



Carolina Power & Light Company

May 13, 1982

USNRC
ATLANTA, GEORGIA
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File: SH N-2/18
Item 63

CQAD 82-850

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

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NOS. 50-400 AND 50-401
THREADED STUDS WITH INSUFFICIENT THREAD
ENGAGEMENT INTO EMBEDDED STRIP PLATES

Dear Mr. O'Reilly:


Attached is a second interim report on the subject item which was deemed as reportable on November 10, 1981. Due to the magnitude of the problem, CP&L and Ebasco are continuing to evaluate this matter; and it is currently projected that the final report will be submitted by July 16, 1982.

Thank you for your consideration in this matter.

Yours very truly,

RDB/mt
Attachment

cc: Mr. G. Maxwell W/A
Mr. V. Stello (2) W/A


N. J. Chiangi - Manager
Engineering & Construction
Quality Assurance/Quality Control

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNITS NO. 1 AND 2

INTERIM REPORT
May 10, 1982

Reportable Under 10CFR50.55(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
potentially 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,
approximately forty-five percent (45%) of the
inspection has been completed in the containment, fuel
handling, reactor auxiliary, reactor auxiliary-common,
diesel generator, diesel fuel oil storage tank, and
tank 1 and 2 buildings. The intake and screening
structures have been completely checked. 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. The
investigation has been hampered by the advanced stages
of construction in many areas (pipe hangers, pipes,
cable tray hangers, cable trays, conduits, lights and
HVAC ducts) and shoring in place.

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. Sufficient investigation has not been conducted to actually evaluate the loading on the identified plates.

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. All the plates in question are threaded completely through the plates and, therefore, are readily identifiable. This action will prevent a plate from being overlooked during the construction period. Plates already having attachments have been identified and submitted to the Engineer for evaluation (PW-AS-1391). To date no resolution has been received. To eliminate attachments to these plates once the plant becomes operational, operating personnel have agreed to implement inspection in their procedures.

FINAL REPORT:

A final report will be issued once the plates having attachments are evaluated and reworked, if required. It is currently projected that the submittal date will be July 16, 1982.