



Entergy Nuclear Northeast

Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249
Tel 914 254 6700

John A Ventosa
Site Vice President

NL-14-025

February 12, 2014

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

SUBJECT: Update to Response to NRC 10 CFR 50.54(f) Request for Information
Regarding Near-Term Task Force Recommendation 2.3, Flooding - Review
of Available Physical Margin (APM) Assessments
Indian Point Unit Number 2 and 3
Docket Nos. 50-247 and 50-286
License Nos. DPR-26 and DPR-64

- REFERENCES:**
- 1 NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated March 12, 2012, Accession No. ML12073A348.
 - 2 NRC Letter to Nuclear Energy Institute, Endorsement of Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012, Accession No. ML12144A142.
 3. Entergy IP2 Letter to NRC (NL-12-169) Regarding Flooding Walkdown Report - Entergy's Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident, dated November 27, 2012.
 4. Entergy IP3 Letter to NRC (NL-12-170) Regarding Flooding Walkdown Report – Entergy's Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident, dated November 27, 2012.

A001
NRR

5. NRC Letter, Request for Additional Information Associated with Near-Term Task Force Recommendation 2.3, Flooding Walkdowns; dated December 23, 2013, Accession No. ML13325A891.

Dear Sir or Madam

On March 12, 2012, the NRC staff issued Reference 1 requesting information pursuant to Title 10 of the Code of Federal Regulations, Part 50.54(f). Enclosure 4 of that letter contains specific Requested Information associated with Near-Term Task Force Recommendation 2.3 for Flooding. The NRC endorsed Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012, in Reference 2. IPEC submitted the final reports for Indian Point 2 (IP2) and Indian Point 3 (IP3) in response to the request for information following the approved guidance in References 3 and 4.

One of the requirements of NEI 12-07 is to identify the available physical margin (APM) associated with each applicable flood protection feature, determine if the margin provided is small, and evaluate any small margins that have potentially significant consequences through the corrective action process. The results of this effort were to be maintained on site for future NRC audits.

Following the NRC staff's initial review of the walkdown reports, regulatory site audits were conducted at a sampling of plants. Based on the walkdown report reviews and site audits, the staff identified additional information necessary to allow them to complete its assessments. Accordingly, by Reference 5 the NRC staff has issued a request for addition information (RAI). The RAI questions and the IPEC responses are provided below.

RAI Number 1:

Provide confirmation that the process for evaluating APM was reviewed.

Response:

IPEC has completed a review of the process used at IP2 and IP3 to evaluate APMs.

RAI Number 2:

Provide confirmation that the APM process is now or was always consistent with the guidance in NEI 12-07 and discussed in this RAI.

Response:

The original walkdown effort followed the guidance provided in NEI 12-07, including a definition for a small margin. Additional actions have been taken to make the process consistent with the information provided in this RAI.

RAI Number 3.

If changes are necessary, a general description of any process changes to establish this consistency.

Response:

As stated above, the original walkdown effort followed the guidance provided in NEI 12-07, including a definition for a small margin. However, a specific APM had not been assigned to the seals associated with flood protection features. These items have now been addressed in accordance with the guidance provided in this RAI and entered into the corrective action process, as appropriate. An Engineering Change is being developed in accordance with site processes to further evaluate the seals associated with conduits that enter the 480V switchgear rooms and provide additional mitigation measures as appropriate.

RAI Number 4:

As a result of the audits and subsequent interactions with industry during public meetings, NRC staff recognized that evaluation of APM for seals (e.g., flood doors, penetrations, flood gates, etc.) was challenging for some licensees. Generally, licensees were expected to use either Approach A or Approach B (described below) to determine the APM for seals:

- a) If seal pressure ratings were known, the seal ratings were used to determine APM (similar to example 2 in Section 3.13 of NEI 12-07). A numerical value for APM was documented. No further action was performed if the APM value was greater than the pre-established small-margin threshold value. If the APM value was small, an assessment of "significant consequences" was performed and the guidance in NEI 12-07 Section 5.8 was followed.
- b) If the seal pressure rating was not known, the APM for seals in a flood barrier is assumed to be greater than the pre-established small-margin threshold value if the following conditions were met: (1) the APM for the barrier in which the seal is located is greater than the small-margin threshold value and there is evidence that the seals were designed/procured, installed, and controlled as flooding seals in accordance with the flooding licensing basis. Note that in order to determine that the seal has been controlled as a flooding seal, it was only necessary to determine that the seal configuration has been governed by the plant's design control process since installation. In this case, the APM for the seal could have been documented as "not small".

As part of the RAI response, state if either Approach A or Approach B was used as part of the initial walkdowns or as part of actions taken in response to this RAI. No additional actions are necessary if either Approach A or B was used.

If neither Approach A or B was used to determine the APM values for seals (either as part of the walkdowns or as part of actions taken in response to this RAI), then perform the following two actions:

- Enter the condition into the CAP (note: it is acceptable to utilize a single CAP entry to capture this issue for multiple seals). CAP disposition of "undetermined" APM values for seals should consider the guidance provided in NEI 12-07, Section 5.8. The CAP disposition should confirm all seals can perform their intended safety function against floods up to the current licensing basis flood height. Disposition may occur as part of the Integrated Assessment. If an Integrated Assessment is not performed, determine whether there are significant consequences associated with exceeding the capacity of the seals and take interim action(s), if necessary, via the CAP processes. These actions do not need to be complete prior to the RAI response.
- Report the APM as "undetermined" and provide the CAP reference in the RAI response.

Response:

At IPEC, Approach B was utilized for the penetration seals located in the Zurn Strainer pits which are part of the Intake Structures. These penetrations are shown on plant drawings and subject to the configuration control processes should any of these penetrations and associated seals be changed. These penetrations and seals are periodically inspected as part of the structural maintenance rule program and were submerged during Super Storm Sandy with no observed leakage.

For the conduit seals located in the 480V switchgear rooms, neither Approach A or B, as described above, was used to determine the APM values for seals. These do not have a known capacity but they are above the current design basis flood levels (this is river flood levels only since probable maximum precipitation is not a design basis) by more than a small margin. All seals were inspected as part of the original walkdowns for signs of degradation, and corrective actions were taken, if required. These seals are also inspected as part of the structural maintenance rule walk downs in conformance with Entergy procedures. As part of the actions taken to address this RAI, mitigation measures are in place at IPEC to protect vital equipment at the site from river levels up to 17'-11" through strategic placement of pre-filled sandbags and tiger dams. This protection level is 2'-11" above the current design basis flood level.

This letter contains no new Regulatory Commitments and no revision to existing Regulatory Commitments.

Should you have any questions regarding this submittal, please contact Mr. Robert Walpole, Manager Regulatory Affairs, at (914) 254-6710. I declare under penalty of perjury that the foregoing is true and correct. Executed on February 12, 2014

Sincerely,



JAV/sp

cc: next page

cc: Mr. Douglas Pickett, Senior Project Manager, NRC NRR DORL
Mr. William Dean, Regional Administrator, NRC Region 1
NRC Resident Inspector
Mr. Francis J. Murray, Jr., President and CEO, NYSERDA
Ms. Bridget Frymire, New York State Dept. of Public Service