



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

September 17, 2012
3F0912-01

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

Subject: Crystal River Unit 3 – Extended Power Uprate LAR Supplement and Response to Second Request for Additional Information to Support NRC Nuclear Performance and Code Review Branch (SNPB) Technical Review (TAC No. ME6527)

- References:**
1. FPC to NRC letter dated June 15, 2011, “Crystal River Unit 3 – License Amendment Request #309, Revision 0, Extended Power Uprate” (ADAMS Accession No. ML112070659)
 2. Email from S. Lingam (NRC) to D. Westcott (CR-3) dated May 8, 2012, “Crystal River, Unit 3 EPU LAR - Boric Acid RAIs from SNPB (TAC NO. ME6527)”
 3. NRC to FPC letter dated August 2, 2012, “Crystal River Unit 3 Nuclear Generating Plant – Request For Additional Information For Extended Power Uprate License Amendment Request (TAC No. ME6527)” (ADAMS Accession No. ML12202A060)
 4. FPC to NRC letter dated October 11, 2011, “Crystal River Unit 3 – Response to Request for Additional Information to Support NRC Reactor Systems Branch Acceptance Review of the CR-3 Extended Power Uprate LAR (TAC No. ME6527)” (ADAMS Accession No. ML11286A092)

Dear Sir:

By letter dated June 15, 2011, Florida Power Corporation (FPC) 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 (Reference 1). On May 8, 2012, via electronic mail, the NRC provided a draft request for additional information (RAI) needed to support the SNPB technical review of the CR-3 Extended Power Uprate (EPU) License Amendment Request (LAR) (Reference 2). During the June 2012 AREVA NP, Inc. safety analysis audit, CR-3 discussed the draft RAI with the NRC to confirm an understanding of the information being requested. On August 2, 2012, the NRC provided a formal RAI required to complete its evaluation of the CR-3 EPU LAR (Reference 3).

Attachment A, “AREVA Document ANP-3156(P) – Crystal River 3 EPU Boric Acid Precipitation RAI Responses (Proprietary),” provides the formal response to the RAI.

Attachment A contains information that is considered proprietary. AREVA NP, Inc., as the owner of the proprietary information, has executed the affidavit provided in Attachment B, “AREVA Affidavit for Withholding Proprietary Information from Public Disclosure,” and states that the identified information has been classified as proprietary, is customarily held in confidence, and not made available to the public. AREVA requests that the identified proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390(a)(4).

Attachment C, "AREVA Document ANP-3156(NP) – Crystal River 3 EPU Boric Acid Precipitation RAI Responses (Non-Proprietary)," is a non-proprietary copy of the formal RAI responses with the proprietary information redacted.

Attachment D, "Supplement – Summary of the Reactor Coolant System Hot Leg Blowdown Line Design," provides a summary description of the Reactor Coolant System (RCS) blowdown line modification including a decision flowchart that illustrates how the two boron precipitation mitigation methods; RCS hot leg injection and RCS blowdown; are utilized during a loss of coolant accident (LOCA).

Attachment E, "Markup Pages of the CR-3 EPU No Significant Hazards Considerations Evaluation," provides the affected pages noting the licensing basis change request provided herein. These changes are in addition to the changes provided in FPC to NRC letter dated October 11, 2011 (Reference 4).

Attachment F, "Revised Pages of the CR-3 EPU No Significant Hazards Considerations Evaluation," provides a clean typed revision of the affected pages noting the licensing basis change request provided herein. These changes are in addition to the changes provided in FPC to NRC letter dated October 11, 2011 (Reference 4).

Additionally, this correspondence revises one of the licensing basis changes proposed for the requested EPU license amendment (Reference 1):

"Credit the new LPI System HLI line as the primary method of boron precipitation mitigation during a LOCA, thereby eliminating the need for the two active methods currently credited and allowing deletion of CR-3 OL License Condition 2.C.11."

The licensing basis change request is revised as follows (change in *italics*):


"Credit the new LPI System HLI line *and the new RCS hot leg blowdown line* as the primary *methods* of boron precipitation mitigation during a LOCA, thereby eliminating the need for the two active methods currently credited and allowing deletion of CR-3 OL License Condition 2.C.11."

The information provided herein does not change the intent or the justification for the requested EPU license amendment (Reference 1). FPC has evaluated the new RCS hot leg blowdown line modification and determined that this supplement does not alter the conclusion that the proposed license amendment does not involve a Significant Hazards Consideration. Revised wording of the 10 CFR 50.92(c) evaluation provided in the June 15, 2011 submittal (Reference 1) is included in Attachments E and F.

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/krw

Attachments:

- A. AREVA Document ANP-3156(P) – Crystal River 3 EPU Boric Acid Precipitation RAI Responses (Proprietary)
- B. AREVA Affidavit for Withholding Proprietary Information from Public Disclosure
- C. AREVA Document ANP-3156(NP) – Crystal River 3 EPU Boric Acid Precipitation RAI Responses (Non-Proprietary)
- D. Supplement – Summary of the Reactor Coolant System Hot Leg Blowdown Line Design
- E. Markup Pages of the CR-3 EPU No Significant Hazards Considerations Evaluation
- F. Revised Pages of the CR-3 EPU No Significant Hazards Considerations Evaluation

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; 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 17th day of September, 2012, by Jon A. Franke.



Signature of Notary Public
State of Florida
NOTARY PUBLIC-STATE OF FLORIDA
Sheryl M. McCullough
Commission # EE011293
Expires: JULY 25, 2014
BONDED THRU ATLANTIC BONDING CO., INC.

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

Personally Produced
Known X -OR- Identification _____

FLORIDA POWER CORPORATION

CRYSTAL RIVER UNIT 3

DOCKET NUMBER 50-302 / LICENSE NUMBER DPR-72

ATTACHMENT B

**AREVA AFFIDAVIT FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE**

AFFIDAVIT

COMMONWEALTH OF VIRGINIA)
) ss.
COUNTY OF CAMPBELL)

1. My name is Gayle F. Elliott. I am Manager, Product Licensing, for AREVA NP Inc. (AREVA NP) and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by AREVA NP to determine whether certain AREVA NP information is proprietary. I am familiar with the policies established by AREVA NP to ensure the proper application of these criteria.

3. I am familiar with the AREVA NP information contained in the report ANP-3156(P), entitled "Crystal River 3 EPU Boric Acid Precipitation RAI Responses," dated September 2012, and referred to herein as "Document." Information contained in this Document has been classified by AREVA NP as proprietary in accordance with the policies established by AREVA NP for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by AREVA NP and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information".

6. The following criteria are customarily applied by AREVA NP to determine whether information should be classified as proprietary:

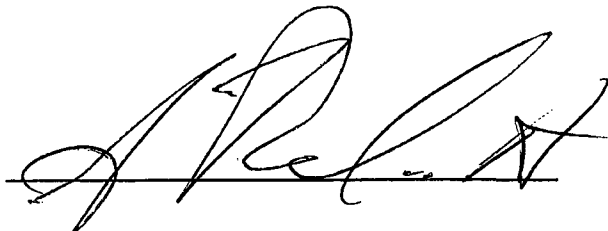
- (a) The information reveals details of AREVA NP's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA NP.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA NP in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA NP, would be helpful to competitors to AREVA NP, and would likely cause substantial harm to the competitive position of AREVA NP.

The information in the Document is considered proprietary for the reasons set forth in paragraphs 6(b) and 6(c) above.

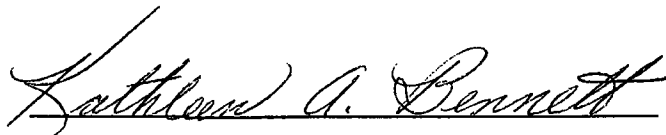
7. In accordance with AREVA NP's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside AREVA NP only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. AREVA NP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.



SUBSCRIBED before me this 13th
day of September 2012.



Kathleen A. Bennett
NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES: 8/31/2015
Reg. #110864

