



Carolina Power & Light Company

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January 21, 1983

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 3100)
Atlanta, Georgia 30303

NRC-34

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1985-89 - 900,000 KW - UNITS 1 & 2
THREADED STUDS WITH INSUFFICIENT THREADED ENGAGEMENT INTO
EMBEDDED STRIP PLATES, ITEM 63

dkn: 50-4000
50-401

Dear Mr. O'Reilly:

Attached is the fourth interim report on the subject item which was deemed reportable on November 10, 1981. All the corrective action we have proposed is complete, and we are still awaiting engineering disposition of eight attachments. We expect to have these evaluations completed by mid February. For this reason, we would request an extension until February 25, 1983 for submitting the final report.

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: Mr. G. Maxwell (NRC-SHNPP)
Mr. V. Stello (NRC)

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNITS NO. 1 AND 2

INTERIM REPORT
January 20, 1983
ITEM 63

THREADED STUDS WITH INSUFFICIENT THREADED
ENGAGEMENT INTO EMBEDDED STRIP PLATES

Reportable Under 10CFR 50.55(e)

SUBJECT: Shearon Harris Nuclear Power Plant/Units No. 1 and 2
10CFR50.55(e), reportable deficiency. Thread engagement
of threaded studs into embedded strip plates.

ITEM: Improperly installed threaded studs on embedded strip
plates. These tapped strip plates and threaded studs
have been used in many cases in lieu of strip plates
with welded-on Nelson headed studs.

SUPPLIED BY: Not a supplier-related deficiency. The studs and strip
plates were assembled in the field.

NATURE OF
DEFICIENCY: The deficiency involves Seismic Category I embedded
strip plates with screwed-in studs that have insufficient
thread engagement. These screwed-in studs are used in
lieu of welded-on Nelson headed studs. The deficient
plates/studs were found after concrete placements and
acceptance of the placements.

DATE PROBLEM WAS
CONFIRMED TO EXIST: October 13, 1981

DATE PROBLEM REPORTED: October 13, 1981, Mr. N. J. Chiangi notified the NRC,
Region II (Mr. R. Butcher), that the item was poten-
tially reportable. November 10, 1981, Mr. N. J. Chiangi
notified the NRC, Region II (Mr. R. Butcher), that this
item was reportable per the provision of 10CFR50.55(e).

SCOPE OF PROBLEM: Approximately 1300 of the strip plates to be used with
screwed-in studs have been ordered. To date, all
inspection has been completed in the containment, fuel
handling, reactor auxiliary, reactor auxiliary-common,
diesel generator, diesel fuel oil storage tank, tank 1
and 2 buildings, intake and screening structures. A
large number of plates that have threaded studs with
improper thread engagement have been found. Also,
hangers have been found welded to plates that have
threaded studs with improper thread engagement.

SAFETY IMPLICATION: Pipe, cable tray, and HVAC hangers, as well as other
miscellaneous items, attach to these plates. Plates
with studs not having proper thread engagement will
possibly be overstressed in normal operation or during
a seismic event.

REASON DEFICIENCY
IS REPORTABLE: Reportable due to the magnitude of the problem plus
the extensive evaluation and/or rework required.

CORRECTIVE ACTION:

Appropriate site work procedures have been revised requiring notification of site engineering personnel prior to attaching any item to an embedded plate with screwed-in studs. In addition, all plates having insufficient thread engagement have been marked with stickers* identifying them. Plates having attachments have been identified and all but eight have been evaluated by the engineer using test data provided to them on shear resistance. Any plates requiring corrective action have been reworked. To eliminate attachments to these plates once the plant becomes operational, operational personnel have agreed to implement inspection of the plates in their procedures prior to making any attachments.

FINAL REPORT:

A Final Report will be issued as soon as the remaining eight attachments have been evaluated by Engineering. We expect to have this completed by February 25, 1983.

*Note on sticker reads:

CAUTION

Anchor studs for this plate have reduced thread engagement. Evaluate plate load limits prior to making any attachments.