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1CAN011504

January 16, 2015

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

SUBJECT: Commitment Change Notification for NRC Order EA-12-049  
Arkansas Nuclear One – Unit 1  
Docket No. 50-313  
License No. DPR-51

- REFERENCES:
1. NRC Letter to Entergy, *Arkansas Nuclear One, Unit 1 – Relaxation of the Schedule Requirements for Order EA-12-049 “Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (BDBEEs)”* (TAC No. MF0942), dated May 20, 2014 (1CNA051402) (ML14114A697)
  2. Entergy letter to NRC, *Request for Implementation Date Relief in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for BDBEEs (NRC Order EA-12-049)*, dated April 7, 2014 (1CAN041401) (ML14098A114)

Dear Sir or Madam:

On March 12, 2012, the NRC issued order EA-12-049 to Entergy Operations, Inc. (Entergy). The order was immediately effective and directed Entergy to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a BDBEE.

In response to order EA-12-049 Entergy requested a relaxation of the order due date for Arkansas Nuclear One, Unit 1 (ANO-1) as documented in Reference 2, and it was subsequently granted by the NRC as documented in Reference 1. As part of the request, (Reference 2) Entergy made two specific commitments and is withdrawing these commitments as discussed with the NRC Staff on January 14, 2015, and justified in the attachment to this letter.

There are no new regulatory commitments in this letter. If you have any questions regarding this request, please contact Stephenie Pyle at 479.858.4704.

I declare under penalty of perjury that the foregoing is true and correct; executed on January 16 2015.

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Sincerely,

**ORIGINAL SIGNED BY JEREMY G. BROWNING**

JGB/nbm

Attachment: ANO-1 Commitment Change Justification

cc: Mr. Marc L. Dapas  
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U. S. Nuclear Regulatory Commission, Region IV  
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NRC Senior Resident Inspector  
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U. S. Nuclear Regulatory Commission  
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**Attachment to**

**1CAN011504**

**Arkansas Nuclear One, Unit 1 (ANO-1) Commitment Change Justification**

## **ANO-1 Commitment Change Justification**

### **Background:**

In a letter to the NRC (Reference 2) Entergy Operations, Inc. (Entergy) made two specific commitments as part of the request for NRC order EA-12-049 "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Event (BDBEEs)," schedule relaxation. The two commitments were:

1. As an interim measure, instructions will be in place by startup from the ANO-1 refueling outage 1R25 for connecting a portable diesel generator to the 2B5 load center should the ANO-2 2B6 load center not be capable of being powered for some unforeseen reason during an extended loss of alternating current power.
2. The 2B5 load center modification will be the only aspect of the ANO-1 Diverse and Flexible Coping Strategies (FLEX) that will not be in full compliance with NRC Order EA-12-049 by the ordered schedule date of February 2015. Additionally, the other aspects of compliance with NRC Order EA-12-049 will be complete by 1R25 (e.g., FLEX Support Guidelines, training, equipment staged, and modifications installed).

Both these commitments were scheduled "Prior to ANO-1 Startup from 1R25 (February 2015)."

### **Commitment Change:**

Entergy has determined that ANO-1 implementation of the NRC order EA-12-049 prior to implementation at ANO-2 is a less optimal action than a coordinated ANO-1 and ANO-2 implementation. As a result, the two commitments discussed above are withdrawn. The basis for this change is discussed below.

### **Basis:**

NRC Order EA-12-049 requires the development, implementation, and maintenance of guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a BDBEE. Section II of this order dictates the need to have guidance and strategies available to prevent fuel damage in the reactor and spent fuel pit should the loss of power, motive force, and normal access to the ultimate heat sink affect all units at a site simultaneously.

ANO is a two-unit site with significant physical and procedural interdependencies. The two units share certain common structures, systems, components (such as water tanks, electrical cross connections, and station blackout diesel generator), and common operational staff resources for BDBEEs.

Compliance with the ANO-1 commitments to the NRC requires full implementation for ANO-1 with the exception of the 2B5 load center modification. This results in an approximate six-month interim period that the two units would not be consistently configured for responding to a BDBEE at the site. A specific example is the ANO qualified condensate storage tank (QCST). The QCST is a seismically qualified tank common to both units which contains a protected

water volume sufficient for both units to utilize until time is available to transfer to alternate water sources under current licensing basis conditions. Entergy is working to qualify the QCST in order to credit a larger volume of water for both units to meet FLEX needs. Currently, with ANO-1 in a FLEX condition and ANO-2 complying with the current license basis procedures, the sharing of the volume of water available in the QCST would challenge operators to make alternate line-ups in the time required. A similar issue also exists for the ANO-1 borated water storage tank and the ANO-2 refueling water tank qualification for crediting the availability of the volume of water.

While most of the physical modifications are unit-specific, due to the interdependency of needed systems and structures, the interim period would require special procedures and training that would create operational challenges on both units with respect to BDBEE mitigation philosophy. Additionally the creation of a six-month interim mixed implementation would create training, procedural, and regulatory issues while attempting to establish different requirements on the same piece of equipment. An example of this is the commitment for an interim action to connect a portable diesel generator to the 2B5 load center.

The elimination of the two ANO-1 stated commitments would allow both ANO-1 and ANO-2 to be in compliance with the NRC Order EA-12-049 requirements at the same time. The justification for this commitment withdrawal is based on implementation of a more consistent and overall site response to a BDBEE. The ANO-1 full order compliance date is startup from the 2R24 (October 2015).

### **Conclusion:**

As described above, compliance with the previous commitments results in undue burden to the operators by creating two separate operating environments, ANO-1 implementing FLEX while ANO-2 is using normal emergency operating procedures. Entergy has determined that withdrawal of the commitments is a better approach by allowing implementation of a more consistent and overall site response to a BDBEE. Accordingly, Entergy is withdrawing the commitments to the NRC identified above.

### **References:**

1. NRC Letter to Entergy, *Arkansas Nuclear One, Unit 1 – Relaxation of the Schedule Requirements for Order EA-12-049 “Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for BDBEEs”* (TAC No. MF0942), dated May 20, 2014 (1CNA051402) (ML14114A697)
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