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NL-16-055

May 6, 2016

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11545 Rockville Pike, TWFN-2F1
Rockville, MD 20852-2738

SUBJECT: Response to Request for Additional Information Regarding Relief Request IP2-
ISI-RR-02 Alternate Examination Volume Required by Code Case N-729-1
(CAC No. MF7151)
Indian Point Unit 2
Docket No. 50-247
License No. DPR-26

REFERENCES: 1. NRC Letter to Entergy, Indian Point Nuclear Generating Unit No. 2- Request for
Additional Information Regarding Relief Request IP2-ISI-RR-02 Alternative
Examination Volume Required by Code Case N-729-1 (CAC NO. MF7151), April
26, 2016.
2. Entergy Letter to NRC, NL-15-139, "Relief Request IP2-ISI-RR-02 Alternate
Examination Volume Required by Code Case N-729-1," dated December 9,
2015 (Accession No. ML 15349B009).

Dear Sir or Madam:

The purpose of this letter is to provide a response to the NRC request for additional information
(Reference 1) regarding Relief Request IP2-ISI-RR-02. The Entergy request for relief was transmitted
in Reference 2.

There are no new commitments contained in this submittal. If you have any questions regarding this
confirmation of receipt, please contact Mr. Robert Walpole, Manager, Regulatory Assurance at (914)
254-6710.

Respectfully,

A large, stylized handwritten signature in black ink, appearing to be "LC/sp".

LC/sp

Attachment and cc next page.

A047
NRR

Attachment: Response to Request for Additional Information on IP2-ISI-RR-02

cc: Mr. Douglas Pickett, Senior Project Manager, NRC NRR DORL
Mr. Daniel H. Dorman, Regional Administrator, NRC Region 1
NRC Resident Inspector
Mr. John B. Rhodes, President and CEO, NYSERDA
Ms. Bridget Frymire, New York State Dept. of Public Service

ATTACHMENT TO NL-16-055

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION ON IP2-ISI-RR-02

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2
DOCKET NO. 50-247

REQUEST FOR ADDITIONAL INFORMATION
RELIEF REQUEST NO. IP2-ISI-RR-02

By letter dated December 9, 2015, (Accession Number ML15349B009), Entergy Nuclear Operations, Inc. submitted Relief Request IP2-ISI-RR-02 for Nuclear Regulatory Commission (NRC) review and approval. The request was to implement an alternative to the requirements of Title 10 of the *Code of Federal Regulations*, Section 50.55a(g)(6)(ii)(D)(3). The request pertains to the volumetric and/or surface examinations of reactor vessel upper head nozzles, most of which are used to house control rod drive mechanisms. The requests and responses are as follows:

RAI 1

The NRC staff notes that a proposed alternative to the requirements of the code case is to be considered only when obstructions or limitations prevent meeting the requirements of Figure 2 of Code Case N-729-1. The staff also notes that the relief request does not identify the penetrations for which the requirements of Figure 2 cannot be met. Please provide a list of those penetrations for which the requirements of Figure 2 cannot be met and for which relief is requested.

Response

Based on Reactor Vessel head penetration examinations from 2R19 to 2R22, penetrations 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, and 37, do not meet the 1.5" examination volume criterion specified in Code Case N-729-1 for an incident angle of less than or equal to 30 degrees and penetrations 38, 39, 40, 41, 47, 52, 53, 58, 62, 64, 65, 67, 68, 70, 71, 74, 75, 77, 78, 79, 80, 81, 82, 84, 88, 89, 90, 93, 94 and 97 do not meet the 1.0" examination volume criterion specified in Code Case N-729-1 for an incident angle of greater than 30 degrees. Relief is requested for these penetrations. Examinations performed from 2R19 to 2R22, examination volume coverage for penetrations 2, 42, 48, 50, 54, 56, 59, 60, 63, 66, 72, 76, 83, 85, 86, 87, 91, 92 and 96 were measured to be within 0.080" of the examination volume criterion. Relief is also preemptively requested for these penetrations to avoid an exigent relief request. Entergy Letter NL-09-130 (Accession No. ML092800242) provides a diagram of these penetration locations.

RAI 2

The NRC staff notes that Table 1 of the relief request lists the minimum required ultrasonic testing (UT) coverage below the J-groove weld. The staff also notes that the request states that UT coverage will extend down to "at least the top of the threaded region". The staff further notes that the request does not state that, for each penetration, the UT inspection which will be performed meets or exceeds the coverage requirement listed in Table 1. For each nozzle for which relief is requested, please confirm that UT coverage to "at least the top of the threaded region" meets or exceeds the requirements listed in Table 1.

Response

Entergy has confirmed that UT examination volume coverage to "at least the top of the threaded region" meets or exceeds the requirements listed in Table 1 of IP2-ISI-RR-02 for each nozzle identified in response to RAI 1 for which relief is requested.