

**From:** DAVANT, GUY H <GDAVANT@entergy.com>  
**Sent:** Monday, March 07, 2016 2:52 PM  
**To:** Guzman, Richard  
**Cc:** BROADBENT, GREGORY E; WEICKS, JOSEPH G; Ford, Bryan  
**Subject:** [External\_Sender] Responses to Second Round of RAIs Pertaining to Entergy Relief Request RR-EN-15-1

Rich,

On February 24, 2016, Entergy received from NRC via e-mail a second set of RAIs pertaining to Entergy Relief Request RR-EN-15-1 - Proposed Alternative to Use ASME Code Case N-789-1 (FLEET SUBMITTAL - MF6340-MF6349). As per our telephone conversation on March 1, 2016, provided below are the RAIs and Entergy's responses to them. Please let me know if you have any additional questions.

Thanks!

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By letter dated June 5, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15159A200), as supplemented by letter dated January 29, 2016, (ADAMS Accession No. ML16029A341), Entergy requested the Nuclear Regulatory Commission (NRC) to authorize relief from Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for the specific repair/replacement activity identified in Relief Request RR EN-15-1, Revision 1. Relief Request RR EN-15-1, Revision 1 provides an alternative repair method for degraded moderate energy Class 2 and 3 piping using ASME Code Case N-789-1 at Arkansas Nuclear One, Units 1 & 2; Grand Gulf Nuclear Station, Unit 1; James A. Fitzpatrick Nuclear Power Plant; Indian Point Energy Center, Units 2 & 3; Palisades Nuclear Plant; Pilgrim Nuclear Power Station; River Bend Station, Unit 1; and Waterford 3 Steam Electric Station.

To complete its review, the NRC staff requests the following additional information regarding the licensee's responses to NRC request for additional information (RAI) (ADAMS Accession No. ML15341A166) in the licensee's January 29, 2016 letter.

1. In response to RAI Number 1, the applicant stated, "For piping systems which must remain functional during refueling outages, Entergy will remove Type A and partial-structural Type B reinforcing sleeves prior to the refueling outage that is scheduled at the end of the fuel cycle during which the repair is performed." The NRC staff notes that Type A and partial-structural Type B reinforcing sleeves do not apply to Code Case N-789-1. Code Case N-789-1 involves the use of reinforcement pads. Provide an explanation for this inconsistency and modify the RAI response accordingly.

### **Response**

Entergy agrees with the NRC's comment. The corrected response to this RAI is as follows: "For piping systems which must remain functional during refueling outages, Entergy will remove the reinforcing pad(s) prior to the refueling outage that is scheduled at the end of the fuel cycle during which the repair is performed."

2. In response to RAI Number 2, the applicant stated, in part, "In conclusion, Entergy would only perform the proposed alternative due to the existence of one or more of the conditions described above, or other unforeseen conditions that Entergy determines to be prudent to use the Code Case instead of

performing a code repair.” Describe how the statement “...or other unforeseen conditions that Entergy determines to be prudent to use the Code Case instead of performing a code repair” supports the licensee request pursuant to 10 CFR 50.55a(z)(2).

### **Response**

The subject statement applies to Entergy’s response to previous RAI Number 3. Based on the NRC’s comment, Entergy has revised its response to delete the statement in the last paragraph as follows: “...or other unforeseen conditions that Entergy determines to be prudent to use the Code Case instead of performing a code repair.” The revised complete response is provided below:

Raw water piping systems, such as Service Water, may experience wall thinning due to internal degradation. When this occurs, Entergy’s preference would be to perform a code repair in accordance with IWA-4000 of ASME Section XI. IWA-4000 repairs, such as pipe replacement and internal weld repair, are preferable because they are approved by the NRC in 10 CFR 50, permanent, and do not require a supplemental replacement during the next refueling outage. However, performance of IWA-4000 repairs is not always possible or may result in unnecessary plant risk for one or more of the following reasons:

- Longer repair times may challenge the Technical Specification (TS) completion time or necessitate a plant shutdown because the repair cannot be performed within the TS completion time.
- Isolation of the affected piping to facilitate performance of an IWA-4000 repair may result in a plant configuration or condition which sufficiently increases the likelihood of an initiating event (e.g., plant scram, loss of power, turbine trip) or plant coping capability resulting in an unacceptable level of plant risk. Equipment out-of-service considerations (e.g., degree of available redundancy for performing the safety function served by out-of-service equipment, effects on key safety functions, duration of out-of-service condition, likelihood of an initiating event or accident that would require performance of the safety function, etc.) are evaluated in accordance with Entergy procedures.
- An IWA-4000 repair, such as pipe replacement or internal weld repair, may not be possible due to excessive leakage by a valve seat or inability to isolate the degraded piping.
- Replacement materials may not be available or additional time may be needed to develop plans for performing an IWA-4000 repair or replacement. The proposed alternative provides adequate time for evaluation, design, material procurement, planning, and scheduling of an appropriate permanent repair or replacement of the defective piping, considering the impact on system availability.

In conclusion, Entergy would only perform the proposed alternative due to the existence of one or more of the conditions described above.