field per AI-110 Caution Tag Procedure or a new AI-58.2 Equipment Control Procedure tag would have been more visible and expected.
- 5) On April 8, 1994, a pulled annunciator logic card was moved to its new location with a clearance tag attached. This resulted in a personnel error by an individual who felt it was allowable to move the pulled card as directed by the procedure.
- 6) On April 16, 1994, drain valves used during the chemical decontamination of the Recirculation System piping were identified as the source of an increase in Drywell sump leakage. The personnel involved in the decontamination effort were not adequately trained in the proper operation of valves per the Valve and Electrical Lineup Administrative Controls Procedure (OI-13) and did not detect that the drain valves were stuck on the backseat.
- 7) On April 28, 1994, EDG SW valve (1/2-SW-V681) was stroked prior to the maintenance personnel setting the travel stops. The clearance had been authorized for removal, in preparation for restoring the system. Communications weaknesses could have been compensated by using the new equipment control tags or a caution tag.

Considered individually these events are not significant. However, collectively the events are indicative of an adverse trend in plant equipment control.

Corrective Actions Which Have Been Taken and Results Achieved

A revision (Effective March 31, 1994) to AI-58 has provided plant equipment control enhancements by eliminating the use of red clearance tags for equipment control. AI-58.2 now provides a definite means for equipment control by use of yellow equipment control tags. Operation of components by non-operations personnel is to be allowed only when specifically governed by an approved procedure or under the equipment control tag process. Following maintenance, valve lineups will be performed inside the clearance boundaries as part of restoring a system to its normal alignment. In addition, operations now performs a discipline review of special procedures and acceptance tests to ensure adequate control of plant equipment.

Corrective Steps Which Will Be Taken to Avoid Further Violations

The Corrective Action Program (CAP) has documented the adverse trend with plant equipment control issues and will track the effectiveness of the corrective actions taken. Identified trends are continually updated in reports to site senior management and the trend remains open until a sustained improvement is demonstrated. Through early June of 1994, the Corrective Action Program will continue an ongoing self-assessment which includes an evaluation of the effectiveness of trending adverse conditions.

A multi-discipline assessment team headed by the Operation Unit is conducting a thorough review of equipment control events to provide a basis for recommending further corrective actions. The results will be available for implementation in June of 1994. Additionally a team of industry peers has been requested to assess plant equipment control in June of 1994.

In order to address the number of performance issues, management is continuing to reinforce the importance of individual accountability, questioning attitudes, and attention to detail. This is consistent with a site wide policy that continues to encourage the lower threshold of self-reporting that will result in improved plant performance. Ongoing site-wide meetings were started April 8, 1994, and are being used to increase awareness on plant issues. During the May 6, 1994 meeting, the adverse trend in equipment control/work control issues was highlighted stressing the importance of properly using the equipment clearance procedure, equipment control procedure (AI-58.2), and the caution tag procedure (AI-110). This has been followed by the management meeting held on May 25, 1994 in preparation for the site-wide meetings being held May 27, 1994.

Date When Full Compliance Will Be Achieved

Carolina Power & Light is in full compliance. The site Corrective Action Program will continue to monitor adverse conditions as they arise and initiate actions necessary to enhance plant performance.

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
The Corrective Action Program will continue their ongoing self-assessment which includes an evaluation of the effectiveness of trending adverse conditions.	6/30/94
An Assessment Team headed by the Operation Unit is conducting a thorough review of this type of event and their review will provide the basis for recommending further corrective actions.	6/30/94