



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

January 5, 2012  
3F0112-05

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

**Subject:** Crystal River Unit 3 – Response to Request for Additional Information to Support NRC Instrumentation and Controls Branch Technical Review of the CR-3 Extended Power Uprate LAR (TAC No. ME6527)

- References:**
1. CR-3 to NRC letter dated June 15, 2011, "Crystal River Unit 3 – License Amendment Request #309, Revision 0, Extended Power Uprate" (Accession No. ML112070659)
  2. NRC to CR-3 letter dated December 7, 2011, "Crystal River Unit 3 Nuclear Generating Plant - Request for Additional Information for Extended Power Uprate License Amendment Request (TAC No. ME6527)" (Accession No. ML11326A231)

Dear Sir:

By letter dated June 15, 2011, Florida Power Corporation (FPC), doing business as Progress Energy Florida, Inc., requested a license amendment to increase the rated thermal power level of Crystal River Unit 3 (CR-3) from 2609 megawatts (MWt) to 3014 MWt. On December 7, 2011, the NRC provided a request for additional information (RAI) required to complete its evaluation of the CR-3 Extended Power Uprate (EPU) License Amendment Request (LAR).

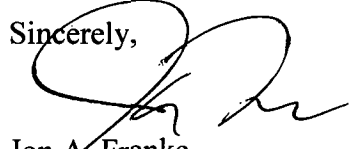
The attachment, "Response to Request for Additional Information to Support NRC Instrumentation and Controls Branch Technical Review of the CR-3 EPU LAR," provides the CR-3 formal response to the RAI needed to support the Instrumentation and Controls Branch (EICB) technical review of the CR-3 EPU LAR.

In support of the EICB technical review RAI response, an enclosure, "Drawings of ICCMS, FCS, and ADV Indication and Controls," provides current design diagrams that show the controls and indications in the main control room available to the operator to monitor and control the Inadequate Core Cooling Mitigation System, Fast Cooldown System, and atmospheric dump valves.

This correspondence contains no new regulatory commitments.

If you have any questions regarding this submittal, please contact Mr. Dan Westcott, Superintendent, Licensing and Regulatory Programs at (352) 563-4796.

Sincerely,



Jon A. Franke  
Vice President  
Crystal River Nuclear Plant

JAF/gwe

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

A001  
NRC

Attachment: Response to Request for Additional Information to Support NRC Instrumentation and Controls Branch Technical Review of the CR-3 EPU LAR

Enclosure: Drawings of ICCMS, FCS, and ADV Indication and Controls

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

**STATE OF FLORIDA**

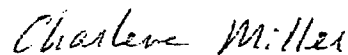
**COUNTY OF CITRUS**

Jon A. Franke states that he is the Vice President, Crystal River Nuclear Plant for Florida Power Corporation, doing business as Progress Energy Florida, Inc.; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

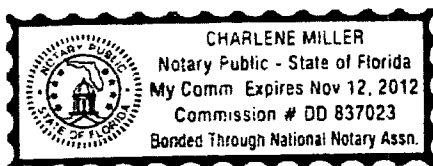


Jon A. Franke  
Vice President  
Crystal River Nuclear Plant

The foregoing document was acknowledged before me this 5<sup>th</sup> day of January, 2012, by Jon A. Franke.



Signature of Notary Public  
State of Florida



(Print, type, or stamp Commissioned  
Name of Notary Public)

Personally Known ☒ -OR- Produced Identification ☐

**FLORIDA POWER CORPORATION**

**CRYSTAL RIVER UNIT 3**

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

**ATTACHMENT**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
TO SUPPORT NRC INSTRUMENTATION AND CONTROLS  
BRANCH TECHNICAL REVIEW OF THE CR-3 EPU LAR**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION TO  
SUPPORT NRC INSTRUMENTATION AND CONTROLS BRANCH  
TECHNICAL REVIEW OF THE CR-3 EPU LAR**

By letter dated June 15, 2011, Florida Power Corporation (FPC), doing business as Progress Energy Florida, Inc., requested a license amendment to increase the rated thermal power level of Crystal River Unit 3 (CR-3) from 2609 megawatts (MWt) to 3014 MWt. On December 7, 2011, the NRC provided a request for additional information (RAI) required to complete its evaluation of the CR-3 Extended Power Uprate (EPU) License Amendment Request (LAR). The following provides the CR-3 formal response to the RAI needed to support the Instrumentation and Controls Branch (EICB) technical review of the CR-3 EPU LAR. For tracking purposes, each item related to this RAI is uniquely identified as EICB X-Y, with X indicating the RAI set and Y indicating the sequential item number.

Instrumentation and Controls Branch (EICB)

**10. (EICB 1-1)**

Provide the diagrams or photographs of all inadequate core cooling mitigation system (ICCMS), fast cooldown system, and atmospheric dump valves related controls and indications in the main control room, showing the information the operators have available to monitor and control.

***Response***

Current design diagrams are provided in the attached enclosure, "Drawings of ICCMS, FCS, and ADV Indication and Controls," that show the controls and indications in the main control room available to the operator to monitor and control the ICCMS, Fast Cooldown System, and atmospheric dump valves.

**FLORIDA POWER CORPORATION**

**CRYSTAL RIVER UNIT 3**

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

**ENCLOSURE**

**DRAWINGS OF ICCMS, FCS, AND ADV INDICATION AND  
CONTROLS**

**THIS PAGE IS AN  
OVERSIZED DRAWING OR  
FIGURE,  
THAT CAN BE VIEWED AT THE  
RECORD TITLED:**

**DRAWING NO.: E-201-151  
“ELECTRICAL  
MAIN CONTROL BOARD  
PRIMARY SECONDARY  
AUXILIARIES ASSEMBLY”,  
REV. 12, SHEET 3**

**WITHIN THIS PACKAGE**

**D-01**

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RECORD TITLED:**

**DRAWING NO.: E-201-151  
“ELECTRICAL  
MAIN CONTROL BOARD  
PRIMARY SECONDARY  
AUXILIARIES ASSEMBLY”,  
REV. 11, SHEET 5**

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**D-02**



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**DRAWING NO.: E-201-151  
“ELECTRICAL  
MAIN CONTROL BOARD  
PRIMARY SECONDARY  
AUXILIARIES ASSEMBLY”,  
REV. 20, SHEET 8**

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**D-03**

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**DRAWING NO.: E-201-426  
“ELECTRICAL  
MAIN CONTROL BOARD  
PRIMARY & SECONDARY  
AUXILIARIES  
SECTION ABOVE ANNUNCIATORS”,  
REV. 1**

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**D-04**

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FIGURE,  
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RECORD TITLED:**

**DRAWING NO.: E-224-048  
“ELECTRICAL  
MAIN CONTROL BOARD  
ANNUNCIATOR WINDOW  
ENGRAVINGS”,  
REV. 59**

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**D-05**

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RECORD TITLED:**

**DRAWING NO.: E-201-141  
“ELECTRICAL  
MAIN CONTROL BOARD  
INTEG. CONT. SYSTEM ASSY.”,  
REV. 11, SHEET 14**

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**D-06**

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**DRAWING NO.: E-201-141  
“ELECTRICAL  
MAIN CONTROL BOARD  
INTEG. CONT. SYSTEM ASSY.”,  
REV. 8, SHEET 8**

**WITHIN THIS PACKAGE**

**D-07**