



October 24, 2007

L-2007-172
10 CFR 50.4
10 CFR 50.55a

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

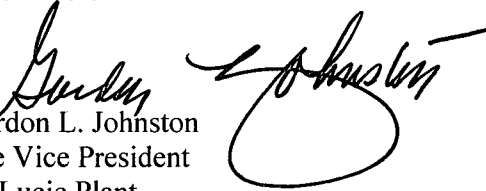
Re: St. Lucie Unit 2
Docket No. 50-389
In-Service Inspection Plans
Reponse to Request for Additional Information
Third Ten-Year Interval Unit 2 Relief Request 10

Pursuant to the provisions of 10 CFR 50.55a(a)(3)(i), via letter L-2007-045 dated March 29, 2007, as supplemented by L-2007-148 dated September 24, 2007, Florida Power & Light (FPL) requested approval to use structural weld overlays (SWOLs) as an alternative repair method. Relief was requested on the basis that the relief request provides an acceptable level of quality and safety.

On October 12, 2007, FPL and NRC held a teleconference on the submittals, and this letter contains the FPL response to the NRC request for additional information.

FPL requests approval of the relief request prior to entering Mode 4 during the fall 2007 St. Lucie Unit 2 refueling outage, SL2-17, tentatively scheduled for Early December. Please contact Ken Frehafer at (772) 467-7748 if there are any questions about this submittal.

Very truly yours,


Gordon L. Johnston
Site Vice President
St. Lucie Plant

Attachment

GLJ/KWF

A047
NRC

Proposed Alternative in Accordance with 10 CFR 50.55a(a)(3)(i)

Alternative Provides Acceptable Level of Quality and Safety

USE OF WELD OVERLAYS AS AN ALTERNATIVE REPAIR TECHNIQUE

The purpose of this document is to provide weld overlay thickness and reduction in ultrasonic testing volume coverage information for the weld overlaid locations which involve cast stainless steel safe-ends at the St. Lucie Unit 2 Nuclear Power plant. This information is provided in response to the NRC request received during the conference call between the NRC and FPL on October 12, 2007.

FPL Response

The following information is summarized in the table below:

- Minimum analyzed weld overlay thickness in inches for each weld overlay design at the nozzle side of the weld overlay.
- Barrier layer thickness in inches.
- Thickness of the associated pipe in inches
- Approximate percent (%) reduction in Ultrasonic (UT) coverage of the ISI volume due to the cast stainless steel safe-ends.

Weld Location	Minimum Analyzed Thickness	Barrier Layer Thickness Note (1)	Nominal Pipe Thickness	Reduction in UT coverage due to cast safe-end
Pressurizer Surge Line	0.54"	0.065"	1.312"	<10%
Hot Leg Surge Line	0.68"	0.065"	1.312"	<10%
Shutdown Cooling to A RCS	0.50"	0.065"	1.312"	<10%
Shutdown Cooling to B RCS	0.50"	0.065"	1.312"	<10%

Note 1: Barrier layer is not credited in the analysis of the Structural Weld Overlay (SWOL).