



**FEB 26 2007**

L-2007-027

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

Re: Florida Power and Light Company  
St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389

**Supplemental Response Regarding Inspection and Mitigation of Alloy  
82/182 Pressurizer Butt Welds**

By letter dated January 31, 2007, Florida Power and Light Company (FPL) notified the Nuclear Regulatory Commission (NRC) of the actions taken or planned for inspecting or mitigating Alloy 82/182 butt welds on pressurizer connections for St. Lucie Nuclear Plant, Units 1 and 2.

During a subsequent telephone conference call between NRC staff members and FPL management on February 16, 2007, FPL management agreed to make additional commitments pertaining to St. Lucie Unit 2 in regard to required elements of an enhanced leakage monitoring program.

Accordingly, the following information supplements the St. Lucie Unit 2 inspection and mitigation of Alloy 82/182 commitments provided in Attachment 2 to FPL letter (L-2007-013) dated January 31, 2007:

A110

### RCS Leakage Monitoring/Action Commitment

Until the inspection or mitigation activities of the pressurizer Alloy 600/82/182 butt weld locations at St. Lucie Unit 2 are complete, the following enhanced reactor coolant system (RCS) leakage monitoring requirements will be implemented by FPL:

1. FPL will perform daily measurements of unidentified RCS leakage.
2. FPL will take the following actions based on identification of unidentified leakage rates during steady state operating conditions greater than either of the following limits:
  - a. 0.25 gpm greater than a baseline value.  
Note: This baseline should be established after RCS leakage has stabilized within 7 days of full power operation after startup following the last bare metal visual examination of the pressurizer Alloy 600/82/182 butt weld locations.
  - b. 0.1 gpm increase between two consecutive daily measurements.
  - c. If unidentified leakage during steady state operating conditions exceeds either limit set forth in Section 2.a or 2.b, FPL shall identify the source of the RCS leak within 72 hours or shutdown the plant and perform bare metal visual examinations of all pressurizer Alloy 600/82/182 butt weld locations. Following the initiation of a shutdown, the plant must be in Hot Standby in 6 hours and in Cold Shutdown in the next 36 hours.
3. If the increase in unidentified RCS leakage rate is not maintained for 3 days, the requirement in Section 2.c for shutdown and/or pressurizer Alloy 600/82/182 butt weld bare metal examinations shall not apply.
4. If FPL determines that the unidentified leakage did not come from the pressurizer, the requirement in Section 2.c for shutdown and/or pressurizer Alloy 600/82/182 butt weld bare metal examination shall not apply.
5. If FPL determines that a quantity of the RCS leakage is attributable to a source other than the pressurizer and that quantity decreases the unidentified leakage below the thresholds set forth in Section 2.a or 2.b, the requirement in Section 2.c for shutdown and/or pressurizer Alloy 600/82/182 butt weld bare metal examination shall not apply.
6. FPL shall report results of any bare metal visual inspections required to NRC 60 days after plant start up.

The implementation schedule for the leakage monitoring program enhancements is to have full implementation including operator training achieved by March 1, 2007.

Regarding re-inspection frequency, FPL will re-inspect pressurizer butt welds with qualified UT methods every four years if not mitigated or removed from service.

If you have any questions concerning this submittal, please contact Rudy Gil at (561) 694-3370.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'J. A. Stall', with a stylized, cursive script.

J. A. Stall  
Senior Vice President, Nuclear and  
Chief Nuclear Officer

cc: Regional Administrator, Region II  
USNRC Project Manager, St. Lucie and Turkey Point  
Senior Resident Inspector, USNRC, St. Lucie