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Manager, Regulatory Assurance  
Arkansas Nuclear One

1CAN051605

May 24, 2016

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

SUBJECT: Update to Evaluations Described Response to Request for  
Additional Information 15(a)  
Reactor Vessel Internals Aging Management Program Plan  
Arkansas Nuclear One, Unit 1  
Docket No. 50-313  
License No. DPR-51

Dear Sir or Madam:

Entergy Operations, Inc. (Entergy) submitted the Arkansas Nuclear One, Unit 1 (ANO-1) Reactor Vessel Internals Aging Management Program Plan (Reference 1) to fulfill a commitment made as part of the ANO-1 License Renewal Application. The plan identified the reactor vessel internals components that must be included for aging management review and identified the augmented inspection plan for those components.

The NRC issued a Request for Additional Information (RAI) via Reference 2. Reference 3 provided the Entergy responses to the RAI, with a commitment to provide the requested evaluations associated with RAI 15(a) by September 2015. RAI 15 is related to the Applicant / Licensee Action Item 7 of the NRC Staff Safety Evaluation (SE) for MRP-227-A. This action requires the development of plant-specific analyses to demonstrate reactor vessel internal components that may be fabricated from cast austenitic stainless steel, martensitic stainless steel or precipitation hardened stainless steel, will maintain their functionality during the period of extended operation.

Reference 5 provided the response to RAI 15(a). The Reference 5 response included both a proprietary and non-proprietary version of AREVA Document ANP-3417NP, Revision 0, *MRP-227-A Applicant / Licensee Action Item #7 Analysis for Arkansas Nuclear One Unit 1*. Following initial review, the NRC questioned some of the proprietary markings (also called "redactions") in the report. Entergy and AREVA subsequently completed further review of the report in an attempt to minimize the amount of material to be redacted. Attachment 1 is the proprietary version of AREVA Document ANP-3417P, updated to minimize redactions. The respective non-proprietary version of the AREVA document, ANP-3417NP, is included in Attachment 2.

**Attachment 1 to this letter contains proprietary information**  
**Attachment 1 is withheld from public disclosure per 10 CFR 2.390.**

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NRR

AREVA requests that the proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390. AREVA has provided Entergy with authorization to provide the proprietary information. An affidavit by the information owner, AREVA, supporting the request for non-disclosure is provided in Attachment 3. Therefore, Entergy requests that Attachment 1 of this submittal be withheld from public disclosure in accordance with 10 CFR 2.390.

The evaluations presented in this submittal were developed by AREVA for both ANO-1 and Oconee 1, 2 and 3, and are similar to those that were approved by the NRC in the SE for the Oconee station (Reference 4). It should be noted that Reference 4 addresses other Applicant / Licensee Action Items in addition to Item 7.

The regulatory commitment included in Attachment 4 of the original Entergy response to RAI 15(a) (Reference 5) is repeated in the letter for completeness. This commitment is listed in Attachment 4 of this letter.

In accordance with 10 CFR 50.91(b)(1), a copy of this application is being provided to the designated Arkansas state official.

If you have any questions or require additional information, please contact me.

Sincerely,

**ORIGINAL SIGNED BY STEPHENIE L. PYLE**

SLP/dbb

Attachments:

1. AREVA Document ANP-3417P, Revision 1, *MRP-227-A Applicant / Licensee Action Item #7 Analysis for Arkansas Nuclear One Unit 1*, PROPRIETARY
2. AREVA Document ANP-3417NP, Revision 1, *MRP-227-A Applicant / Licensee Action Item #7 Analysis for Arkansas Nuclear One Unit 1*, NON-PROPRIETARY
3. Affidavit
4. List of Regulatory Commitments

**Attachment 1 to this letter contains proprietary information  
Attachment 1 is withheld from public disclosure per 10 CFR 2.390.**

REFERENCES:

1. Entergy letter to NRC, *Reactor Vessel Internals Aging Management Program Plan*, dated May 20, 2014 (1CAN051403) (ML14141A554)
2. NRC email to Entergy, dated December 12, 2014, *Requests for Additional Information – Reactor Vessel Internals Aging Management Plan* (TAC No. MF4201) (1CNA121403) (ML14349A787)
3. Entergy letter to NRC, *Responses to Request for Additional Information – Reactor Vessel Internals Aging Management Program Plan*, dated February 10, 2015 (1CAN021503) (ML15043A102)
4. NRC letter to Duke Energy Carolinas. LLC, *Oconee Nuclear Station, Units 1, 2, and 3, Issuance of Amendments Regarding Inspection Plan for Reactor Vessel Internals* (TAC NOs ME9024, ME9025, and ME9026), dated June 19, 2015 (ML15050A671)
5. Entergy letter dated September 28, 2015, *Evaluations Described Response to Request for Additional Information 15(a) – Reactor Vessel Internals Aging Management Program Plan*, (1CAN091503) (ML15278A023)
6. Entergy letter dated December 30, 2015, *Evaluations Described Response to Request for Additional Information 3, 5, 6(a), and 7 – Reactor Vessel Internals Aging Management Program Plan*, (1CAN121502) (ML16004A178)

cc: Mr. Marc L. Dapas  
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NRC Senior Resident Inspector  
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U. S. Nuclear Regulatory Commission  
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Radiation Control Section  
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**Attachment 1 to this letter contains proprietary information**  
**Attachment 1 is withheld from public disclosure per 10 CFR 2.390.**

**Attachment 3 to**

**1CAN051605**

**Affidavit**

## AFFIDAVIT

COMMONWEALTH OF VIRGINIA    )  
  ) ss.  
CITY OF LYNCHBURG                )

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

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

3. I am familiar with the AREVA information contained in the topical draft report ANP-3417P, Revision 1, "MRP-227-A Applicant/Licensee Action Item #7 Analysis for Arkansas Nuclear One Unit 1," and referred to herein as "Document." Information contained in this Document has been classified by AREVA as proprietary in accordance with the policies established by AREVA Inc. 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 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 to determine whether information should be classified as proprietary:

- (a) The information reveals details of AREVA'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.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA, would be helpful to competitors to AREVA, and would likely cause substantial harm to the competitive position of AREVA.

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

7. In accordance with AREVA'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 only as required and under suitable agreement providing for nondisclosure and limited use of the information.

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

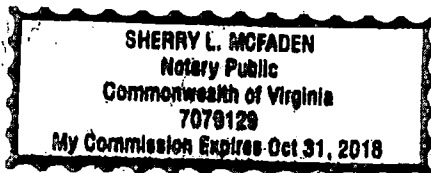
9. The foregoing statements are true and correct to the best of my knowledge,  
information, and belief.

Maris E. Ryan

SUBSCRIBED before me this 6<sup>th</sup>  
day of May, 2016.

Sherry L. McFaden

Sherry L. McFaden  
NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA  
MY COMMISSION EXPIRES: 10/31/18  
Reg. # 7079129



**Attachment 4 to**  
**1CAN051605**  
**List of Regulatory Commitments**



### LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (check one)		SCHEDULED COMPLETION DATE
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Entergy commits to record the serial numbers and heat numbers stamped on the vent valve bodies currently installed in the ANO-1 RV internals when the core barrel assembly is removed during the initial MRP-227 inspections.	✓		Completion of 1R26 (Fall 2016)