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1CAN081806

August 22, 2018

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

SUBJECT: Response to Request for Additional Information (RAI) Regarding Relief Request ANO1-ISI-031
Arkansas Nuclear One, Unit 1
Docket No. 50-313
License No. DPR-51

REFERENCES: (1) Entergy letter to NRC, "Requests for Relief from American Society of Mechanical Engineers (ASME) Section XI Volumetric Examination Requirements Fourth 10-Year Interval, Second and Third Period," dated April 23, 2018 (1CAN041801) (ML18115A102)
(2) NRC email to Entergy, "ANO-1- Final RAI Concerning Relief Request ISI-031," dated August 14, 2018 (1CNA081801) (ML18226A315)

Dear Sir or Madam:

By letter dated April 23, 2018 (Reference 1) and pursuant to 10 CFR 50.55a(g)(6)(i), Entergy Operations, Inc. (Entergy) requested relief from the requirements of the ASME, Boiler and Pressure Vessel Code, Section XI pertaining to volumetric examinations at Arkansas Nuclear One, Unit 1 (ANO-1). In several locations it was determined that the examinations were impractical due to interference or geometry. Individual relief requests were provided in the Reference 1 attachments, sorted by examination category.

In the course of review, the NRC determined that additional information was required, associated with relief request ANO1-ISI-031 and forwarded an RAI to Entergy on August 14, 2018 (Reference 2). ANO1-ISI-031 pertains to welds with Component Identification Nos. (IDs) 23-057, 23-059, and 12-001 at ANO-1. Entergy's response to the RAI is included in Attachment to this letter.

There are no new regulatory commitments made in this submittal.

If you have any questions or require additional information, please contact me.

Sincerely,

ORIGINAL SIGNED BY STEPHENIE L. PYLE

SLP/dbb

Attachment: Response to Request for Additional Information (RAI) – ANO1-ISI-031

cc: Mr. Kriss Kennedy
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U. S. Nuclear Regulatory Commission, Region IV
1600 East Lamar Boulevard
Arlington, TX 76011-4511

NRC Senior Resident Inspector
Arkansas Nuclear One
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U. S. Nuclear Regulatory Commission
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Attachment to

1CAN081806

Response to Request for Additional Information (RAI)

ANO1-ISI-031

Response to Request for Additional Information (RAI) – ANO1-ISI-031

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Question 1

Table 1 of the April 23, 2018, request of ANO1-ISI-031 references ASME Code Section XI, Figure IWC-2500-8 for the examination volume of Component IDs 23-057 and 23-059. The referenced figure addresses the examination volume for ASME Code Class 2 components. However, the relief request states that these welds are Class 1 components. Please clarify the ASME Code class of these welds. In addition, identify and describe the specific system(s) where the three subject welds are located, as baseline information.

Entergy Response

Welds 23-057 and 23-059 are both Class 1 butt welds in the High Pressure Injection system. The applicable ASME Code Figure is IWB-2500-8 (Attachment 5, Table 1, of the Reference 1 request inadvertently stated IWC-2500-8). Weld 12-001 is a Class 1 butt weld joining the 28" loop piping safe end to Reactor Coolant Pump P-32B in the Reactor Coolant System.

Question 2

Please provide the pipe diameter and thickness of Component ID 12-001.

Entergy Response

The nominal pipe size of Component ID 12-001 is 28" and the nominal thickness is 2.7".

Question 3

Please discuss the operating experience for the subject welds (e.g., indications of leakage) to confirm that there was no leakage from these welds. As part of the response, clarify whether the pump associated with Component ID 12-001 is fabricated with a cast stainless steel material that retains high resistance to environmentally-assisted cracking (e.g., stress corrosion cracking).

Entergy Response

Welds 23-057 and 23-059 were examined in refueling outage 1R23 (2013) at which time no evidence of leakage was identified. Weld 12-001 was examined in 1999 and 2013 with no evidence of leakage. Weld 12-001 is a stainless steel weld joining a stainless steel safe end (ASTM SA376 TP316) to a cast stainless steel pump casing (ASTM A351 CF8M).

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