



Carolina Power & Light Company

P. O. Box 101, New Hill, NC 27562
April 11, 1985

15 APR 17 A10:22

Dr. J. Nelson Grace
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30323

NRC-349

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
POTENTIAL OVERPRESSURIZATION OF THE
COMPONENT COOLING WATER SYSTEM, ITEM 183

Dear Dr. Grace:

Attached is our second interim report on the subject item, which was deemed reportable per the provisions of 10CFR 50.55(e) and 10CFR, Part 21 on August 13, 1984. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by October 31, 1985.

Thank you for your consideration in this matter.

Yours very truly,

R. M. Parsons
Project General Manager
Completion Assurance
Shearon Harris Nuclear Power Plant

RMP:sae

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)
Mr. R. C. DeYoung (NRC)

8504250515 850411
PDR ADOCK 05000400
S PDR

Official Copy

IE 27

11

XEX-se13/1-OS5

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT 1

SECOND INTERIM REPORT

POTENTIAL OVERPRESSURIZATION OF THE
COMPONENT COOLING WATER SYSTEM
ITEM 183

April 11, 1985

REPORTABLE UNDER 10CFR50.55(e)
AND 10CFR21

SUBJECT: 10CFR50.55(e) and 10CFR21 Reportable Item Shearon Harris Nuclear Power Plant Potential Overpressurization of the Component Cooling Water System.

ITEM: Component Cooling Water System for SHNPP Unit 1.

SUPPLIED
BY: Westinghouse Water Reactor Division.

NATURE OF
DEFICIENCY: Westinghouse notified the NRC under 10CFR21 on July 12, 1984, of a reportable item associated with the design of the Westinghouse-supplied component cooling water system. An overpressure condition could result from closure of the surge tank vent valve on a high radiation signal from the radiation directors within the component cooling water system. Closure of the vent valve could result in an increase in pressure in the surge tank due to a system inleakage or an increase in system heat load. The pressure in the surge tank could then increase to the set pressure of the surge tank relief valve. System overpressurization of up to 170% of the design pressure may then occur downstream of the CCW pumps as a result of pump developed head.

DATE PROBLEM
WAS CONFIRMED
TO EXIST: Westinghouse letter CQL-8065 dated July 23, 1984, and received July 27, 1984.

DATE PROBLEM
REPORTED: N. J. Chiangi notified the NRC (Mr. A Hardin) that this item was reportable under 10CFR 50.55(e) and 10CFR21 on August 13, 1984.

SCOPE OF
PROBLEM: Unit 1 Component Cooling Water System (both trains).

SAFETY
IMPLICATIONS: Overpressurization and potential loss of both component cooling water trains.

REASON PROBLEM
IS REPORTABLE: Overpressurization could lead to a degraded safety condition and loss of an ESF system.

CORRECTIVE
ACTION:

As automatic isolation of the surge tank vent line is not an essential function, Westinghouse has recommended disabling the vent valve circuitry, yet maintaining annunciator alarm on the main control board. In the long term, the vent valve could be locked open or removed, and the surge tank relief valve could be removed. CP&L, Westinghouse, and Ebasco are still investigating this matter in order to determine the appropriate course of action to be taken.

FINAL REPORT:

A final report will not be available until the appropriate corrective action is determined and implemented, which is currently expected to be October 31, 1985.