NRR-PMDAPEm Resource

From: Koenick, Stephen
Sent: Tuesday, April 26, 2016 4:13 PM
To: CLARK, ROBERT W
Cc: Khanna, Meena; Wengert, Thomas; Dijamco, David
Subject: Request for Additional Information - Relief Request ANO2-ISI-018 and ANO2-ISI-019 (CAC No.: MF7271 and MF7272)
Attachments: RAI - ANO Unit 2 - Relief Requests ANO2-ISI-018 and ANO2-ISI-019 (MF7271 and MF7272) 4-15-2016 sk.docx

Dear Mr. Clark,

Thank you for your response to my email dated April 20, 2016. This email represents the formal issuance of the request for additional information (attached and unchanged from the April 20, 2016 email) related to Entergy relief requests ANO2-ISI-018 and ANO2-ISI-019. It is my understanding that Entergy has determined that ANO2-ISI-019 is no longer necessary and that Entergy will formally withdraw this relief as part of your response to the request for addition information. It is my understanding as a result of this withdrawal, Entergy will not need to respond to the questions as they pertain to ANO2-ISI-019.

Furthermore, Entergy has committed to respond to this request within 30 days of this email.

Please let me know if you have any questions.

Regards

Steve

Stephen S. Koenick
Senior Project Manager
Plant Licensing Branch IV-2 (LPL4-2)
Division of Operating Reactor Licensing (DORL)
Office of Nuclear Reactor Regulation (NRR)
US Nuclear Regulatory Commission
(301) 415-6631
Stephen.Koenick@nrc.gov

From: CLARK, ROBERT W [mailto:RCLARK@entergy.com]
Sent: Tuesday, April 26, 2016 12:26 PM
To: Koenick, Stephen <Stephen.Koenick@nrc.gov>
Subject: [External_Sender] RE: DRAFT Request for Additional Information - Relief Request ANO2-ISI-018 and ANO2-ISI-019

Steve,

ANO has reviewed the draft RAIs that were transmitted via the email below. In reviewing the RAIs and the subject relief requests it has been determined that ANO will withdrawal relief request ANO2-ISI-019. This relief request is related to a weld examination performed on one of the Shutdown Cooling Heat Exchangers. ANO submitted the relief shortly after

the last ANO-2 refueling outage instead of waiting until the end of the ISI interval (ends March 25, 2020). Subsequent to that submittal ANO has made the decision to replace the Shutdown Cooling Heat Exchangers during the next refueling outage (2017). Therefore there is no need for this relief request at this time. All the pre-service ISI exams will be performed at the appropriate time. ANO will formally withdraw that relief request as part of our RAI response.

In reviewing the RAIs in light of relief request ANO2-ISI-018, ANO understands what information the NRC is requesting in RAIs 1, 2, and 3. It appears RAI 4 is applicable to relief request ANO2-ISI-019 and therefore could be deleted.

ANO believes it can provide the responses to the RAIs and the withdrawal of ANO2-ISI-019 within 30 days of the formal transmittal of the RAIs.

If you have any questions concerning the above information, please let me know.

Bob

From: Koenick, Stephen [mailto:Stephen.Koenick@nrc.gov]
Sent: Wednesday, April 20, 2016 3:09 PM
To: CLARK, ROBERT W
Subject: DRAFT Request for Additional Information - Relief Request ANO2-ISI-018 and ANO2-ISI-019

Dear Mr. Clark,

By letter dated January 14, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML16015A276), Entergy Operations, Inc. (Entergy, the licensee), submitted relief request numbers ANO2-ISI-018 and ANO2-ISI-019 to the U.S. Nuclear Regulatory Commission (NRC) for the fourth ten-year inservice inspection interval of Arkansas Nuclear One, Unit 2. In relief requests ANO2-ISI-018 and ANO2-ISI-019, the licensee requested relief from the examination requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) applicable to ASME Code Class 1 nozzle-to-vessel welds in the pressurizer vessel and ASME Code Class 2 circumferential welds in the shutdown cooling heat exchanger shell identified in the licensee's submittal. These welds are ASME Code, Section XI, Examination Category B-D weld, Item No. B3.110 and Examination Category C-A weld, Item Nos. C1.10 and C1.30, respectively. The licensee determined that conformance with the examination requirements of Section XI of the ASME Code for these welds is impractical. Title 10 of the *Code of Federal Regulations*, Part 50, Paragraph 50.55a(g)(5)(iii) requires the licensee to submit information to the NRC to support the determination of impracticality.

In the course of its review, the U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is required in order to complete its evaluation. A draft request for additional information is attached to this email. In accordance with NRR Office Instructions COM-203, "Informal Interfacing and Exchange of Information with Licensees and Applicants," the NRC staff would like to offer whether a clarification call regarding this RAI is necessary, prior to formal issuance of the request for additional information. If you have any questions, I can be reached by phone or email.

Steve

Stephen S. Koenick
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Subject: Request for Additional Information - Relief Request ANO2-ISI-018 and ANO2-ISI-019 (CAC No.: MF7271 and MF7272)
Sent Date: 4/26/2016 4:13:13 PM
Received Date: 4/26/2016 4:13:00 PM
From: Koenick, Stephen

Created By: Stephen.Koenick@nrc.gov

Recipients:
"Khanna, Meena" <Meena.Khanna@nrc.gov>
Tracking Status: None
"Wengert, Thomas" <Thomas.Wengert@nrc.gov>
Tracking Status: None
"Dijamco, David" <David.Dijamco@nrc.gov>
Tracking Status: None
"CLARK, ROBERT W" <RCLARK@entergy.com>
Tracking Status: None

Post Office:

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MESSAGE	5223	4/26/2016 4:13:00 PM
RAI - ANO Unit 2 - Relief Requests ANO2-ISI-018 and ANO2-ISI-019 (MF7271 and MF7272) 4-15-2016 sk.docx	38516	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION
RELIEF REQUEST NUMBERS ANO2-ISI-018 AND ANO2-ISI-019
ARKANSAS NUCLEAR ONE, UNIT 2
FOURTH TEN-YEAR INSERVICE INSPECTION INTERVAL
ENTERGY OPERATIONS, INC.
DOCKET NUMBER 50-368
(TAC NOS. MF7271 AND MF7272)

By letter dated January 14, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML16015A276), Entergy Operations, Inc. (Entergy, the licensee), submitted relief request numbers ANO2-ISI-018 and ANO2-ISI-019 to the U.S. Nuclear Regulatory Commission (NRC) for the fourth ten-year inservice inspection interval of Arkansas Nuclear One, Unit 2. In relief requests ANO2-ISI-018 and ANO2-ISI-019, the licensee requested relief from the examination requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) applicable to ASME Code Class 1 nozzle-to-vessel welds in the pressurizer vessel and ASME Code Class 2 circumferential welds in the shutdown cooling heat exchanger shell identified in the licensee's submittal. These welds are ASME Code, Section XI, Examination Category B-D weld, Item No. B3.110 and Examination Category C-A weld, Item Nos. C1.10 and C1.30, respectively. The licensee determined that conformance with the examination requirements of Section XI of the ASME Code for these welds is impractical. Title 10 of the *Code of Federal Regulations*, Part 50, Paragraph 50.55a(g)(5)(iii) requires the licensee to submit information to the NRC to support the determination of impracticality. The NRC staff determined that additional information is required in order to complete the review of relief request numbers ANO2-ISI-018 and ANO2-ISI-019.

RAI 1

a) The coverage diagrams in Figures 1 through 4 of relief request number ANO2-ISI-018 and in Figures 1 and 2 of relief request number ANO2-ISI-019 do not provide sufficient detail for the staff to evaluate the examination coverage obtained. For an example of what the staff deems as clear information in a coverage diagram, please refer to slide 12 of the "Coverage Relief Requests" presentation (ADAMS Accession No. ML15013A266) given by the staff during an Industry/NRC Information Exchange Public Meeting held on January 13 -15, 2015. Please include separate diagrams for the "Axial Scan" and "Circumferential Scan" coverages as shown in the example.

b) With respect to relief request number ANO2-ISI-018, explain how the values for "factor for limitation" in Figures 2 through 4 were determined and why there was no "factor for limitation" applied in Figure 1.

c) With respect to relief request number ANO2-ISI-018, under the "Axial Scan Coverage" in Figures 1 through 4, where it indicates "Metal", please clarify if this is meant to be "Weld Metal".

RAI 2

With respect to relief request numbers ANO2-ISI-018 and ANO2-ISI-019, please discuss the ASME Code Section XI, Appendix I requirement on which the manual ultrasonic examinations method is based. If supplements apply, please discuss which supplements were used.

RAI 3

With respect to relief request numbers ANO2-ISI-018 and ANO2-ISI-019, please discuss any plant-specific operating experience regarding potential degradation (such as stress corrosion cracking, fatigue cracking, flow-accelerated corrosion, and general corrosion) in the subject welds.

RAI 4

With respect to weld 49-001 in relief request number ANO2-ISI-019, the licensee indicated in Table 1 of Attachment 2 in the submittal that a plate segregate indication was identified outside of the ASME Code required volume and that was "~50°" from the shell inside diameter. The staff noted that in the licensee's submittal of relief request number ANO2-ISI-12 for the previous (third) ten-year ISI interval (ADAMS Accession No. ML12086A293), the licensee identified in the same weld of the SDC heat exchanger (weld 49-001) a plate segregate indication that was also outside the ASME Code required volume and "~0.50″" from the shell inside diameter. Please clarify the apparent discrepancy between "~50°" in the January 16, 2016 submittal and "~0.50″" in the third ten-year ISI submittal.