CP&L
Carolina Power & Light Company

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

May 15, 1989

FILE: B09-13510C
SERIAL: BSEP/89-0463 10CFR 2.201

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

BRUNSWICK STEAM ELECTRIC PLANT UNIT
DOCKET NO. 50-325 AND 50-324
LICENSE NOS. DPR-71 AND DPR-62
RESPONSE TO INFRACTIONS OF NRC REQUIREMENTS

Gentlemen:

The Brunswick Steam Electric Plant (BSEP) has received I&E Inspection Report 50-325/89-05 and 50-324/89-05 and finds that it does not contain information of a proprietary nature.

This report identified two items that appeared to be in noncompliance with NRC requirements. Enclosed is Carolina Power & Light Company's response to these violations. This response due date was extended in a telephone conversation between Mr. H. Dance (Region II) and Mr. R. Poulk (my staff) on April 19, 1989.

Very truly yours,

J. L. Harness, General Manager
Brunswick Nuclear Project

TMJ/pb

Enclosure

cc: Mr. S. D. Ebneter
Mr. E. G. Tourigny
BSEP NRC Resident Office

IE01
1/1

VIOLATION A

Technical Specification 6.8.1.a requires the licensee to implement written procedures as recommended by Appendix A of Regulatory Guide 1.33, November 1972. Appendix item A.3, Equipment Control, requires procedures for clearances.

Adminsitrative Instruction (AI)-58, Equipment Clearance Procedure, Revision 25, Section 4.1.2.3.3.c requires that Clearance Tag Sheet, Attachment C, be filled out for each valve which is to be manipulated during the maintenance work indicating location (valve number). N/A is to be marked in the "Tag No." column to indicate that a clearance tag is not required.

AI-58, Section 4.1.2.3.5 requires that equipment be in a safe condition to perform the work when valves are positioned according to Clearance Tag Sheet, Attachment C.

AI-58, Section 4.1.4 requires that individuals accepting a clearance verify that tags have been properly placed on components as necessary to place equipment in a safe condition.

Contrary to the above, on January 27, 1989, AI-58 was not properly implemented in that, clearance 1-189A, which was prepared and approved by operations personnel and accepted by maintenance personnel, did not adequately establish the clearance boundaries for maintenance work to be done on the unit 1 C41-F010 and C41-F014 valves. In addition, Attachment C to clearance 1-189A did not list valves C41-F010 and C41-F014 as valves to be manipulated during the maintenance activity. The improper clearance, manipulation of the valves, and subsequent maintenance, resulted in an inadvertent draining of approximately 450 gallons from the Unit 1 Standby Liquid Control System Tank.

This is a Severity Level IV violation (Supplement I) applicable to Unit 1 only.

RESPONSE

I. Admission or Denial of the Alleged Violation

Carolina Power and Light Acknowledges that AI-58 was not properly implemented and the result was an inadvertent draining of approximately 450 gallons from the Unit 1 Standby Liquid Control (SLC) system tank.

II. Reason for the Violation

On January 24, 1989, work requests (WR/JO) 89-ACAR1 and 89-ACAS1 were initiated on 1-C41-F010 and 1C41-F014, respectively. The requests stated that the valves may be leaking past their seats, allowing the SLC tank level to increase, and asked that they be investigated and repaired. On January 26, 1989, at 1100 hours, clearance 1-189 was hung to isolate the

demineralized water system from SLC. At 1200 hours, the SLC system was declared inoperable and limiting condition for operation (LCO) A1-89-0121 was initiated because the increasing level had diluted the boron solution resulting in the SLC tank boron concentration not being within the limits set by Technical Specification (T.S.) 3.1.5. At 1800 hours clearance 1-189 was extended to clearance 1-189A to drain the demineralized water supply piping and allow work on 1-C41-F010. However, clearance 1-189A did not adequately isolate the valve from the SLC tank in that 1-C41-F014 should have been used as an isolation valve, but was not. At 1900 hours shift turnover occurred and the oncoming shift was informed that a clearance was in place to allow work on the SLC system to stop the inleakage of demineralized water. However, the oncoming shift was not aware that the clearance was written and hung with the intention to work the 1-C41-F010 only. At 2030 hours maintenance personnel requested permission to work the two WR/JOs. Permission was granted by operations and the maintenance personnel signed onto clearance 1-189A signifying their acceptance that the clearance tags were properly placed. Operations and maintenance personnel failed to note that the clearance only specified SLC valve 1-C41-F010 as the equipment being cleared and that maintenance was, in fact, planning to work on both 1-C41-F010 and 1-C41-F014. At 2045 hours, the SLC tank level and boron concentration were returned to within T.S. limits and LCO A1-89-0121 was cancelled. (Clearance 1-189A did not interfere with the ability of SLC to inject and was not an operational concern.) Maintenance personnel proceeded to disassemble the two valves by opening both valves and then loosening their bonnets to complete the draining of any water left in the piping. Maintenance personnel contacted the Control Room concerning the amount of leakage they were observing and were informed that the drainage was anticipated and from the demineralized water header. However, as a result of the inadequate clearance isolation, the SLC tank was draining to the floor drain system. At 2230 hours, the "Standby Liquid Tank HI/LOW" annunciator was received. The operations staff investigated and discovered clearance 1-189A was inadequate and that the SLC tank was draining through the 1-C41-F010 and F014. The SLC tank level had decreased to 3200 gallons. Operations requested that the maintenance personnel present close the valve bonnets and the drainage was stopped. A second boundary extension, which utilized the 1-C41-F014 valve as a boundary, was hung at 0130 hours on January 27, 1989, and work on 1-C41-F010 was successfully completed at 0350 hours. Non Conformance Report S-89-010 was initiated as a result of this event.

III. Corrective Steps Which Have Been Taken

Involved Operations personnel were counseled regarding the incident.

IV. Corrective Action to Avoid Further Violations

A "Clearance Center" is being developed which will remove the responsibility for routine clearance reviews away from Operations personnel staffing the Control Room. Additional personnel will be assigned to the center's staff and the hours will be expanded to support periods of increased clearance requests. It is anticipated that refueling outages will require the largest complement of personnel. The personnel assigned will not be limited to operations personnel to ensure that expertise available in the various fields is utilized.

A Unit Head Task force is acting as a steering committee for the development of the "Clearance Center" to establish its objectives and to ensure an initiation which meets those objectives. Current objectives are:

1. To receive clearance requests from the appropriate planning and scheduling group.

2. To deliver a clearance request work package to Control Room personnel specifying:

   a) Required plant conditions

   b) Work scope

   c) Required LCO actions.

Therefore, the Center will be accountable for evaluating the work scope of, determining the required boundaries of, and performing operability reviews on equipment affected by a clearance request.

The Operations personnel staffing the Control Room will be responsible for establishing the plant conditions specified by the Clearance Center personnel and for allowing the clearance to be hung once the referenced conditions are established. The establishment of this Clearance Center should prevent the occurrence of future events resulting from improper clearance implementation.

In addition, the clearance procedure will be reviewed and revised, as necessary, to provide clarification of methods and accountabilities for boundary verification by Operations and Maintenance personnel. The clearance procedure will also be revised, as necessary, to provide a method of correlating the work scope on the clearance to the approved work. Appropriate Operations and Maintenance personnel will receive training on revisions made to the clearance procedure as a result of this event.

V. Date When Full Compliance Will Be Achieved

The Clearance Center is scheduled to be implemented by 7-9-89 which will allow a two month preparation time for the upcoming Unit 2 refueling outage.

Revisions to the clearance procedure are expected to be completed by 7-9-89.

The training of Operations and Maintenance personnel should be completed by 8-31-89.

VIOLATION B

Technical Specification 6.8.1.f requires that written procedures be established and implemented covering the fire protection program implementation. Periodic Test (PT)-34 11.2.1, Rev. 6, Portable Fire Extinguisher Inspection, Reactor Buildings 1 and 2, implements inspection of fire extinguishers. PT acceptance criteria 6.0.1.7 states that, "For a dry chemical portable extinguisher to be acceptable, the pressure gauge reading must fall in the acceptable range."

Contrary to the above, PT-34.11.2.1 was not implemented in that, on March 8, 1989, two dry chemical portable extinguishers were verified acceptable while undercharged.

This is a Severity Level V violation (Supplement I) applicable to Unit 2 only.

RESPONSE

I. Admission or Denial of the Alleged Violation

CP&L admits the violation as stated. However, it should be noted that the pressure gauge indicator for each subject fire extinguisher, although not within the acceptable region of the indicator, was only slightly out of the region.

II. Reason for the Violation

Prior to the NRC inspector informing the Control Room that the subject Control Building and Reactor Building fire extinguishers were inadequately charged, the condition of the extinguishers had been verified as acceptable during required surveillances, on February 10 and 20, 1989, respectively.

In recalling the conversation on February 27, 1989 with the NRC inspector, the Senior Reactor Operator (SRO) acknowledged discussing several topics involving fire protection. However, the concern with the fire extinguishers was not an identified topic as understood by the SRO. As the result of the apparent inadequate communication between the SRO and the NRC inspector during the conversation on February 27th, the condition of the subject fire extinguishers was not realized by the SRO and consequently, action to replace the extinguishers was not performed between February 27 and March 8, 1989.

In addition, due to personnel error, the involved Radiological Waste Control Operator (RW CO) who performed the surveillance on the Control Building fire extinguisher on March 8, 1989, had incorrectly read the extinguisher pressure gauge and determined it to be within the acceptable range. A subsequent check of fire extinguishers inspected by the involved RW CO within the time frame of this occurrence was performed. This check did not reveal instances where the pressure gauges of other extinguishers were incorrectly read.

III. Corrective Steps Taken and Results Achieved

On March 8, 1989, the subject fire extinguishers were replaced with ones of an acceptable charge.

The plant Operations Manager reviewed and discussed the circumstances of this violation with the involved SRO and RW CO. The importance of maintaining good communications was discussed with the SRO. It was reverified that the RW CO knew how to properly read a fire extinguisher indicator and appropriate disciplinary action was taken concerning his actions on March 8th.

IV. Corrective Steps Which Will Be Taken To Avoid Further Violations and When Full Compliance Will Be Achieved

By August 11, 1989, the circumstances of this violation will be reviewed by appropriate plant Operations personnel. Full compliance with Technical Specification 6.8.1.f was achieved on March 8, 1989, through replacement of the subject extinguishers.