

## **NRR-DMPSPeM Resource**

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**From:** Regner, Lisa  
**Sent:** Thursday, May 24, 2018 9:54 AM  
**To:** TIM SCHENK  
**Cc:** Bridget Johns; Regner, Lisa  
**Subject:** Re: DRAFT RAI RCIC Piping Modification (L-2018-LLA-0029)  
**Attachments:** DRAFT-RBS-RCIC RAI - to licensee (Regner, Lisa).docx

### Final Request for Additional Information (L-2017-LLS-0002)

On May 22, 2018, the U.S. Nuclear Regulatory Commission (NRC) staff sent Entergy (the licensee) a draft Request for Additional Information (RAI). These RAI questions relate to a license amendment request (LAR) dated January 29, 2018, for a license amendment to modify the Reactor Core Isolation Cooling (RCIC) piping. Entergy informed the NRC staff that a clarification call was not needed. Mr. Tim Schenk agreed to provide a response to this final RAI on or before June 25, 2018. If Entergy does not respond by this date, the requested completion date for the LAR decision may not be met by the NRC.

The NRC staff also informed the licensee that a publicly available version of this final RAI would be placed in the NRC's Agencywide Documents Access and Management System (ADAMS). While this RAI is considered 'final' based on the draft questions sent on May 22, the NRC staff may have more questions to complete its review.

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By letter dated January 29, 2018, (ADAMS package Accession No. ML18029A187), the licensee requested an amendment to the Operating License for River Bend Station. The proposed amendment requests to relocate the RCIC piping. The NRC staff requires additional information to complete its review of this request as detailed in the attached document.

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**From:** Regner, Lisa  
**Sent:** Tuesday, May 22, 2018 10:21 AM  
**To:** TIM SCHENK  
**Cc:** Regner, Lisa  
**Subject:** DRAFT RAI RCIC Piping Modification (L-2018-LLA-0029)

Hi Tim,

Attached are the draft questions associated with your RCIC piping relocation amendment request.

Please let me know if you need a clarification call.

Thank you,

Lisa

**Hearing Identifier:** NRR\_DMPS  
**Email Number:** 390

**Mail Envelope Properties** (CY1PR09MB11465097E8592AEE8E339FF9E56A0)

**Subject:** Re: DRAFT RAI RCIC Piping Modification (L-2018-LLA-0029)  
**Sent Date:** 5/24/2018 9:53:54 AM  
**Received Date:** 5/24/2018 9:53:57 AM  
**From:** Regner, Lisa

**Created By:** Lisa.Regner@nrc.gov

**Recipients:**

"Bridget Johns" <bjohns@entergy.com>  
Tracking Status: None  
"Regner, Lisa" <Lisa.Regner@nrc.gov>  
Tracking Status: None  
"TIM SCHENK" <tschenk@entergy.com>  
Tracking Status: None

**Post Office:** CY1PR09MB1146.namprd09.prod.outlook.com

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DRAFT-RBS-RCIC RAI - to licensee (Regner, Lisa).docx		21873

**Options**

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**Expiration Date:**  
**Recipients Received:**

REQUEST ADDITIONAL INFORMATION (RAI)  
FOR RIVER BEND STATION

RELOCATION OF THE REACTOR CORE ISOLATION COOLING (RCIC) INJECTION POINT

By letter dated January 29, 2018, Entergy submitted a license amendment application. The licensee stated that the 6-inch Reactor Core Isolation Cooling (RCIC) system injection line is routed to the 20-inch Feedwater A Loop by tapping into the 10-inch Reactor Heat Removal system shutdown cooling mode return line to feedwater inside the main steam tunnel just south of the jet impingement wall. The staff noted that the piping system has to be qualified in accordance with ASME Code Section III requirements and meet 10 CFR 50.55(a) and relevant GDCs. The staff requests the licensee to address the following items related to the piping analysis:

- a. Piping analysis model: The staff noted that this change affects 3 different systems. Figure 3A.24-1 of USAR provides RCIC piping system used in analysis of water hammer loads. The staff noted that the piping model does not appear to address the RHR piping. Please explain. Also, describe the piping model used for other load cases.
- b. Please provide the piping stress summary for RCIC and RHR systems.
- c. Please discuss any thermal mode or transient changes and loading condition changes since the Cumulative Usage Factors (CUFs) and stresses are shown to lessen from previous values as specified below:
  1. Table 3.6A-9a of the USAR lists the CUFs and the stresses for the feedwater system inside containment. The NRC staff noted that there is no routing change inside containment. Please explain what causes the reduction in stresses and CUFs.
  2. Table 3.6A-10a of the USAR lists the stresses for the feedwater system outside of containment. The NRC staff noted that there is no routing change for the feedwater system outside of the containment. Please explain what causes the reduction in stresses.