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JAFP-16-0148
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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Request for Extension to Comply with NRC Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions"

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

- References:**
1. NRC Order, Issuance of Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, EA-13-109, dated June 6, 2013
 2. ENOI letter, James A. Fitzpatrick Answer to June 6, 2013, Commission Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Order Number EA-13-109), dated June 26, 2013
 3. ENOI letter, James A. Fitzpatrick, Notification of Permanent Cessation of Operations, JAFP-15-0133, dated November 18, 2015
 4. ENOI letter, James A. Fitzpatrick, Certification of Permanent Cessation of Operations, JAFP-16-0045, dated March 16, 2016
 5. ENOI and Exelon letter, Application for Order Approving Transfer of Renewed Facility Operating License and Proposed Conforming License Amendment, CNRO 2016-00019, dated August 18, 2016

Dear Sir or Madam:

On June 6, 2013, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an Order (Reference 1) to James A. FitzPatrick Nuclear Power Plant (JAF). Reference 1 was immediately effective and directs JAF to take certain actions to ensure that the JAF facility has a hardened containment vent system (HCVS) to remove decay heat from the containment, and maintain

control of containment pressure within acceptable limits following events that result in loss of active containment heat removal capability while maintaining the capability to operate under severe accident (SA) conditions resulting from an Extended Loss of AC Power (ELAP). Specific requirements are outlined in Attachment 2 of Reference 1. The Order includes two separate implementation phases. Phase 1 includes modifications to wetwell venting systems, while Phase 2 includes modifications to drywell venting systems or implementation of a reliable containment strategy that meets regulatory requirements.

Reference 2 provided the Entergy Nuclear Operations, Inc. (ENOI) answer to the June 6, 2013 Commission Order EA-13-109 and identified that JAF's future responses may include requests for schedule relief as warranted by subsequent NRC requirements or implementing guidance or as the result of engineering analyses not yet performed.

On November 18, 2015 and March 16, 2016, ENOI notified the NRC that it had decided to permanently cease power operations at JAF on January 27, 2017 (References 3 and 4). As such, the plant would be permanently shutdown before any required CHV Order EA-13-109 completion date.

In reference 5 Entergy and Exelon Generation Company LLC (Exelon) requested the transfer of JAF license to Exelon. In this letter Entergy is providing a basis for requesting relaxation of NRC Order EA-13-109 by demonstrating good cause for the relaxation as explained in the Attachment. The Attachment is based on the final approval of the license transfer by the NRC as well as other criteria as explained in Reference 5. If this option occurs, JAF will shut down in January 2017 for a planned refueling outage and resume power operations upon startup from the January 2017 refueling outage. Following the start up from the outage Entergy would transfer ownership of JAF to Exelon Generation Company, LLC.

JAF has resumed work to complete full implementation of the NRC Order EA-13-109. However, given the sale of JAF is only a recent possibility, additional time is needed to complete implementation of the remaining engineering and design activities, plant modifications, and procedural and training activities required to fully implement the requirements of Order EA-13-109 Phase 1.

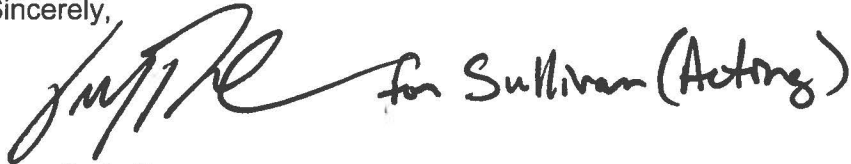
In the event of the sale, JAF will resume power operations upon startup from the January 2017 refueling outage (RFO22). NRC Order EA-13-109, Section IV requires that JAF shall complete implementation of Phase 1 of the Order no later than startup from the January 2017 refueling outage (i.e., second refueling outage beginning after June 30, 2014), or June 30, 2018, whichever comes first.

In accordance with Section IV of NRC Order EA-13-109, JAF is hereby requesting that the Director, Office of Nuclear Reactor Regulation, grant an extension to comply with the requirements in Section IV of NRC Order EA-13-109 concerning implementation of the Phase 1 (wetwell vent) at the James A. FitzPatrick Nuclear Power Plant until June 30, 2018. No request for extension to comply with Phase 2 of the Order is needed at this time. The Attachment to this letter provides the basis and justification demonstrating good cause for an extension to comply with the requirements of Phase 1 of NRC Order EA-13-109 for the James A. FitzPatrick Nuclear Power Plant.

This letter contains no new regulatory commitments. If you have any questions regarding this submittal, please contact William C. Drews, Regulatory Assurance Manager, at 315-349-6562.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 8th day of September 2016.

Sincerely,

A handwritten signature in black ink that reads "BRS" followed by a long horizontal flourish, and then "for Sullivan (Acting)".

Brian R. Sullivan
Site Vice President

BRS/WCD/cb

Attachment: Request for Extension to Comply with NRC Order EA-13-109, Section IV
Requirements Regarding Implementation of Phase 1 Severe Accident Capable
Vents for James A. FitzPatrick Nuclear Power Plant

cc: Director, Office of Nuclear Reactor Regulation
Director, Japan Lessons-Learned Division, NRR
NRC Regional Administrator - Region I
NRC Senior Resident Inspector
NRC Project Manager, NRR
Mr. Raj Auluck, NRR/JLD/TSD/JCBB, NRC
Mr. Peter J. Bamford, NRR/JLD/JOMB, NRC
NYSPSC
NYSERDA

JAFP-16-0148

Attachment

**Request for Extension to Comply with NRC Order EA-13-109, Section
IV Requirements Regarding Implementation of Phase 1 Severe
Accident Capable Vents for James A. FitzPatrick Nuclear Power Plant**

(4 pages)

Request for Extension to Comply with NRC Order EA-13-109, Section IV Requirements Regarding Implementation of Phase 1 Severe Accident Capable Vents for James A. FitzPatrick Nuclear Power Plant

I. Request for Extension

Pursuant to Nuclear Regulatory Commission (NRC) Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions" (Reference 1), Entergy Nuclear Operations, Inc. (ENOI) hereby submits a request for extension to comply with the requirements in Section IV of NRC Order EA-13-109 concerning implementation of Phase 1 (wetwell vent) at the James A. FitzPatrick Nuclear Power Plant (JAF) until June 30, 2018.

II. Order Requirement from Which Extension is Requested

NRC Order EA-13-109, Section IV.B requires licensees to complete implementation of Phase 1 (severe accident capable wetwell venting system) no later than startup from the second refueling outage that begins after June 30, 2014, or June 30, 2018, whichever occurs first. Based on the timelines specified in NRC Order EA-13-109, JAF is required to implement Phase 1 requirements prior to startup from the refueling outage now planned in January 2017.

On November 18, 2015 and March 16, 2016, ENOI notified the NRC that it had decided to permanently cease power operations at JAF on January 27, 2017 (References 2 and 3). As a result of permanently ceasing power operations the required Phase 1 compliance date of startup from the January 2017 refueling outage (i.e., second refueling outage beginning after June 30, 2014) would not be reached.

Based on the announcement of a possible sale of JAF and license transfer to Exelon Generation Company, LLC, JAF may shut down in January 2017 for a planned refueling outage and resume power operations upon startup from the refueling outage. Accordingly, NRC Order EA-13-109, Section IV requires that JAF shall complete implementation of Phase 1 of the Order no later than startup from the January 2017 refueling outage (i.e., second refueling outage beginning after June 30, 2014). As a result of the decision to continue plant operation beyond January 27, 2017, additional time is needed to complete implementation of the remaining engineering and design activities, plant modifications, and procedural and training activities required to fully implement the Phase 1 requirements of the Order.

III. Justification for Extension Request

In accordance with the requirements of Section IV of NRC Order EA-13-109, JAF is required to implement Phase 1 (severe accident capable wetwell venting system) at JAF by startup from the January 2017 refueling outage. These requirements are intended to provide a reliable Hardened Containment Vent System (HCVS) to prevent or limit core damage upon loss of heat removal capability during beyond-design-basis severe accident conditions until other means of heat removal are available, such as the Residual Heat Removal and Shutdown Cooling systems.

JAF has developed project plans to finalize the engineering and design activities supporting the plant modifications required to achieve compliance with Phase 1 of the Order. Based on the current status of these project activities, the project completion schedules identified that completing all modifications prior to startup from the January 2017 refueling outage is not achievable. Additionally, given the scope of the work needed to complete the NRC Orders EA-12-049 and EA-051, additional time to complete HCVS Phase 1 is needed beyond the current requirement date.

**Request for Extension to Comply with NRC Order EA-13-109, Section IV Requirements
Regarding Implementation of Phase 1 Severe Accident Capable Vents for James A.
FitzPatrick Nuclear Power Plant**

The requested relaxation to the Phase 1 compliance date to no later than June 30, 2018 specified in the Order has been determined to be adequate to complete all required project activities needed to fully implement Phase 1 of the Order. The requested relaxation would enable JAF to complete the ongoing engineering and design activities, complete all plant modifications, complete operator training activities, and implement applicable plant procedures.

During the requested period of extension to comply with Phase 1 of the Order, the existing JAF containment vent system used to address GL 89-16, as documented in the NRC Safety Evaluation (ML 13015A634), will continue to provide defense-in-depth measures and enhanced plant capability to mitigate the consequences of a beyond-design-basis external event and to prevent severe accident conditions in accordance with existing Emergency Operating Procedures.

Interim Vent Capability

Procedural steps are currently contained in section 5.14 of EP-6 ("Post Accident Containment Venting and Gas Control") to manually open the containment vent system primary containment isolation valves, 27AOV-117 and 27AOV-118 (locally in the reactor building) in the event of a loss of electrical power and/or instrument air. For the implementation of NRC Order EA-12-049 requested to be extended to 6/30/2017, until the completion of Order EA-13-109 Phase 1, JAF is in the process of revising the appropriate site documents (e.g., emergency operating procedures, FLEX support guidelines, etc.) to manually open the standby gas treatment system (SGTS) inlet and outlet motor operated isolation valves and to open up the door from the SGTS room to the outside. As documented in the NRC Safety Evaluation (ML13015A634) the SGBT room is separated from the reactor building such that use of this vent pathway will not adversely impact the reactor building. These valves are located in the reactor building or the SGTS room such that the valves and piping are protected from all external hazards. This strategy will support full compliance with NRC Order EA-12-049 on June 30, 2017.

Seismic Design

The existing containment vent piping and SGTS piping between the torus and the SGTS room is seismically designed and supported. A modification to eliminate the only seismic weak point of this pathway will be accomplished during the upcoming refueling outage.

Combustible Gas Control

In the NRC's safety evaluation of Fitzpatrick's existing containment vent system (ref: memo from Steven A. Varga to Ralph E. Beedle dated September 28, 1992), the NRC concluded that the Interim Vent Capability design was acceptable and met the intent of GL 89-16 criterion (h), which requires that "The hardened vent design shall ensure that no ignition sources are present in the pipeway". The safety evaluation credits, in part, the uncertainty as to whether a combustible mixture could develop, the prevention potential of steam and nitrogen to suppress a hydrogen deflagration, and the mitigation potential of the concrete wall between the SGTS room and the safety related equipment.

A walkdown was conducted by site personnel to address valve accessibility. Additionally FLEX procedures will be developed to establish the Order EA-12-049 interim anticipatory vent path using the containment vent system used to address GL 89-16 as documented in the NRC Safety Evaluation (ML 13015A634), vent path.

**Request for Extension to Comply with NRC Order EA-13-109, Section IV Requirements
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Containment Integrity

Currently JAF containment integrity can be maintained using the normal installed design features of the containment such as the containment isolation valves and the torus and containment vent system, used to address GL 89-16, qualified vents by use of manual valve actuation where required.

The coping strategy is to vent containment early using the existing torus and containment vent system. As documented in the containment analysis, venting early ensures that containment pressures stay within acceptable limits. Containment remains vented throughout the event.

Hardened Containment Vent System

JAF's current plans are to implement all outage-required Phase 1 HCVS mechanical and electrical tie-ins and testing during JAF's RFO22 outage (January/February 2017 timeframe). The field work required to implement the remainder of the Phase 1 HCVS modifications will be performed online during operating cycle CY23, with a completion target no later than 6/30/2018 as specified in Order EA-13-109.

Accordingly, ENOI requests that the NRC Order EA-13-109, Section IV.B, Phase 1 implementation requirement date for JAF be relaxed to allow completion no later than June 30, 2018.

A sequence of events such as those that occurred at the Fukushima Dai-ichi accident is unlikely to occur in the United States based on current regulatory requirements and existing plant capabilities, and the limited duration of the requested extension to comply with Phase 1 of the Order at JAF. Therefore, the requested extension to the compliance requirements of NRC Order EA-13-109 for JAF does not pose a significant increase in plant risk and does not reduce nuclear safety or safe plant operations.

IV. Conclusion

As a result of the possible sale and license transfer of the JAF from ENOI to Exelon Generation Company, LLC, JAF may no longer permanently cease operation on January 27, 2017. JAF may conduct a refueling outage in January 2017 and continue to operate. This change in operational status for JAF was unforeseen. As described above, compliance with the NRC Order EA-13-109 schedule for implementation of Phase 1 requirements would result in hardship or unusual difficulty without a compensating increase in the level of safety. Additional time following startup from the JAF January 2017 refueling outage is required in order to complete the Phase 1 implementation activities identified above and complete all equipment installation and plant modifications required to achieve compliance with Phase 1 of the Order. Accordingly, significant hardship and unusual difficulty exists in completing installation of the equipment and modifications required to implement Phase 1 of the Order in accordance with the original implementation schedule requirements. Therefore, in accordance with the provisions of Section IV of the Order, ENOI has shown good cause and requests an extension to comply with the requirements in Section IV of NRC Order EA-13-109 concerning implementation of Phase 1 (wetwell vent) at JAF until June 30, 2018.

**Request for Extension to Comply with NRC Order EA-13-109, Section IV Requirements
Regarding Implementation of Phase 1 Severe Accident Capable Vents for James A.
FitzPatrick Nuclear Power Plant**

V. References

1. NRC Order Number EA-13-109, "Issuance of Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions," dated June 6, 2013
2. Entergy Letter to NRC, James A. Fitzpatrick, Notification of Permanent Cessation of Operations, JAFP-15-0133, dated November 18, 2015
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