CP&L

Carolina Power & Light Company

17 P12:45

P. O. Box 101, New Hill, N. C. 27562
April 11, 1984

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30303

NRC-209

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
REACTOR VESSEL SUPPORT ANCHOR BOLT NUTS, ITEM 165

Dear Mr. O'Reilly:

Attached is an interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e), on March 12, 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 August 1, 1984.

Thank you for your consideration in this matter.

Yours very truly,

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

RMP/sh

Attachment

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

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

INTERIM REPORT

REACTOR VESSEL SUPPORT ANCHOR BOLT NUTS
ITEM 165

April 11, 1984

REPORTABLE UNDER 10CFR50.55(e)

SUBJECT: Shearon Harris Nuclear Power Plant/Unit No. 1, 10CFR50.55(e) reportable deficiency. Anchor bolt nuts not properly secured on vertical and horizontal Reactor Vessel support assemblies.

ITEM: Two vertical support anchor bolt nuts are loose and one nut is missing. Also, there are no washer material requirements given on design prints. Several anchor bolt nuts on the horizontal supports are not in full contact with the support structure, due in part to a lack of thread on the bolt as well as to the angle at which the bolt projects through the assembly. Some bolts have washers, which are not required and none have the half jam nut which is required.

SUPPLIED BY: Not a supplier-related deficiency.

NATURE OF DEFICIENCY: Both the vertical and horizontal supports were designed as Seismic Class I assemblies. The process control for complete installation and inspection of the Reactor Vessel Supports was incomplete. Procedures WP-119, Reactor Vessel Setting, and TP-28, Inspection of Equipment for Setting and Grouting, inadvertently failed to address post-grouting activities (e.g., final bolting and bolting inspection). On the lateral supports, jam nuts were not installed. Some of the anchor bolts do not have sufficient threads to allow the nuts to come into full contact with the supports. Washers were installed on some of the bolts but not on others, and the bolts in some cases vary from being perpendicular to the round surface of the supports, preventing full tightening of the bolts without the use of washers, which were not specified. On the vertical supports, one nut was found missing and the material for the washers was not specified on a design document.

DATE PROBLEM OCCURRED: March and April, 1980.

DATE PROBLEM REPORTED: On March 12, 1984, CP&L (Mr. K. V. Hate') notified the NRC (Mr. A. Hardin) that this item was reportable per the provisions of 10CFR50.55(e).

SCOPE OF PROBLEM: The hardware deficiencies are limited to the reactor vessel supports. The program deficiency potentially affects all equipment on site installed prior to September 23, 1980.

SAFETY IMPLICATION: The seismic strength of the supports is decreased by the missing and loose nuts, and the improper bolt to support contact.

REASON DEFICIENCY IS REPORTABLE: The supports are for a Safety Class I component.

CORRECTIVE ACTION:

Procedure TP-28, Rev. 3, which incorporated inspection of tightness of connections and fastenings, was issued September 23, 1980. The procedure title at that time was changed to Inspection of Equipment Installation. As a process control measure, an Exhibit 12 to procedure WP-105, Installation and Inspection of Equipment, has been prepared for accomplishment of the necessary work and inspection points for the reactor vessel supports. Field Change Requests have been prepared requesting the washer material specification for the vertical supports and resolution of the bearing problems on the horizontal supports. The design information will be received and the installation completed in accordance with WP-105 and TP-28.

To correct the program deficiency, we are in the process of reinspecting all nuclear safety-related and seismically supported equipment on site installed prior to September 23, 1980. After this date, the procedures for the installation and inspection of equipment are considered adequate to insure quality.

Major NSSS equipment was installed using procedures specifically written for their installation. The procedures for installing the reactor vessel, the steam generators, and the reactor coolant pumps have been reviewed and revised, as necessary. These procedures are considered adequate and installation and inspection activities are proceeding.

The procedure for installation of the pressurizer will be reviewed and revised, as necessary.

FINAL REPORT:

A final report will be issued once all of the corrective actions stated above have been completed. It is currently projected that a final report on this item will be issued by August 1, 1984.