



Carolina Power & Light Company

Brunswick Nuclear Plant
P.O. Box 10429
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BSEP-94-0116
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 February 23, 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 50-325/94-01 and 50-324/94-01. 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. R. E. Lopriore at (910) 457-2404.

Very truly yours,

J. Cowan, Director-Site Operations (Acting)
Brunswick Nuclear Plant

SFT/

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 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 A:

Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A, Paragraph G, "Procedures for Control of Radioactivity" of Regulatory Guide 1.33, dated November 1972.

Contrary to the above, on January 19, 1994, the licensee failed to establish and provide an adequate procedure(s) specifying engineering and work controls necessary to effectively control radioactivity commensurate with the hazards of the specific work evolution being performed in the Unit 1 Reactor Cavity area.

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

RESPONSE TO VIOLATION:

Admission or Denial of Violation

Carolina Power & Light admits the violation.

Reason for Violation

On January 19, 1994, reassembly of the Unit 1 reactor vessel in accordance with plant procedure OSPP-RPV502, Revision 8C was in progress. Work activities scheduled for the shift included the removal of remaining strippable coating from the vessel cavity area and the preparation of the drywell dome flange for the eventual landing of the drywell dome. Dome flange preparation work commenced following the completion of pre-job briefings. Approximately thirty minutes after the start of work, contamination was detected in previously clean areas of the refuel floor. The work was stopped and recovery efforts initiated. The Health Physics (HP) and Refuel Floor Units immediately began to investigate the event. Site management also established a Site Incident Investigation Team to provide an independent, multi-discipline review of the event. The causes of this event as determined by these reviews are summarized as follows:

As Low As Reasonably Achievable (ALARA) and HP pre-planning for this activity did not consider some of the hazards associated with the activity,

Communications including shift turnovers and pre-job briefings were inadequate,

Performance with respect to management expectations was not effective.

Corrective Actions Which Have Been Taken and Results Achieved

Following this incident work was stopped on the refueling floor until ALARA and HP planning were more formally integrated into the remaining vessel reassembly activities. A detailed ALARA plan describing comprehensive radiological precautions for the remaining vessel reassembly tasks was prepared and implemented prior to performing those activities. Management expectations for the performance and coordination of refuel floor activities were reemphasized to the personnel assigned to the refuel floor. Additional Environmental and Radiation Control management personnel were placed on shift to provide continual management oversight of the remaining vessel reassembly activities. The vessel reassembly was subsequently completed without incident.

Environmental and Radiation Control procedure, OE&RC-0045, Radiation Control Pre-Job Briefings, was developed to establish a structure and formality for HP pre-job briefings. Administrative Instruction, AI-53, ALARA Evaluation, was revised to provide instruction for the preparation of ALARA plans. This procedure has been implemented to provide comprehensive ALARA planning of high risk activities.

Formal expectations for key outage leaders have been enhanced to more clearly define the responsibilities for the oversight of high risk outage activities.

A comprehensive task list has been developed for the Unit 2 vessel disassembly currently scheduled for March 27, 1994. This list integrates the prewritten work steps, the schedule, the pre-job briefings, and the radiological/contamination briefings for the disassembly activity.

Corrective Steps Which Will Be Taken to Avoid Further Violations

A comprehensive task list will be developed for the Unit 2 vessel reassembly currently scheduled for June 4, 1994. This list integrates the prewritten work steps, the schedule, the pre-job briefings, and the radiological/contamination briefings for the reassembly activity.

Date When Full Compliance Will Be Achieved

Carolina Power & Light believes that it is now in compliance with Technical Specification 6.8.1.

VIOLATION B:

10 CFR 20.1501(a) requires each licensee shall make or cause to be made, surveys that (2) are reasonable under the circumstances to evaluate (ii) Concentrations or quantities of radioactive material and (iii) The potential radiological hazards that could be present.

Contrary to the above, on January 19, 1994, during performance of work in the Unit 1 Reactor Cavity area, the licensee failed to perform adequate surveys to evaluate the potential radiological hazards that could be present from unknown concentrations or quantities of airborne radioactivity that existed in areas on the Unit 1 Reactor Building not evaluated or established for the control of airborne radioactivity.

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

RESPONSE TO VIOLATION:

Admission or Denial of Violation

Carolina Power & Light admits the violation.

Reason for Violation

The HP technicians involved with the drywell dome preparation pre-job briefings and HP coverage were not aware of the entire work scope to be accomplished. They did not receive a detailed turnover for potential work items and were not involved with the technical briefing conducted on the activities to be performed. Additionally, HP personnel were not aware of the vessel cavity's changing air flow conditions. Heated air from the drywell was rising up through the vessel cavity to the refuel floor. Without a complete understanding of the work scope and the environmental conditions present during the work activity, HP personnel were unable to adequately evaluate the potential radiological consequences associated with the activity. The reasons are delineated in the "Reason for Violation" section of the response to Violation A.

Corrective Actions Which Have Been Taken and Results Achieved

The corrective actions taken and results achieved are presented under "Corrective Actions Which Have Been Taken and Results Achieved" in response to Violation A.

Corrective Steps Which Will Be Taken to Avoid Further Violations

The corrective steps which will be taken are presented under "Corrective Steps Which Will be Taken to Avoid Further Violations" in response to Violation A.

Date When Full Compliance Will Be Achieved

Carolina Power & Light believes that it is now in compliance with 10 CFR 20.1501(a)

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
1. A comprehensive task list will be developed for the Unit 2 vessel reassembly currently scheduled for June 4, 1994. This list integrates the prewritten work steps, the schedule, the pre-job briefings, and the radiological/contamination briefings for the reassembly activity.	NA