



Crystal River Nuclear Plant  
Docket No. 50-302  
Operating License No. DPR-72

January 23, 2008  
3F0108-09

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Subject: Crystal River Unit 3 – Summary of Ultrasonic Examination Results of Structural Weld Overlays

- References:
1. CR-3 to NRC letter 3F0907-05, dated September 13, 2007, "Crystal River Unit 3 - Relief Request #07-003-RR, Revision 1, and Response to Request for Additional Information"
  2. NRC to CR-3 letter, dated November 15, 2007, "Crystal River Unit 3 - Relief Request #07-003-RR Regarding Structural Weld Overlays (TAC NO. MD5552)"

Dear Sir:

As committed in Reference 1 and reiterated in Reference 2, Florida Power Corporation (FPC), doing business as Progress Energy Florida, Inc., Crystal River Unit 3 (CR-3), is submitting a summary of ultrasonic examination performed on structural weld overlays completed during Crystal River Unit 3 Refueling Outage 15 (R15).

CR-3 satisfactorily completed structural weld overlays for all Alloy 600/82/182 pressurizer butt weld locations during R15. CR-3 also performed overlay techniques on the hot leg surge nozzle. That weld overlay was completed, but partially removed due to indications in the repair metal. A Performance Demonstrative Initiative (PDI) inspection was performed on the remaining weld configuration with acceptable results.

Ultrasonic examinations were completed on November 24, 2007. This submittal is being made within 60 days of the completion of these examinations and fulfills the regulatory commitment made in Reference 1.

This submittal contains no new regulatory commitments.

If you have any questions regarding this submittal, please contact Mr. Dennis Herrin, Acting Supervisor, Licensing and Regulatory Programs at (352) 563-4633.

Sincerely,

Stephen J. Cahill  
Engineering Manager

*B.J. Foster (acting)*

SJC/seb

Attachment

xc: NRR Project Manager  
Regional Administrator, Region II  
Senior Resident Inspector

Progress Energy Florida, Inc.  
Crystal River Nuclear Plant  
15760 W. Power Line Street  
Crystal River, FL 34428

A110  
A047  
NRR

**PROGRESS ENERGY FLORIDA, INC.**

**CRYSTAL RIVER UNIT 3**

**DOCKET NUMBER 50 - 302 / LICENSE NUMBER DPR - 72**

**Attachment**

**Summary of Ultrasonic Examination Results of Structural Weld Overlays  
Performed During R15**

## **Summary of Ultrasonic Examination Results of Structural Weld Overlays Performed During R15**

### **Pressurizer Spray Nozzle Weld Overlay Examination (Weld No. B4.1.1A)**

A preemptive full structural reinforcement weld overlay of the pressurizer spray nozzle was performed during Refueling Outage 15 (R15). Several nondestructive examinations (NDE) were performed as required by the examination procedures for this component. Liquid Penetrant (PT) and Magnetic Particle (MT) surface examinations resulted in no recordable indications and no exam limitations.

Ultrasonic (UT) examinations of the applied overlay and adjacent base material were accomplished utilizing personnel and procedures qualified in accordance with ASME Code Section XI, 1995 Edition including Addenda through 1996, Appendix VIII, Supplement 11, with alternatives used to comply with the Performance Demonstrative Initiative (PDI) Program. These examinations resulted in no reportable indications and 100% coverage of both the preservice inspection (PSI) and inservice inspection (ISI) examination volumes were obtained.

### **Pressurizer Relief Nozzle Overlay Examination (Weld No. B4.1.4A)**

A preemptive full structural reinforcement weld overlay of the pressurizer relief nozzle was performed during R15. Several NDE examinations were performed as required by the examination procedures for this component. PT surface examinations resulted in no recordable indications and no exam limitations.

UT examinations of the applied overlay and adjacent base material were accomplished utilizing personnel and procedures qualified in accordance with ASME Code Section XI, 1995 Edition including Addenda through 1996, Appendix VIII, Supplement 11, with alternatives used to comply with the PDI Program. These examinations resulted in no reportable indications and 100% coverage of both the PSI and ISI examinations volumes were obtained.

### **Pressurizer Relief Nozzle Overlay Examination (Weld No. B4.1.6A)**

A preemptive full structural reinforcement weld overlay of the pressurizer relief nozzle was performed during R15. Several NDE examinations were performed as required by the examination procedures for this component. PT surface examinations resulted in no recordable indications and no exam limitations.

UT examinations of the applied overlay and adjacent base material were accomplished utilizing personnel and procedures qualified in accordance with ASME Code Section XI, 1995 Edition including Addenda through 1996, Appendix VIII, Supplement 11, with alternatives used to comply with the PDI Program. These examinations resulted in no reportable indications and 100% coverage of both the PSI and ISI examinations volumes were obtained.

**Pressurizer Relief Nozzle Overlay Examination (Weld No. B4.1.8A)**

A preemptive full structural reinforcement weld overlay of the pressurizer relief nozzle was performed during R15. Several NDE examinations were performed as required by the examination procedures for this component. PT surface examinations resulted in no recordable indications and no exam limitations.

UT examinations of the applied overlay and adjacent base material were accomplished utilizing personnel and procedures qualified in accordance with ASME Code Section XI, 1995 Edition including Addenda through 1996, Appendix VIII, Supplement 11, with alternatives used to comply with the PDI Program. These examinations resulted in no reportable indications and 100% coverage of both the PSI and ISI examinations volumes were obtained.

**Pressurizer Surge Nozzle Overlay Examination (Weld No. B4.1.10A)**

A preemptive full structural reinforcement weld overlay of the pressurizer surge nozzle was performed during R15. Several NDE examinations were performed as required by the examination procedures for this component. PT surface examinations resulted in no recordable indications and no exam limitations.

UT examinations of the applied overlay and adjacent base material were accomplished utilizing personnel and procedures qualified in accordance with ASME Code Section XI, 1995 Edition including Addenda through 1996, Appendix VIII, Supplement 11, with alternatives used to comply with the PDI Program. These examinations resulted in no reportable indications and 100% coverage of both the PSI and ISI examinations volumes were obtained.