Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

December 3, 2008

L-2008-253
10 CFR 50.4
10CFR 50.55a

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

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Inservice Inspection Plans
Unit 1 Fourth Inspection Interval RR 4
Unit 2 Third Inspection Interval RR 11

Pursuant to 10CFR50.55a(a)(3)(i), FPL requests an alternative to the requirements of the Code required schedule of examinations of the reactor vessel closure head studs, nuts, and washers as specified in Table IWB-2500-1 (successive inspection intervals), Examination Category B-G-1 and IWB-2420 of ASME Section XI, 2001 Edition through 2003 Addenda (Unit 1) and 1998 Edition through 2000 Addenda (Unit 2). These relief requests are applicable to the RPV bolting of both St. Lucie Units 1 and 2.

Please contact Ken Frehafer at (772) 467-7748 if there are any questions about this submittal.

Sincerely,

Eric S. Katzman
Licensing Manager
St. Lucie Plant

Attachment

ESK/KWF

A047
NRR

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

--Alternative Provides Acceptable Level of Quality and Safety--

1. ASME Code Components Affected

Class 1 Reactor Pressure Vessel Bolting

Unit 1

Exam Cat.	Item No.	Examination Requirements
B-G-1	B6.10	Reactor Vessel Closure Head Nuts - Visual Examination, VT-1
	B6.20	Reactor Vessel Closure Studs - Volumetric Examination
	B6.50	Reactor Vessel Closure Washers, Bushings - Visual Examination, VT-1

Unit 2

Exam Cat.	Item No.	Examination Requirements
B-G-1	B6.10	Reactor Vessel Closure Head Nuts - Visual Examination, VT-1
	B6.20	Reactor Vessel Closure Studs, in place - Volumetric Examination
	B6.30	Reactor Vessel Closure Studs, when removed - Surface or Volumetric Examination
	B6.50	Reactor Vessel Closure Washers, Bushings - Visual Examination, VT-1

2. Applicable Code Edition and Addenda

Inservice inspections (ISI) are performed on piping to the requirements of the ASME Boiler and Pressure Vessel Code Section XI, 2001 Edition with 2003 Addenda (Unit 1) and 1998 Edition through 2000 Addenda (Unit 2) as required by 10CFR50.55a.

3. Applicable Code Requirement

Pursuant to 10CFR50.55a(a)(3)(i), FPL requests an alternative to the requirements of the Code required schedule of examinations of the reactor vessel closure head studs, nuts, and washers as specified in Table IWB-2500-1 (successive inspection intervals), Examination Category B-G-1 and IWB-2420 of ASME Section XI, 2001 Edition through 2003 Addenda (Unit 1) and 1998 Edition through 2000 Addenda (Unit 2). This relief request is applicable to the RPV bolting of both St. Lucie Units 1 and 2.

4. Reason for Request

ASME Section XI, Table IWB-2500-1, Category B-G-1, Extent and Frequency of Examination requires successive examinations of B-G-1 bolting will be the same as for the first interval, with nuts, studs, washers, and bushings allowed to be deferred to the end of the interval.

ASME Section XI IWB-2420(a) states, "The sequence of component examinations which was established during the first inspection interval shall be repeated during each successive inspection interval, to the extent practical."

In 1993, during the St. Lucie Unit 1 Second Inservice Inspection Interval and St. Lucie Unit 2 First Inservice Inspection Interval, FPL purchased an additional set of reactor vessel closure studs, nuts, and washers. With the addition, FPL currently has three complete sets of RPV bolting which are shared between the two units. The 3 sets have been identified with three designations "A", "B", and "C" to preclude intermixing. While in storage between outages, a set is cleaned and prepared for service. During a refueling outage in a specific unit, one complete set of RPV bolting (studs, nuts, and washers) is removed and placed into storage. The set that had been in storage is then placed into service. In between outages, the set that had been in service is cleaned, visually examined and prepared for service in accordance with FPL maintenance procedures. During the next refueling outage on the opposite unit, this same work is performed with the set of bolting that had been previously in one unit being placed into service in the sister unit. This swapping of the bolting has resulted in examinations being performed in one unit now being credited for the other.

Because FPL maintains three sets of RPV bolting components that are rotated and used in two units, it is not feasible to maintain an inspection cycle which corresponds with the periodic requirements of ASME Section XI, Table IWB-2412 for each unit. Simplifying the examination schedule for the three sets of RPV studs will ensure that FPL meets the intent of ASME Section XI, which is to examine all bolting for flaws. No RPV bolting will be installed for use that has not been examined at least once during the interval.

5. Proposed Alternative and Basis for Use

Proposed Alternative

FPL will continue to perform the ASME required NDE examinations of RPV bolting between scheduled refueling outages while the bolting is being cleaned and prepared for service in the opposite unit. Examinations will continue to be performed of all three sets of bolting during the St. Lucie Unit 1 fourth interval and the St. Lucie Unit 2 third interval and will be in accordance with Code Examination Category B-G-1 requirements and applicable relief requests. The bolting will continue on a ten-year schedule for examination.

Additionally, as part of the preparation for service process, FPL will continue to perform visual examinations of each bolting set in accordance with maintenance procedures.

Basis for Use

The requirement for bolting in the first interval at Unit 1 was to examine one-third of the bolting each period. The 1983 Edition with Summer 1983 Addenda, which was used for the Unit 1 Second Interval, and the 1980 Edition with Winter 1980 Addenda, which was used for the Unit 2 First Interval, of Section XI allow deferral of examinations of B-G-1 bolting. This wording shows that the examination of RPV bolting was considered to be important, but that they can all be performed at the same time. Additionally, later editions of ASME Section XI dropped the examination schedule requirement of one-third of the bolting each period.

The two St. Lucie units have inservice inspection intervals approximately 5 years apart with the RPV bolting sets moving from one unit to the other. FPL performs the required nondestructive examinations (NDE) of three complete sets of bolting instead of two.

FPL performed the required NDE of all three sets of RPV bolting during the St. Lucie Unit 1 third interval and the St. Lucie Unit 2 second interval utilizing this alternative. This alternative was previously authorized by the NRC during the third inspection interval in Unit 1 (Docket No. 50-335) and the second inspection interval in Unit 2 (Docket No. 50-389) in a Safety Evaluation dated August 25, 2000.

6. Duration of Proposed Alternative

FPL will continue to implement the alternative to the Code required schedule of examinations on the RPV bolting during the St. Lucie Unit 1 Fourth Inservice Inspection Interval, and the St. Lucie Unit 2 Third Inservice Inspection Interval.

7. Precedents

This alternative was previously authorized by the NRC during the third inspection interval in Unit 1 (Docket No. 50-335) and the Second Inspection Interval in Unit 2 (Docket No. 50-389) in a Safety Evaluation dated August 25, 2000.

8. Attachments to the Request

None