CP&L

Carolina Power & Light Company

USNRC REGION II
ATLANTA, GEORGIA

August 21, 1981

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SERIAL: NO-81-1357

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II, Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
RESPONSE TO I.E. INSPECTION REPORT NO. 50-261/81-19

Dear Mr. O'Reilly:

Carolina Power and Light Company (CP&L) has received and reviewed the subject report and provides the following responses.

Violation - Severity Level IV

10 CFR 50.59 allows the licensee to make changes to the facility and procedures as described in the safety analysis report, without prior Commission approval, unless the change constitutes an unreviewed safety question. A proposed change is deemed to involve an unreviewed safety question if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created. Additionally the licensee shall maintain records of such changes to the facility and procedures, including a written safety evaluation which provides the bases for the determination that the change does not involve an unreviewed safety question, and shall furnish at least annually a report containing a brief description of such changes including a summary of the safety evaluation of each.

Contrary to the above, these requirements were not met in that:

(1) Modification 383, which installed increased-capacity waste condensate tanks located outside the auxiliary building with unmonitored, unvalved vents to atmosphere, was not adequately reviewed to reach the conclusion that it did not constitute an unreviewed safety question.

(2) Modification 383, a change to the facility as described in the FSAR and implemented in 1978, has not been reported to the Commission.

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(3) The licensee did not adequately review the safety implications of the transfer of untreated waste water to E Waste Condensate Tank on November 27, 1980, and its subsequent storage there.

1. Admission or Denial of Alleged Violation

Carolina Power and Light Company acknowledges the above violation.

2. Reason for Violation

The following response addresses the above items by item number:

(1) In 1977, Modification 383 added a 15 gpm Waste Evaporator Package which included three Waste Condensate Tanks (WCT), a recirculation pump and their associated piping outside the Auxiliary Building. The Safety Analysis discussion stated: "Precautions were taken during the design phase to eliminate possible trouble points that could result in inadvertant release of liquids with low level activity." The Safety Analysis did not specifically document the design precautions taken to support this statement. However, discussions with those involved with developing this modification revealed that Branch Technical Position 11.1 of the Standard Review Plan was used as a guide during the design phase to incorporate the following specific design features into Modification 383:

a. The system was designed with the intention that the WCT's would receive low level activity waste evaporator condensate effluent (low level activity relative to the unprocessed waste evaporator influent).

b. The number of valves and the amount of piping outside the Auxiliary Building was minimized.

c. Diaphragm valves were used whenever possible instead of valves with stem packing to minimize the potential for leaks.

d. All vent and drain valves would be capped and the drain valves locked.

e. The recirculation pump was enclosed in a metal building equipped with a floor weir and collection system that returns possible pump leakage back to the Auxiliary Building Floor Drain System.

f. Waste Condensate Tanks were provided with greater than full capacity overflow lines back to the Auxiliary Building Floor Drain System.

g. WCTs were installed with atmospheric vents above the overflow line tap to ensure that the tanks remain at atmospheric pressure. (Noncondensable gases are removed in the evaporative process.)

h. All piping and vessels containing unprocessed waste water were contained within the Auxiliary Building.

Because of the above considerations during the design phase, the safety analyses concluded that Modification 383-B (Exterior Foundations and Structures) did change the plant from the description given in the FSAR but did not constitute an unreviewed safety question.

However, Chapter 14 of the Robinson FSAR states that "all liquid waste components are located in the Auxiliary Building except the reactor coolant drain and pressurizer relief tanks." In view of this statement, the Safety Analysis for the above modification should have addressed the newly created potential for a radioactive release.

(2) Modifications are reviewed annually to identify those "completed" modifications that will be reported to the NRC. Modifications have historically been considered "completed" when all physical work, procedure changes, and drawing changes are completed and when all QA documents are available and properly filed. Because some of the administrative steps were not yet complete, Modification 383 did not meet the "completed" requirements and therefore was not included in an Annual Report.

(3) On November 27, 1980, the Waste Evaporator was inoperable. As a result of an operational event previously reported (Reference: LER 80-28), a surge in waste water inventory occurred. With the Waste Holdup Tank (WHUT) level increasing at 96% full, the Deviation from Established Procedures provision of the Adminsitrative Instructions (section 5.3) was invoked to expedite a transfer of unprocessed waste water to a WCT outside the Auxiliary Building. This expeditious transfer prevented the certain overflow and release of the WHUT contents onto the Auxiliary Building floor.

The Shift Foreman conferred with the Operating Supervisor and Environmental and Radiation Control Supervisor before invoking the provision of AI section 5.3. The Waste Condensate Tank containing the unprocessed waste water was isolated under clearance and the area roped off with appropriate radiological postings. A memorandum from the Operating Supervisor to the Plant Nuclear Safety Committee (PNSC) describing the above transfer was submitted on the following day, November 28, 1980. The PNSC reviewed the Deviation from Established Procedures (transfer of waste water) on November 28, 1980. However, during this review it was not identified that this transfer of waste water was contrary to the Safety Analysis in Modification 383 which assumed that the WCTs outside the Auxiliary Building would receive low level activity waste evaporator condensate, and that this action would therefore require a documented 10CFR50.59 evaluation.

The unprocessed waste water was returned from the WCT to the WHUT on December 3, 1980.

3. Corrective Steps Which Have Been Taken and Results Achieved

A procedure which was developed to transfer water from the WHUT to the WCTs outside the Auxiliary Building has been voided. The Shift Foremen have been instructed not to transfer water from the WHUT to the WCTs outside the Auxiliary Building until an appropriate safety analysis has been completed which would support transfers of radioactive water to the subject WCTs.

4. Corrective Steps That Will Be Taken to Avoid Further Violation

A safety evaluation to address the concerns identified above has been initiated. In addition, more detailed guidance regarding safety evaluations as specifically related to systems which contain radioactive materials is being included in a revision to the modification control and development procedures currently in progress. This revision will also more appropriately define a modification as completed for reporting purposes when the modified component, system or structure is actually placed in service. This will result in a more timely reporting of these modifications in accordance with 10CFR50.59. Additionally, a review to identify any other modifications requiring reporting pursuant to 10CFR50.59 which have been placed in service and not reported to the NRC will be performed and the appropriate report will be made.

5. Date When Full Compliance Will Be Achieved

The 10CFR50.59 evaluation mentioned above should be completed by December 31, 1981. Appropriate changes to the Modification Procedure mentioned above will be implemented by September 30, 1981. A modification review to identify any other modifications requiring reporting will be completed by December 31, 1981, and reported in the 1981 Annual Report.

Should you have any questions regarding these responses, please contact a member of my staff.

Very truly yours,

B. J. Furr
Vice President
Nuclear Operations Department

CLW/mag

B. J. Furr, having been first duly sworn, did depose and say that the information contained herein is true and correct to his own personal knowledge or based upon information and belief.

My commission expires:

My Commission Expires 6-8-86

Rebecca R. Toole
Notary (Seal)