P. O. BOX 013100, MIAMI, FLORIDA 33101

Reactor Facilities Branch

FLORIDA POWER & LIGHT COMPANY

February 19, 1976
L-76-61

Mr. John G. Davis, Acting Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Davis:

Re: 10 CFR 50.55(e) Final Report
Improper Containment Boundary
Quality Group Designation
St. Lucie Unit No. 1

50-335

On January 22, 1976, I forwarded an interim report to you concerning the improper quality group designation of a number of the containment boundary penetrations at St. Lucie Unit No. 1. A final report of this incident is herewith forwarded to you in accordance with 10 CFR 50.55(e).

Yours very truly,

J. A. De Mastry
for

Robert E. Uhrig
Vice President

REU:nch
Attachment

cc: M. S. Kidd
Norman C. Moseley
Jack R. Newman, Esq.

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FLORIDA POWER & LIGHT COMPANY

ST. LUCIE PLANT - UNIT #1

FINAL REPORT

CONTAINMENT BOUNDARD QUALITY GROUP DESIGNATION

February, 1976

I. SUMMARY

During an updating of piping and instrumentation diagrams, it was noted that the lines and containment isolation valves attaching to fourteen containment penetration assemblies were designated as Quality Group C. Since these lines and their respective isolation valves comprise part of the containment boundary, the appropriate quality group designation is "B" as stated in FSAR Table 3.2-1.

A review to determine the additional NDE and other QA and code requirements necessary to upgrade Quality Group C lines and valves to Quality Group B has been performed. The upgrading efforts are complete with no major repair work having resulted from the efforts.

II. DESCRIPTION OF DEFICIENCY

The following containment penetration isolation boundary piping had been procured as Quality Group C in total or in part up to and including the containment isolation valves located outside containment:

PENET. NO.	SERVICE
14	Nitrogen Supply
15,17,19,21	Containment Fan Coolers Cooling Water Return
16,18,20,22	Containment Fan Coolers Cooling Water Supply
23	Reactor Coolant Pump Cooling Water Supply
24	Reactor Coolant Pump Cooling Water Return

PENET. NO.	SERVICE
31	Containment Vent Header
41	Safety Injection Tank Test Line
43	Reactor Drain Tank Pump Suction

The differences between Quality Group B and C (code class 2 and 3, respectively) are mainly mainfest in the quality assurance requirements, ie, level of nondestructive examination (NDE), materials traceability, and inservice inspection. Design code stress allowables remain unchanged as noted in FSAR Table 3.9-3.

Section IV of this report provides a tabulation of the NDE performed for the components under consideration.

III. SAFETY IMPLICATIONS

While no real consequence is to be expected from the improper classification of these components since code class 2 and 3 components have identical design stress requiremetns, a deviation from stated FSAR requirements was in evidence.

IV. CORRECTIVE ACTION

All piping valves, fittings, field welds and shop welds associated with the aforementioned penetrations were investigated as a result of the upgrading effort to establish the level of NDE previously required by code class 3 of the design codes applicable to St. Lucie Unit 1 (and/or by Ebasco design

specifications which often exceed minimum code requirements) for comparison with the level of NDE required by code class 2 of those codes (refer to Table 1). Additional NDE required has been completed. Records of all radiography, magnetic particle and/or liquid penetrant tests performed are on file at the Ebasco site Quality Control Department.

Minor defects uncovered by NDE have been resolved using procedures which are in accordance with the applicable codes. All areas will be satisfactorily completed prior to fuel loading, scheduled for March 1, 1976.

COMPARISON OF CODE CLASS 2 and 3 NDE REQUIREMENTS *

	CODE CLASS 2		CODE CLASS 3	
COMPONENT	EBASCO SPEC 850-10	CODE	EBASCO SPEC 850-10	CODE
Seamless Piping	100% UT weld ends - LP	Mat'l Spec	Mat'l Spec	Mat'l Spec
Forged Fittings	100% UT 100% LP or MT	Mat'l Spec	100% LP or MT	Mat'l Spec
Cast Fittings	100% RT 100% LP or MT	LP or MT Static: RT Centrifugal: UT to RT	RT (to 2" from weld end) LP or MT	Mat'l Spec
Butt Welds	100% RT 100% LP or MT	100% RT MT $\leq$ 4"NPS	10% RT $\geq$ 2 1/2" 100% Visual	Random RT > 4" 100% Visual
Socket Welds 2" and under	LP or MT	LP or MT	Not Req'd	Not Req'd
Branch Conn.	100% RT $\geq$ 4" 100% LP or MT	100% RT $\geq$4" LP or MT $\leq$ 4"	10% RT $\geq$ 4"	Random LP or MT 4" and over
Cast Valves	100% RT 100% LP or MT	RT + LP or MT	RT (to 2" from weld end) 100% LP or MT	Not req'd
Forged Valves	100% UT $\geq$ 2 1/2" 100% LP or MT	Mat'l Spec	100% LP or MT	Mat'l Spec

*ANSI B31.7 (1969), 1968 Draft Pump & Valve Code, Ebasco Spec 850-10

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