December 27, 2004

Mr. J. A. Stall
Senior Vice President, Nuclear and
Chief Nuclear Officer
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: ST. LUCIE PLANT, UNIT 2 - FIRST REVISED ORDER EA-03-009 RELAXATION REQUEST NO. 3 REGARDING EXAMINATION COVERAGE FOR REACTOR PRESSURE VESSEL HEAD PENETRATION NOZZLES, AND RELAXATION REQUEST NO. 4 REGARDING EXAMINATION COVERAGE OF REACTOR PRESSURE VESSEL HEAD BARE METAL VISUAL EXAMINATION (TAC NOS. MC3107 AND MC3108)

Dear Mr. Stall:

By letter dated May 6, 2004, as supplemented by letter dated November 3, 2004, Florida Power and Light Company (FPL) submitted two requests for relaxation from the inspection requirements of the First Revised U.S. Nuclear Regulatory Commission (NRC) Order EA-03-009 (Order) for St. Lucie Unit 2. Relaxation Request No. 3 requested relaxation from the requirements specified in Section IV, paragraph C.(5)(b)(i) of the Order for Control Element Drive Mechanism nozzles. Relaxation Request No. 4 requested relaxation from some of the requirements of Section IV, paragraph C.(5)(a) of the Order for the 100-percent bare metal visual examination.

The NRC staff has reviewed and evaluated the information provided in support of Relaxation Requests Nos. 3 and 4 and found that FPL demonstrated good cause for the requested relaxation. FPL has demonstrated that compliance with the Order would result in hardship without a compensating increase in the level of quality and safety. Therefore, pursuant to Section IV.F of the Order and Title 10 of the *Code of Federal Regulations*, Section 50.55a(a)(3), the NRC staff approves Relaxation Requests Nos. 3 and 4 for the fall 2004 refueling outage (SL2-15) and the spring 2006 refueling outage (SL2-16), and authorizes the proposed alternatives subject to the conditions outlined in the conclusion section of the enclosed safety evaluation. FPL agreed to these conditions in its letter dated November 3, 2004.

In addition, if there are significant adverse findings during the inspection in the SL2-15 outage, the NRC staff, at its discretion, may rescind or modify approval of the relaxation for the spring 2006 outage (SL2-16) inspection.

Further details on the bases for the NRC staff's conclusions are contained in the enclosed safety evaluation. If you have any questions regarding this issue, please contact Brendan Moroney at (301) 415-3974

Sincerely,

/RA J. E. Lyons for/

Edwin M. Hackett, Director
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No.: 50-389

Enclosure: Safety Evaluation

cc w/enclosures: See next page

Further details on the bases for the NRC staff's conclusions are contained in the enclosed safety evaluation. If you have any questions regarding this issue, please contact Brendan Moroney at (301) 415-3974

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELAXATION REQUESTS NOS. 3 AND 4

FLORIDA POWER AND LIGHT COMPANY

ST. LUCIE NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-389

1.0 INTRODUCTION

By letter dated May 6, 2004, as supplemented by letter dated November 3, 2004, Florida Power and Light Company (FPL) submitted two requests for relaxation from the inspection requirements of the First Revised U.S. Nuclear Regulatory Commission (NRC) Order EA-03-009 (Order) for St. Lucie Unit 2. Relaxation Request No. 3 requested relaxation from the requirements specified in Section IV, paragraph C.(5)(b)(i) of the Order for Control Element Drive Mechanism (CEDM) nozzles. Relaxation Request No. 4 requested relaxation from some of the requirements of Section IV, paragraph C.(5)(a) of the Order for the 100-percent bare metal visual examination.

2.0 REGULATORY EVALUATION

The First Revised NRC Order EA-03-009, issued on February 20, 2004, requires specific examinations of the reactor pressure vessel (RPV) head and vessel head penetration (VHP) nozzles of all pressurized-water reactor plants. Section IV.F of the Order states that requests for relaxation of the Order associated with specific penetration nozzles will be evaluated by the NRC staff using the procedure for evaluating proposed alternatives to the *American Society of Mechanical Engineers* Code in accordance with Title 10 of the *Code of Federal Regulations*, Section 50.55a(a)(3). Section IV.F of the Order states that a request for relaxation regarding inspection of specific nozzles shall address the following criteria: (1) the proposed alternative(s) for inspection of specific nozzles will provide an acceptable level of quality and safety, or (2) compliance with this Order for specific nozzles would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

For St. Lucie Unit 2, and similar plants determined to have a high susceptibility to primary water stress corrosion cracking (PWSCC) in accordance with Sections IV.A and IV.B of the Order, the following inspections are required to be performed every refueling outage in accordance with Sections IV.C.(5)(a) and IV.C.(5)(b) of the Order:

(a) Bare metal visual [BMV] examination of 100 percent of the RPV head surface (including 360E around each RPV head penetration nozzle). For RPV heads with the surface obscured by support structure interferences which are located at RPV head elevations downslope from the outermost RPV head penetration, a bare metal visual inspection of no less than 95 percent of the RPV head surface may

be performed provided that the examination shall include those areas of the RPV head upslope and downslope from the support structure interference to identify any evidence of boron or corrosive product. Should any evidence of boron or corrosive product be identified, the licensee shall examine the RPV head surface under the support structure to ensure that the RPV head is not degraded.

(b) For each penetration, perform a nonvisual NDE [non-destructive examination] in accordance with either (i), (ii), or (iii):

(i) Ultrasonic testing [UT] of the RPV head penetration nozzle volume (i.e., nozzle base material) from 2 inches above the highest point of the root of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) to 2 inches below the lowest point at the toe of the J-groove weld on a horizontal plane perpendicular to the nozzle axis (or the bottom of the nozzle if less than 2 inches [see Figure IV-1]); OR from 2 inches above the highest point of the root of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) to 1.0-inch below the lowest point at the toe of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) and including all RPV head penetration nozzle surfaces below the J-groove weld that have an operating stress level (including all residual and normal operation stresses) of 20 ksi tension and greater (see Figure IV-2). In addition, an assessment shall be made to determine if leakage has occurred into the annulus between the RPV head penetration nozzle and the RPV head low-alloy steel.

(ii) Eddy current testing [ECT] or dye-penetrant testing [PT] of the entire wetted surface of the J-groove weld and the wetted surface of the RPV head penetration nozzle base material from at least 2 inches above the highest point of the root of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) to 2 inches below the lowest point at the toe of the J-groove weld on a horizontal plane perpendicular to the nozzle axis (or the bottom of the nozzle if less than 2 inches [see Figure IV-3]); OR from 2 inches above the highest point of the root of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) to 1.0-inch below the lowest point at the toe of the J-groove weld (on a horizontal plane perpendicular to the nozzle axis) and including all RPV head penetration nozzle surfaces below the J-groove weld have an operating stress level (including all residual and normal operation stresses) of 20 ksi tension and greater (see Figure IV-4).

(iii) A combination of (i) and (ii) to cover equivalent volumes, surfaces, and leak paths of the RPV head penetration nozzle base material and J-groove weld as described in (i) and (ii). Substitution of a portion of a volumetric exam on a nozzle with a surface examination may be performed with the following requirements:

1. On nozzle material below the J-groove weld, both the outside diameter and inside diameter surfaces of the nozzle must be examined.

2. On nozzle material above the J-groove weld, surface examination of the inside diameter surface of the nozzle is permitted provided a surface examination of the J-groove weld is also performed.

3.0 TECHNICAL EVALUATION

3.1 Order Requirements for which Relaxation Is Requested

Section IV.C.(1) of the Order requires, in part, that the above inspections be performed every refueling outage for high susceptibility plants similar to St. Lucie Unit 2, using techniques specified in Paragraph IV.C.(5)(a) and Paragraph IV.C.(5)(b) of the Order.

Relaxation Request No. 3

FPL has requested relaxation from Section IV.C.(5)(b)(i) of the Order to perform UT of the RPV head penetrations inside the tube from 2 inches above the J-groove weld to the bottom of the penetration. Specifically, the relaxation is related to UT examination of the bottom portion (threaded area) of 89 CEDM penetration nozzles with the original J-groove weld configuration (2 nozzles were repaired in the spring 2003 outage). Relaxation is not requested for the remaining 11 RPV head penetrations, which include 10 incore instrumentation penetrations and one RPV head vent line.

Relaxation Request No. 4

FPL has requested relaxation from Section IV.C.(5)(a) of the Order to perform bare metal visual examination of 100 percent of the RPV head surface. Specifically, FPL is unable to comply with the 100 percent visual examination requirement due to inaccessibility of a small portion of the RPV head. The inaccessible areas are behind the twelve 6-inch wide shroud lugs and under the horizontal reflective metal insulation (RMI) support legs.

Both of these relaxations were requested for the next two refueling outages (SL2-15 and SL2-16) with an 18-month operating cycle.

3.2 FPL's Proposed Alternative Method

Relaxation Request No. 3

FPL proposed to perform UT examination from 2 inches above the weld to below the weld to the extent possible. Nozzles that cannot be UT examined at least 0.50 inch below the weld would receive a supplemental outside diameter (OD) non-visual NDE (either PT or ECT) extending to the maximum extent practical but not less than 0.5 inch below the lowest point at the toe of the J-groove weld. Based on the previous inspection, as documented in a letter dated May 11, 2003, 18 of its CEDM nozzles received less than 0.50 inch of UT coverage below the weld.

Relaxation Request No. 4

FPL proposed to achieve substantial compliance with the 100 percent requirement by conducting a bare metal visual examination of the RPV head surface except for a small portion of inaccessible area, which is less than 1 percent of the total.

3.3 FPL's Basis for Relaxation

Relaxation Request No. 3

FPL stated that the CEDM RPV nozzles have inside-threaded ends that are used to permanently attach externally-threaded guide cones. According to FPL, this design condition will prevent UT examination of CEDM nozzles from collecting data to the end of the nozzles. FPL stated that inspecting the non-pressure boundary area of the threaded portion of the CEDM nozzles would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. In particular, the threaded guide cones would have to be removed and special tooling would have to be developed to inspect the threaded nozzle surface in order to implement an inspection in accordance with Section IV, paragraph C.(5)(b)(i) of the Order.

As an alternative to the UT examination of Order Section IV.C.(5)(b)(i), compliance with the Order can be achieved by ECT or PT of the wetted surfaces of each J-groove weld and RPV head penetration nozzle base material as described in Order Section IV.C.(2)(b)(ii). However, FPL stated that its inspection vendor has not yet qualified the capability to perform ECT, and preparation and performing PT would only be applicable to the OD of the CEDM nozzles. Performing ECT and PT on the outside surfaces would increase personnel radiation exposure significantly. FPL stated that implementation of surface examinations in accordance with Section IV.C.(1)(b)(ii) of the Order, creates a hardship.

FPL discussed the hardship specifically in letters dated May 11, 2003, and November 3, 2004. It stated that during its inspection of the CEDM nozzles in the previous outage, a supplemental PT examination was performed on nine nozzles that had the least UT examination coverage from the bottom of the J-groove weld. The PT examination was performed on the OD of the nozzles that overlapped the UT coverage area and extended to the bottom of the nozzle. No recordable indications on any of the nine nozzles were detected. FPL also stated that performing PT on the aforementioned nine nozzles resulted in a radiation exposure of approximately 2.45 man-Rem.

For the upcoming outage (SL2-15), FPL proposed to perform a supplemental examination (non-visual NDE) on nozzles that receive less than 0.50-inch UT coverage below the weld. Based on this criterion, 18 of its existing nozzles would require a supplemental examination.

FPL's request for the reduction of the examination coverage area is supported by a flaw tolerance approach. FPL stated that its approach will provide an acceptable level of quality and safety with respect to reactor vessel structural integrity and leak integrity. The basis for this approach is provided in Westinghouse Electric Co., LLC, WCAP-16038-P, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operations: St. Lucie Unit 2," Revision 0, March 2003.

FPL stated that for the limiting nozzle location, a postulated axial through-wall flaw at a distance of 0.28 inch from the bottom of the weld, will take 18 months of operation to reach the weld. Therefore, FPL asserts that a UT inspection of an area at least 0.50 inch below the weld will support one 18-month period of operation with a sufficient margin. FPL proposed that for all the nozzles that have UT examination coverage less than 0.50 inch below the weld, a nonvisual NDE will be performed on the OD of the nozzles to the extent practical. FPL stated in its analysis that there will be sufficient safety margin to support an 18-month operating cycle.

FPL stated that according to its analysis, the stresses on the OD surface of the nozzle decrease rapidly as the distance below the weld increases. For the nozzles with limited UT coverage, the hoop stresses were reported by FPL to be bounded by 31 ksi on the inside diameter (ID) and 30 ksi on the OD at 0.41 inch below the weld for nozzles with an intersection angle with the head of 33.8 degrees. Stresses are lower for nozzles with higher intersection angles.

FPL stated that additional efforts to achieve the Order-required examination area (below the weld) will result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Relaxation Request No. 4

FPL stated that inspecting 100 percent of the BMV examination required by the Order would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. FPL stated that the lack of access created by the presence of the twelve 6-inch shroud lugs and the horizontal RMI panel support legs prevent a 100-percent BMV examination. FPL stated that improving access to these inaccessible areas for visual examination would require removal of the horizontal panel support legs and would require major disassembly of the CEDM stacks and lifting of the shroud and shroud ring to allow access for the destructive RMI removal, causing a substantial increase in radiation dose and the potential for damage to removed components.

FPL stated that, during the past two refueling outages (SL2-13 and SL2-14), a bare metal visual examination was performed of the accessible portions of the RPV head inside the RMI, including 360E visual examination around each RPV head penetration nozzle, to identify leakage from the 102 penetrations. FPL stated that there were no indications of staining leading downhill on the head surface or evidence of leakage identified around the 102 RPV head penetrations in both of the outage inspections.

In its submittal, FPL stated that the visual examination performed during the previous outages included approximately 99 percent of the RPV head excluding the aforementioned inaccessible areas. The inspection included a 100-percent inspection (360E) of the RPV head and RPV nozzle interface areas. Head surfaces immediately uphill and downhill of the inaccessible areas were examined for evidence of boric acid leakage under the vertical insulation panels at twelve shroud lug locations, and horizontal RMI panel legs. FPL stated that no evidence of corrosive products were identified.

FPL concluded that a hardship or unusual difficulty without a compensating increase in level of quality and safety would result if physical modifications were performed to achieve the complete coverage of the RPV head base material as required by the order.

3.4 Evaluation

Relaxation Request No. 3

The NRC staff's review of this request was based on criterion (2) of Section IV.F of the Order, which states:

> Compliance with this Order for specific nozzles would result in hardship or unusual

difficulty without a compensating increase in the level of quality and safety.

Within the context of the proposed alternative examination of the RPV penetration nozzles, FPL has demonstrated the hardship that would result from implementing examinations to the bottom-end of these nozzles. The hardship identified by FPL includes the nozzle configuration and the limitation of the UT probe used for nozzle examination. In a letter dated May 11, 2003, FPL stated that it performed a supplemental examination (PT) on nine of its nozzles in the previous outage (SL2-14) inspection and resulted in a radiation exposure of approximately 2.45 man-Rem. In a letter dated November 3, 2004, FPL stated that the proposed supplemental examination on 18 nozzles using manual PT could result in a radiation dose of approximately 4.9 man-Rem. The staff agrees that the nozzle's threaded area that mates with the guide cones makes inspection of these nozzles in accordance with the Order very difficult and would create a hardship. This evaluation focuses on the issue of whether there is a compensating increase in the level of quality and safety such that these nozzles should be inspected in accordance with the Order despite the hardship.

FPL's request to relax the examination requirement of the nozzle base material to at least 0.50 inch below the weld on the downhill side of the CEDM nozzles is supported by FPL's crack growth analysis (Westinghouse Guidance WCAP-1608-P) which indicates that it would take at least 5 years for a postulated flaw in the uninspected area to propagate into the weld. Results from the previous outage inspection showed that Nozzle No. 88, received the most limiting UT coverage of only 0.30 inch below the weld on the downhill side. Based on FPL's analysis, a postulated through-wall flaw could propagate only 0.28 inch in an 18-month operating cycle.

During this refueling outage (SL2-15), the 18 nozzles with less than 0.50-inch UT coverage below the weld will receive a supplemental non-visual NDE (PT or ECT) on the OD surface of the nozzles. This will provide additional safety margin to support an 18-month operating period. The remaining 71 CEDM nozzles will receive a UT coverage of a minimum distance of 0.50 inches below the weld on the downhill side. FPL's analysis had shown that it will take a postulated through-wall crack 5 years to propagate 0.50 inch towards the weld. Therefore, there are sufficient safety margins to support an 18-month operating cycle for these nozzles.

In a letter dated May 11, 2003, FPL documented its findings from the previous inspection, which detected two nozzles with OD axial indications. Both nozzles were repaired. In a letter dated October 12, 2004, the NRC staff issued a Request for Additional Information (RAI) regarding the previous inspection results and crack growth analysis. In a letter dated November 3, 2004, FPL provided its response to the staff's RAI, which stated that the flaws detected in the previous outage were characterized as PWSCC and typical of other cracks found in the industry, and that all cracks were contained completely within the inspection region proposed by this relaxation request. It further stated that recent industry field data did not invalidate the WCAP-1608-P analysis and that the results of the crack growth analysis are still valid.

FPL's crack growth analysis applied a methodology consistent with that described in Footnote 1 of the Order, as provided in the Electric Power Research Institute Report, "Material Reliability Program (MRP) Crack Growth Rates for Evaluating Primary Water Stress Corrosion Cracking (PWSCC) of Thick Wall Alloy 600 Material (MRP-55), Revision 1." The NRC staff has completed a preliminary review of the crack growth formula but has not yet made a final assessment regarding the acceptability of the report. If the NRC staff finds that the crack growth formula in industry report MRP-55 is unacceptable, FPL shall revise its analysis that justifies

relaxation of the Order within 30 days after the NRC informs FPL of an NRC-approved crack growth formula. If FPL's revised analysis shows that the crack growth acceptance criteria are exceeded prior to the end of the current operating cycle, this relaxation is rescinded and FPL shall, within 72 hours, submit to the NRC written justification for continued operation. If the revised analysis shows that the crack growth acceptance criteria are exceeded during the subsequent operating cycle, FPL shall, within 30 days, submit the revised analysis for NRC review. If the revised analysis shows that the crack growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle, FPL shall, within 30 days, submit a letter to the NRC confirming that its analysis has been revised. Any future crack growth analyses performed for this and future cycles for RPV head penetrations must be based on an acceptable crack growth rate formula. FPL accepted this condition by letter dated November 3, 2004.

FPL did not provide a bounding stress calculation directly applicable to all nozzles with coverage less than 0.5 inch below the weld. Instead, FPL provided stress analyses of four intersection angles that represent the range of intersection angles on the RPV head. From the information provided by FPL, the hoop stress at operating conditions for a nozzle with an intersection angle of 29.1E with the RPV head is 31 ksi on the ID surface and 29.3 ksi on the OD surface at 0.41 inch below the weld. Other information provided by FPL indicates that the stress levels decrease as the nozzle intersection angle with the RPV head increases, and the stress levels generally decrease rapidly as the distance increases beyond 0.41 inch below the J-groove weld. Among the 18 nozzles that will be supplemented with a nonvisual NDE, the bounding nozzle has an intersection angle of 33.8E. Therefore, the above assessment is bounding for these 18 nozzles. Based on a review of the information provided by FPL, the areas uninspected by either UT or a supplemental NDE have a low operational hoop stress level. Even if a crack initiated in the uninspected area, there is sufficient safety margin such that the crack will likely not propagate into the weld within 18 months. Therefore, performance of inspection below the J-groove weld according to the Order requirements would result in hardship without a compensating increase in the level of quality and safety.

Relaxation Request No. 4

The NRC staff's review of this request was based on criterion (2) of Section IV.F of the Order, which states:

> Compliance with this Order for specific nozzles would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Within the context of FPL's proposed alternative examination to inspect less than 100 percent of the RPV head outer surface, it has demonstrated that hardship would result from implementing a visual examination of 100 percent of the RPV head. The hardship presented by FPL is the inaccessible area on the RPV head because of twelve 6-inch shroud lugs and the horizontal RMI panel support legs. The staff agrees that the access under the vertical insulation panels at the twelve shroud lug locations and the horizontal RMI support legs makes inspection of the RPV head in accordance with the Order very difficult, and that removal of the necessary interferences to accomplish the examination required by the Order would involve a hardship. This evaluation focuses on the issue of whether there is a compensating increase in the level of quality and safety such that the RPV head should be inspected in accordance with the Order despite the hardship.

The purpose of the BMV examination is to inspect for evidence of head penetration nozzle leakage as well as evidence of degradation on the vessel head surface. Since the examination will cover approximately 99 percent of the head surface, including all areas adjacent to each of the head penetration nozzles and 100 percent (360E) of the RPV head penetrations at the nozzle/RPV head interface, any evidence of nozzle leaks should be detected. In addition, FPL's inspection will cover those portions of the RPV head which are immediately upslope and downslope of the inaccessible areas. Evidence of boric acid leaks or corrosion would be visible in the examined areas. Therefore, the proposed alternative provides reasonable assurance of the structural integrity of the RPV head.

Because the alternative proposed by FPL in the relaxation request provides reasonable assurance of the structural integrity of the component, the staff finds that FPL has demonstrated hardship without a compensating increase in the level of quality and safety.

Relaxation Request Nos. 3 and 4

In its submittal, FPL requested the relaxation be approved for the next two refueling outages (SL2-15 and SL2-16). In a letter dated October 12, 2004, the NRC staff proposed the following condition relative to the two-cycle duration as described below.

> If there are significant adverse findings during the inspection in the SL2-15 outage, the NRC staff, at its discretion, may rescind or modify approval of the relaxation for the SL2-16 outage inspection.

The staff's concern is that adverse findings could potentially challenge the validity of FPL's crack growth analysis which formed the basis for its relaxation requests. FPL accepted this condition by letter dated November 3, 2004. The staff finds that the physical condition of the vessel head configuration and nozzles will not change during the next two cycles, and that all the hardship and conditions discussed will remain the same. Therefore, the staff concludes that authorization of these relaxation requests for a duration of two outages under the condition imposed will not adversely affect the effectiveness of the Order-required inspections.

4.0 CONCLUSION

The staff concludes that FPL's proposed alternative examination of 89 CEDM RPV head penetration nozzles to a level at least 0.50 inch below the J-groove weld (more area will be covered if possible) on the downhill side of the nozzles, and the proposed alternative examination coverage of approximately 99 percent bare metal visual examination of the RPV head to include 100 percent of the RPV nozzles 360E at the nozzle/head interface and the areas upslope and downslope of the aforementioned inaccessible areas, provides reasonable assurance of the structural integrity of the RPV head, VHP nozzles, and welds. Further inspection of the VHP nozzles or RPV head surface in accordance with Section IV.C.(1), of the Order would result in hardship without a compensating increase in the level of quality and safety. Therefore, pursuant to Section IV, paragraph F of the Order, the staff authorizes the proposed relaxation and alternative inspection for all CEDM head penetration nozzles and the RPV head surface at St. Lucie Unit 2, for two operating cycles, subject to the following two conditions agreed upon by FPL:

1. If the NRC staff finds that the crack growth formula in industry report MRP-55 is

unacceptable, FPL shall revise its analysis that justifies relaxation of the Order within 30 days after the NRC informs FPL of an NRC-approved crack growth formula. If FPL's revised analysis shows that the crack growth acceptance criteria are exceeded prior to the end of the current operating cycle, this relaxation is rescinded and FPL shall, within 72 hours, submit to the NRC written justification for continued operation. If the revised analysis shows that the crack growth acceptance criteria are exceeded during the subsequent operating cycle, FPL shall, within 30 days, submit the revised analysis for NRC review. If the revised analysis shows that the crack growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle, FPL shall, within 30 days, submit a letter to the NRC confirming that its analysis has been revised. Any future crack growth analyses performed for this and future cycles for RPV head penetrations must be based on an acceptable crack growth rate formula.

2. If there are significant adverse findings during the inspection in the SL2-15 outage, the NRC staff, at its discretion, may rescind or modify approval of the relaxation for the SL2-16 outage inspection.

Principal Contributor: Z. Fu, NRR

Date: December 27, 2004