

February 8, 2000

Mr. D. E. Young, Vice President
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant,
Unit No. 2
3581 West Entrance Road
Hartsville, South Carolina 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2 (HBRSEP2) -
COMPLETION OF LICENSING ACTION FOR GENERIC LETTER 98-02, "LOSS
OF REACTOR COOLANT INVENTORY AND ASSOCIATED POTENTIAL FOR
LOSS OF EMERGENCY MITIGATION FUNCTION WHILE IN A SHUTDOWN
CONDITION" (TAC NO. MA4802)

Dear Mr. Young:

On May 28, 1998, the U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 98-02 to all holders of operating licenses for Pressurized Water Reactors (PWRs), except those who have permanently ceased operations, and have certified that fuel has been permanently removed from the reactor vessel. The NRC issued GL 98-02 to request that PWR licensees evaluate a September 17, 1994, event, which occurred at Wolf Creek, which had the potential to drain down the reactor coolant system (RCS) to the refueling water storage tank (RWST) and, at the same time, render the emergency core cooling system (ECCS) and residual heat removal (RHR) system inoperable by introducing a steam/water mixture to the suction side of the ECCS and RHR pumps. Addressees of GL 98-02 were requested to provide the following information within 180 days: (1) an assessment of whether the addressee's facility is vulnerable to the September 17, 1994, Wolf Creek event, and (2), if the facility is found to be vulnerable, an assessment of the plant-specific 10 CFR Part 50, Appendix B, quality assurance program attributes which will prevent the subject event. If the addressee's facility was determined to be vulnerable, a response to information item (1) was to be provided pursuant to 10 CFR 50.54(f) and 10 CFR 50.4, and the responses to information items (1) and (2) were to be kept in a licensee's retrievable system for use by the NRC staff on an as-needed basis.

In response to GL 98-02, you provided a letter dated November 12, 1998, for HBRSEP2. The submittal indicated that HBRSEP2 is vulnerable to the type of incident which occurred at Wolf Creek and further indicated that the plant evaluation concerning the subject vulnerability (information item (2) of GL 98-02) was being kept in a retrievable licensee system that the NRC can verify on an as-needed or sample basis, in accordance with GL 98-02.

By letter dated December 6, 1999, the Region II NRC staff, in conformance with Temporary Instruction (TI) 2515/142, "Drain-Down During Shutdown and Common Mode Failure" (NRC Generic Letter 98-02), issued Inspection Report (IR) No. 50-261/99-07. The purpose of the inspection was to confirm that the licensee had searched for potential drain-down paths during shutdown that would be created by operator error or equipment failures, and which could lead to a common-cause failure of the RHR and ECCS pumps. The inspectors confirmed that the

licensee had adequately searched for potential drain-down paths that could be created by operator error or equipment failures, and that could lead to common-cause failure of RHR and ECCS pumps. The licensee had determined, during their review, that the plant was susceptible to a drain-down similar to the drain-down that had occurred at Wolf Creek.

The inspectors reviewed procedures General Procedure (GP)-007, "Plant Cooldown From Hot Shutdown to Cold Shutdown," Revision 3, and Operations Management Procedure (OMP)-004, "Outage Risk Assessment," Revision 5. These procedures had been revised to provide the administrative controls to reduce the likelihood of a drain-down event. These controls included a combination of caution tags on valve handwheel, caution caps on control switches, and screening and preplanning for potentially risk significant issues. The inspectors verified that the current revision of the procedures addressed the concerns identified by the GL. Additionally, the inspectors verified the configuration control measures in place, including the interlock preventing the RHR system inlet valve from being opened from the control room at RCS pressures above RHR system design pressure. The inspectors also verified that operators were trained on these procedures. The inspectors also reviewed licensee performance of procedures GP-007 and OMP-004 during the recently concluded Refueling Outage 19 in September-October 1999, which was found to be satisfactory. The inspectors determined that the licensee had adequately conducted activities to provide adequate protection from concerns raised in GL 98-02.

The NRC staff has reviewed your response to GL 98-02 and the above IR, and has concluded that (1) all the information requested by GL 98-02 has been provided, and (2) that your on-site activities adequately addressed the concerns of GL 98-02 for HBRSEP2; therefore, we consider GL 98-02 to be closed for HBRSEP2.

If you need any other information regarding this matter, please contact me on (301) 415-1478.

Sincerely,

/RA/

Ram Subbaratnam, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-261

cc: See next page

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The NRC staff has reviewed your response to GL 98-02 and the above IR, and has concluded that (1) all the information requested by GL 98-02 has been provided, and (2) that your on-site activities adequately addressed the concerns of GL 98-02 for HBRSEP2; therefore, we consider GL 98-02 to be closed for HBRSEP2.

If you need any other information regarding this matter, please contact me on (301) 415-1478.

Sincerely,
/RA/

Ram Subbaratnam, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-261

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Mr. D. E. Young
Carolina Power & Light Company

H. B. Robinson Steam Electric
Plant, Unit No. 2

cc:

Mr. William D. Johnson
Vice President and Corporate Secretary
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Mr. Mel Fry, Director
N.C. Department of Environment
and Natural Resources
Division of Radiation Protection
3825 Barrett Dr.
Raleigh, North Carolina 27609-7721

Ms. Karen E. Long
Assistant Attorney General
State of North Carolina
Post Office Box 629
Raleigh, North Carolina 27602

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
Post Office Box 29520
Raleigh, North Carolina 27626-0520

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
H. B. Robinson Steam Electric Plant
2112 Old Camden Road
Hartsville, South Carolina 29550
Management

Mr. Virgil R. Autry, Director
South Carolina Department of Health
Bureau of Land & Waste Management
Division of Radioactive Waste

2600 Bull Street
Columbia, South Carolina 29201

Mr. T. D. Walt
Plant General Manager
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant, Unit No. 2
3581 West Entrance Road
Hartsville, SC 29550

Mr. Terry C. Morton
Manager
Performance Evaluation and
Regulatory Affairs CPB 7
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602-1551

Mr. J. W. Moyer
Director of Site Operations
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant, Unit No. 2
3581 West Entrance Road
Hartsville, South Carolina 29550

Mr. John H. O'Neill, Jr.
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037-1128

Public Service Commission
State of South Carolina
Post Office Drawer 11649
Columbia, South Carolina 29211

Mr. R. L. Warden
Manager - Regulatory Affairs
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant,
Unit No. 2
3581 West Entrance Road
Hartsville, South Carolina 29550-0790

Mr. H. K. Chernoff
Supervisor, Licensing/Regulatory Programs
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant,
Unit No. 2
3581 West Entrance Road
Hartsville, South Carolina 29550