



Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802  
Tel 479-858-3110

**Jeremy G. Browning**  
Vice President, Operations  
Arkansas Nuclear One

OCAN081303

August 28, 2013

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

SUBJECT: First Six-Month Status Report in Response to March 12, 2012,  
Commission Order Modifying Licenses with Regard to Reliable Spent  
Fuel Pool Instrumentation (Order Number EA-12-051)  
Arkansas Nuclear One – Units 1 and 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6

- REFERENCES:
1. NRC Order Number EA-12-051, *Order to Modify Licenses with Regard to Reliable Spent Fuel Pool (SFP) Instrumentation*, dated March 12, 2012 (OCNA031207) (ML12054A679)
  2. NRC Interim Staff Guidance JLD-ISG-2012-03, *Compliance with Order EA-12-051, Reliable SFP Instrumentation*, Revision 0, dated August 29, 2012 (ML12221A339)
  3. Nuclear Energy Institute (NEI) 12-02, *Industry Guidance for Compliance with NRC Order EA-12-051, "To Modify Licenses with Regard to Reliable SFP Instrumentation,"* Revision 1, dated August 2012 (ML12240A307)
  4. Entergy letter to NRC, *Initial Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable SFP Instrumentation (Order Number EA-12-051)*, dated October 26, 2012 (OCAN101204) (ML12305A274)
  5. Entergy letter to NRC, *Overall Integrated Plan (OIP) in Response to March 12, 2012, Commission Order Modifying License with Regard to Reliable SFP Instrumentation (Order Number EA-12-051)*, dated February 28, 2013 (OCAN021303) (ML13063A015)

Dear Sir or Madam:

On March 12, 2012, the NRC issued an order (Reference 1) to Entergy Operations, Inc. (Entergy). Reference 1 was immediately effective and directs Entergy to install reliable SFP level instrumentation. Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (Reference 2) and an OIP pursuant to Section IV, Condition C. Reference 2 endorses industry guidance document NEI 12-02, Revision 1 (Reference 3). Reference 4 provided the initial status report regarding SFP instrumentation, and Reference 5 provided the OIP.

Reference 1 requires submission of a status report at six-month intervals following submittal of the OIP. Reference 3 provides direction regarding the content of the status reports. The purpose of this letter is to provide the first six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1. The attached report provides an update of milestone accomplishments since the last status report, including any changes to the compliance method, schedule, or need for relief and the basis, if any.

This letter contains no new regulatory commitments. Should you have any questions regarding this submittal, please contact Stephenie Pyle at 479.858.4704.

I declare under penalty of perjury that the foregoing is true and correct; executed on August 28, 2013.

Sincerely,

***Original signed by Jeremy G. Browning***

JGB/nbm

Attachment: Arkansas Nuclear One Units 1 and 2 First Six Month Status Report for the Implementation of Order EA-12-051, Order to Modify Licenses with Regard to Reliable SFP Instrumentation

cc: Mr. Steven A. Reynolds  
Regional Administrator  
U. S. Nuclear Regulatory Commission, Region IV  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

U. S. Nuclear Regulatory Commission  
Attn: Director, Office of Nuclear Reactor Regulation  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

NRC Senior Resident Inspector  
Arkansas Nuclear One  
P.O. Box 310  
London, AR 72847

U. S. Nuclear Regulatory Commission  
Attn: Mr. Kaly Kalyanam  
One White Flint North MS O-8 B1  
11555 Rockville Pike  
Rockville, MD 20852

U. S. Nuclear Regulatory Commission  
Attn: Jessica A. Kratchman  
One White Flint North MS 9-D2  
11555 Rockville Pike  
Rockville, MD 20852

**Attachment to**

**0CAN081303**

**Arkansas Nuclear One (ANO) Units 1 and 2 (ANO-1 and ANO-2) First Six Month  
Status Report for the Implementation of Order EA-12-051, Order to Modify  
Licenses with Regard to Reliable Spent Fuel Pool (SFP) Instrumentation**

## **ANO-1 and ANO-2 First Six Month Status Report for the Implementation of Order EA-12-051, Order to Modify Licenses with Regard to Reliable SFP Instrumentation**

### **Introduction**

Entergy Operations, Inc. developed an overall integrated plan (OIP) provided via Reference 1 for ANO-1 and ANO-2, documenting the requirements to install reliable spent fuel pool instrumentation (SFPI), in response to Reference 2. This attachment provides an update of milestone accomplishments since submittal of the OIP, including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any.

### **Milestone Accomplishments**

The following milestone(s) have been completed since the development of the OIP (Reference 1) and are current as of July 31, 2013.

- Although not part of the original milestone schedule, NRC requests for additional information (RAIs) were received June 26, 2013 (Reference 3) and responded to on July 25, 2013 (Reference 4). The responses to the RAIs were added to the milestone schedule. The addition of this milestone and target completion date does not impact the Order implementation date.

### **Milestone Schedule Status**

The following provides an update to the milestone schedule to support the OIP. This section provides the activity status of each item, and the expected completion date noting any change. The dates are planning dates subject to change as design and implementation details are developed.

<b>Milestone</b>	<b>Target Completion Date</b>	<b>Activity Status</b>	<b>Revised Target Completion Date</b>
ANO-1 Reliable SFPI Design Modification Package Developed/Issued	October 2013	In Progress	
ANO-1 Reliable SFPI Installed	1R25 Fall 2014 Refueling Outage	Pending	1R25 Early 2015 Refueling Outage (see Note)
ANO-2 Reliable SFPI Design Modification Package Developed/Issued	July 2014	Pending	
ANO-2 Reliable SFPI Installed	2R24 Fall 2015 Refueling Outage	Pending	
NRC RAIs (Received June 26, 2013)	July 25, 2013	Submitted	Not Applicable

Note: The ANO-1 Refueling Outage 1R25 (second refueling outage after submittal of the OIP) original schedule date of Fall 2014 has slipped to early 2015 due to the 1R24 (Spring 2013) stator drop event recovery and outage extension.

### **Changes to Compliance Method**

There are no significant changes to the compliance method as documented in the OIP (Reference 1). OIP changes and/or updates based on current design and implementation plans are considered minor in nature and are summarized as follows:

- Reference OIP Section 2 (*Schedule*). ANO-1 compliance / implementation / target completion date has slipped as noted in the above Milestone Schedule Status. This is a change of the physical date only while maintaining the required implementation association with the second refueling outage after submittal of the OIP.
- Reference OIP Section 6 (*Instrument Channel Design Criteria*), Section 7 (*Arrangement*), and Attachments 1 and 2 (*SFPI Simplified Approximate Locations and Cable Routing*). These sections state that in the SFP area, cables shall be routed in “rigid metal conduit.” As already identified in the RAI response (Reference 4), this is updated to “protective metal raceway” to open up the generic use of raceway (versus conduit) to allow use of wire/tube tracks with convenient removable covers to better facilitate installation.

### **Need for Relief/Relaxation and Basis for the Relief/Relaxation**

ANO expects to comply with the order implementation date and no relief/relaxation is required at this time.

### **Open Items from OIP and Draft Safety Evaluation**

None

### **Potential Draft Safety Evaluation (SE) Impacts**

The NRC has not issued a draft SE for either unit; therefore, there are no potential impacts to the draft SE identified at this time.

## References

1. *OIP in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated February 28, 2013 (OCAN021303) (ML13063A015)
2. NRC Order Number EA-12-051, *Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation*, dated March 12, 2012 (OCNA031207) (ML12054A679)
3. *RAI for the OIP in Response to the Commission Order Modifying Licenses with Regard to Requirements for Reliable SFP Instrumentation (Order Number EA-12-051)*, dated June 26, 2013, (OCNA061308) (ML13156A313)
4. *Response to RAI for the OIP in Response to the Commission Order Modifying Licenses with Regard to Requirements for Reliable SFP Instrumentation*, dated July 25, 2013 (OCAN071301) (ML13207A269)