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JAFP-15-0094
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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Entergy's Response to Request for Additional Information for Expedited Seismic Evaluation Process Report

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-059

Reference:
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, ML12053A340, March 12, 2012
2. NEI letter, Proposed Path Forward for NTTF Recommendation 2.1: Seismic Reevaluations, ML13101A345, dated April 9, 2013
3. Entergy letter, Entergy's Expedited Seismic Evaluation Process Report (CEUS Sites), Response NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, JAFP-14-0143, dated December 30, 2014

Dear Sir or Madam:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued a 50.54(f) letter to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 1 of Reference 1 requested each addressee located in the Central and Eastern United States (CEUS) to submit a Seismic Hazard Evaluation and Screening Report.

Entergy provided an Expedited Seismic Evaluation Process (ESEP) Report [Reference 3] on December 30, 2014, in accordance with Reference 2. On July 1, 2015, the NRC requested additional information in regard to their evaluation of the ESEP report. The Attachment 1 provides Entergy's responses.

This letter contains 1 new regulatory commitment summarized in Attachment 2. If you have any questions regarding this report, please contact Chris M. Adner, Regulatory Assurance Manager, at 315-349-6766.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 4th day of August, 2015.

Sincerely,

Brian R. Sullivan
Site Vice President

BRS/CMA/mh

Attachment 1: Response to Request for Additional Information
Attachment 2: Regulatory Commitments

cc: NRC Regional Administrator
NRC Resident Inspector
Mr. Douglas Pickett, Senior Project Manager
Ms. Bridget Frymire, NYSPSC
Mr. John B. Rhodes, President NYSERDA

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Attachment 1

Response to Request for Additional Information

(3 Pages)

Response to Request for Additional Information

The following clarification questions are in regard to the NRC evaluation of the Expedited Seismic Evaluation Process (ESEP) submittal from James A. FitzPatrick Nuclear Power Plant (JAF), JAFP-14-0143, dated December 30, 2014.

NRC Question 1:

The staff noted that the licensee's FLEX strategies were revised by letter dated February 27, 2015. Confirm that the ESEP and ESEL provided by letter dated December 30, 2014, is not impacted by the revisions made to the FLEX strategies. Otherwise, discuss the necessary changes to the ESEP submittal and ESEL as a result of the February 27, 2015, overall integrated plan 6-month update.

Response:
Changes to FLEX strategy are made consistent with the requirements of NEI guidance 12-06, 12-02, and 13-02 to meet NRC Orders EA-12-049, EA-12-051, and EA-13-109. As required, JAF submits updated information on these NRC orders in the 6 month status reports. The requirements imposed by the NRC 50.54(f) letter relative to the ESEP and ESEL are contained in the commitments made in the December 30, 2014 letter to the NRC. Performance of the ESEP and ESEL was a one time commitment. Any changes to these commitments are handled through the commitment change process, which includes informing the NRC if required. Current and proposed changes to the FLEX strategy do not warrant a commitment change notification to the NRC. This may change based upon the resolution of the path forward for final resolution of the seismic 50.54(f) request.

NRC Question 2:

Section 3.2 of EPRI 3002000704 stated that "The selection process for the ESEL should assume the FLEX strategies (modifications, equipment, procedures, etc.) have been implemented." The staff noted that not all "non-portable" FLEX components have been installed during the development of the licensee's ESEP. In Attachment A of the ESEP Report, the licensee stated that for ESEL Item Number 57 is Reliable Hardened Vent and ESEL Item Number 112 is RHV instrumentation. Specifically, both items are not yet installed. Furthermore, the licensees did not identify the specific components and instrumentation represented by these two items.

a. Identify the specific RHV components and RHV instrumentation

b. Clarify whether HCLFP evaluations will be performed when those "non-portable" FLEX components are installed in the future? If yes, identify those actions in the ESEP report and provide appropriate regulatory commitments for these actions. Or identify alternative means to ensure HCLFP evaluations will be performed in accordance with the acceptance criteria for ESEP for those to-be-installed FLEX components

Response:

a. The reliable hardened vent (RHV) components and instrumentation are being evaluated and resolved in response to EA-13-109. The Entergy – JAF response to that EA, the 1st Six-Month Status Report (JAFP-14-0146, December 19, 2014), indicates that the detailed design is not yet complete. It is premature at this time to provide specific components and instruments, but when the design is completed they will be added to the ESEP (ESEL).

b. Any new "non-portable" FLEX components will be designed and installed per the guidance of NEI 12-06. No High Consequence Low Probability of Failure (HCLPF) evaluations are currently planned.

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NRC Question 3:

Provide the justification why the following components are not included in the ESEL:

a. *27AOV-SGT (These valves may need to be closed for the Hardened Containment Venting Systems (HCVS) to work)*
b. *27AOV-117, 27AOV-118, and 27AOV-HCV*

Response:
As a result of the timing of NRC Order EA-13-109, the ESEL did not include components for the Hardened Containment Vent. Performance of the ESEP and ESEL was a one time commitment. Any changes to these commitments are handled through the commitment change process, which includes informing the NRC if required. Currently proposed changes to the FLEX strategy do not warrant a commitment change notification to the NRC. This may change based upon the resolution of the path forward for final resolution of the seismic 50.54(f) request.

Note: The correct valve numbers for Question 3a and 3b are as follows: Question 3a, 27MOV-120, 27MOV-121 and Question 3b, 27AOV-117, 27AOV-118, and 27AOV-142.

NRC Question 4:

Section 6.2 of the Fitzpatrick ESEP Report describes ESEL component screening using Table 2-4 of EPRI NP-6041-SL. This table is applicable to components located up to 40 ft above grade. The ESEP report does not discuss screening or HCLPF calculations at elevations beyond 40 ft above grade. Therefore, if there are any such components, please clarify how the ESEL components located at elevations beyond 40 ft above grade either were screened out or had their HCLPF capacities calculated.

Response:
The JAF expedited seismic equipment list (ESEL), excluding inaccessible items, contains three (3) components located more than 40' above grade. Included in this set of components is one (1) level transmitter, 23LT-203A1, and two (2) pressure transmitters, 27PT-115A1 and 27PT-115A2. These components are judged to be adequate for local accelerations as determined by scaled in-structure response spectra (ISRS). This judgment is made by the seismic review team (SRT) and is noted on walkdown forms for the subject components. For items identified as inaccessible, evaluations will be performed during and after the walkdown of subject items.

NRC Question 5

ESEP Report Section 5.2 indicates that the horizontal RLGM ISRS is obtained by scaling the SSE ISRS by a scale factor of 1.55 obtained from the maximum ratio of the GMRS to the SSE in the frequency range of 1 to 10 Hz. The ESEP report also states: "The vertical direction RLGM ISRS is obtained by scaling the vertical amplified ground response spectrum." The statement implies that the vertical ground spectrum, scaled by a factor of 1.55, is used at all elevations. Please explain why the vertical floor design basis ISRS were not used. Describe in more detail the scaling procedure used to obtain the vertical RLGM ISRS and the technical basis for this approach.

Response:
Design basis vertical in-structure response spectra (ISRS) are scaled by a factor of 1.55 in order to obtain vertical Review Level Ground Motion (RLGM) ISRS. The text in section 5.2 of the ESEP report is not consistent with the approach used in the evaluation of ESEL components for the RLGM ISRS. This will be clarified in the next revision of the ESEP report when the components currently listed as inaccessible items are evaluated for the RLGM.

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NRC Question 6:

Section 8.4 provides regulatory commitments for all inaccessible items including a letter submittal to NRC summarizing the HCLPF results and confirming implementation of the plant modifications within 60 days following completion of the ESEP activities. Due the large number of inaccessible items (44 components, about 30% of all ESEL items) and to support the staff in its review:

a. *Is there other information that could be relied upon, in accordance with the guidance, to confirm the current state or condition of these inaccessible items, and thus avoid walkdowns/walk bys of all 44 components?*

b. *Provide additional regulatory commitments to send supplemental interim letters to the NRC reflecting the results of the following milestones related to inaccessible items as they are completed: seismic walkdowns, HCLPF calculations, and implementation of plant modifications.*

Response:

a. Other information is available; however, JAF has elected to perform walkdowns of all inaccessible items. The walkdowns will take place by end of next refueling outage, which is scheduled for September, 2016. Of the list of inaccessible components contained in section 7.1 of the ESEP report, most are valves, temperature sensors, level transmitters, and small air accumulators. The walkdowns of those components are not expected to result in any HCLPF evaluations. One component, the Residual Heat Removal System heat exchanger, could potentially require a HCLPF evaluation.

b. Regulatory Commitments made by JAF letter dated December 30, 2014, JAFP-14-0143, are located in the Attachment to the letter only. They include:

Commitment	**Scheduled completion date**
Entergy will perform seismic walkdowns at JAF for inaccessible items listed in Section 7.1	No later than the end of the first planned JAF refueling outage after December 31, 2014.
Entergy will generate HCLPF calculations for inaccessible items listed in Section 7.1	No later than 90 days following the end of the first planned JAF refueling outage after December 31, 2014.
Entergy will implement any necessary JAF modifications for inaccessible items listed in Section 7.1 based on the schedule commitment to complete this activity in JAFP-13-0056 dated April 29, 2013	No later than the end of the second planned JAF refueling outage after December 31, 2014. per JAFP-13-0056.

The new commitment contained in Attachment 2 is to submit a letter to the NRC within 60 days following completion of the ESEP activities specified by the commitments made in Entergy letter dated December 30, 2014, JAFP-14-0143.

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Attachment 2

Regulatory Commitments

(1 Page)

Regulatory Commitments

This table identifies actions discussed in this letter for which Entergy commits to perform. Any other actions discussed in this submittal are described for the NRC's information and are **not** commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Entergy will submit a letter to NRC summarizing the JAF HCLPF results and confirming implementation of the plant modifications associated with the JAF commitments made by the Attachment to Entergy letter dated December 30, 2014, JAFP-14-0143.	X		Within 60 days following completion of JAF ESEP activities committed by the Attachment to Entergy letter dated December 30, 2014, JAFP-14-0143