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JAFP-16-0192
December 22, 2016

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

Subject: Entergy – James A. FitzPatrick Fifth Six-Month Status Report in Response 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)

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

- Reference:**
1. NRC Order, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, EA-13-109, dated June 6, 2013
 2. NRC Interim Staff Guidance, Compliance with Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, Revision 0, JLD-ISG-2013-02, dated November 2013
 3. NRC Interim Staff Guidance, Compliance with Phase 2 of Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, Revision 0, JLD-ISG-2015-01, dated April 2015
 4. NEI document, Industry Guidance for Compliance with NRC Order EA-13-109: BWR Mark I & II Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, Revision 1, NEI 13-02, dated April 2015
 5. ENOI letter, James A. FitzPatrick Overall Integrated Plan In Response To June 6, 2013 Commission Order Modifying License With Regard To Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Order Number EA-13-109), JAFP-14-0075, dated June 30, 2014
 6. ENOI letter, James A. FitzPatrick Phase 2 Overall Integrated Plan In Response To June 6, 2013 Commission Order Modifying License With Regard To Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Order Number EA-13-109), JAFP-15-0149, dated December 29, 2015
 7. ENOI letter, Certification of Permanent Cessation of Power Operations, JAFP-16-0045, dated March 16, 2016
 8. ENOI letter, 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," JAFP-16-0148, dated September 8, 2016.

Dear Sir or Madam:

On June 6, 2013, the Nuclear Regulatory Commission (“NRC” or “Commission”) issued Order EA-13-109 to James A. FitzPatrick Nuclear Power Plant (JAF) [Reference 1]. EA-13-109 directs JAF to install a reliable hardened venting capability in accordance with the requirements detailed in the Order, including:

A Phase 1 Overall Integrated Plan pursuant to Section IV, Condition D.1. Reference 2 endorses industry guidance document NEI 13-02, Revision 0 with clarifications and exceptions identified in Reference 2. Reference 5 provided the JAF’s Phase 1 Overall Integrated Plan.

A Phase 2 Overall Integrated Plan pursuant to Section IV, Condition D.2. Reference 3 endorses industry guidance document NEI 13-02, Revision 1 [Reference 4]. Reference 6 provided the JAF’s Phase 2 Overall Integrated Plan.

Submission of a status report at six-month intervals following submittal of the Overall Integrated Plan phase 1 [Reference 5] pursuant to Section IV, Condition D.3. NEI 13-02 [Reference 4] provides direction regarding the content of the status reports.

The purpose of this letter is to provide the fifth six-month status report, which delineates progress made in implementing the requirements of EA-13-109. Attachment 1 provides an update to milestone status, including any changes to the compliance method, schedule, or possible need for relief and the basis.

Entergy Nuclear Operations, Inc. (ENOI) is no longer planning to cease power operation of JAF on January 27, 2017 [Reference 7]. JAF expects to comply with the Order; however, based on ENOI’s request for extension [Reference 8], compliance with the Order implementation date will be affected. Future six-month status report submittals will address any requests for exemption from the Order requirements prior to the Order implementation date.

This letter contains no new regulatory commitments. If you have any questions regarding this report, please contact Mr. 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 December 22, 2016.

Sincerely,



Brian R. Sullivan
Site Vice President

BRS/WCD/mh

- Attachment 1: James A. FitzPatrick (JAF) Nuclear Power Plant’s Fifth Six-Month Status Report in Response 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)
- 2: Response to Phase 1 Interim Staff Evaluation Open Items
 - 3: Response to Phase 2 Interim Staff Evaluation Open Items

cc: Director, Office of Nuclear Reactor
Regulation
NRC Regional Administrator
NRC Resident Inspector

NRC Project Manager
NYSPSC
NYSERDA

JAFP-16-0192

Attachment 1

**James A. FitzPatrick (JAF) Nuclear Power Plant's Fifth Six Month
Status Report for the Implementation of Order EA-13-109, "Order to
Modify Licenses with Regard to Reliable Hardened Containment Vents
Capable of Operation Under Severe Accident Conditions"**

(6 Pages)

James A. FitzPatrick (JAF) Nuclear Power Plant’s Fifth Six Month Status Report for the Implementation of Order EA-13-109, “Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions”

1 Introduction

JAF developed a Phase 1 Overall Integrated Plan (Reference 2) and a Phase 2 Overall Integrated Plan (Reference 3), documenting the installation of a Hardened Containment Vent System (HCVS) that provides a reliable hardened venting capability in response to NRC Order Number EA-13-109 (Reference 1). This attachment provides an update of milestone accomplishments since submittal of the Phase 1 Overall Integrated Plan, Phase 2 Overall Integrated Plan, and the subsequent Six Month Status Reports, including any changes to the compliance method, schedule, or need for relief / relaxation and the basis, if any.

2 Milestone Accomplishments

The following milestone(s) have been completed since the development of the Phase 1 Overall Integrated Plan (Reference 2) and Phase 2 Overall Integrated Plan (Reference 3), and are current as of December 22, 2016. (See Section 3)

- Submitted Fifth 6 Month Status Report by letter JAFP-16-0192

3 Milestone Schedule Status

The following provides an update to Part 5 of the Phase 1 Overall Integrated Plan (Reference 2) and Part 5 of the Phase 2 Overall Integrated Plan (Reference 2). It provides the status of each item, and whether the expected completion date has changed. The dates are planning dates subject to change as design and implementation details are developed.

Milestone	Target Completion Date	Activity Status	Comments
Phase 1			
Hold preliminary / conceptual design meeting	Jan. 2014	Complete	
Submit Overall Integrated Implementation Plan	Jun. 2014	Complete	
Submit 6 Month Status Report	Dec. 2014	Complete	
Submit 6 Month Status Report	Jun. 2015	Complete	
Design Engineering On-site/Complete	Dec. 2015	Complete	
Submit 6 Month Status Report	Dec. 2015	Complete	
Submit 6 Month Status Report	Jun. 2016	Complete	
Submit 6 Month Status Report	Dec. 2016	Complete	
Submit 6 Month Status Report	Jun. 2017	Not Started	
Submit 6 Month Status Report	Dec. 2017	Not Started	New item
Operations Procedure Changes Developed	April 2018*	Not Started	

James A. FitzPatrick (JAF) Nuclear Power Plant's Fifth Six Month Status Report for the Implementation of Order EA-13-109, "Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions"

Milestone	Target Completion Date	Activity Status	Comments
Site Specific Maintenance Procedure Developed	April 2018*	Not Started	
HCVS Implementation Complete	May 2018*	In Progress	See Section 5.0 (Jan. 2017 Outage); Milestone Desc. Changed
Procedure Changes Active	Jun. 2018*	Not Started	
Walk Through Demonstration/Functional Test	Jun. 2018*	Not Started	
Training Complete	Jun. 2018*	Not Started	
Submit Completion Report	Jun. 2018*	Not Started	
Phase 2			
Hold preliminary/conceptual design meeting	Oct 2015	Complete	
Submit Overall Integrated Implementation Plan	Dec 2015	Complete	
Submit 6 Month Status Report	Jun 2016	Complete	
Submit 6 Month Status Report	Dec 2016	Complete	
Submit 6 Month Status Report	Jun 2017	Not Started	
Design Engineering On-site/Complete	Jun 2017	Not Started	
Submit 6 Month Status Report	Dec 2017	Not Started	
Operations Procedure Changes Developed	Jun 2018	Not Started	
Site Specific Maintenance Procedure Developed	Jun 2018	Not Started	
Training Complete	Jun 2018	Not Started	
Submit 6 Month Status Report	Jun 2018	Not Started	
Implementation Outage	Sep 2018	Not Started	
Walk Through Demonstration/Functional Test	Sep 2018	Not Started	
Procedure Changes Active	Sep 2018	Not Started	
Submit Completion Report	Nov 2018	Not Started	

*Date changed for this six month update

James A. FitzPatrick (JAF) Nuclear Power Plant’s Fifth Six Month Status Report for the Implementation of Order EA-13-109, “Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions”

4 Changes to Compliance Method

There is no change to the compliance method that meets NEI 13-02 (Reference 4). The JAF design changes to the HCVS will continue to meet the requirements of Order EA-13-109 (Reference 1). There are several clarifications to the information presented in the JAF HCVS Overall Inspection Plans (OIP) based on the final detailed design. The following clarifications are described based on the applicable Order section items as well as the applicable sections in the OIP.

Phase 1 Overall Integrated Plan (Reference 2): Part 2 [Discussion of BDBEE Venting]; Order EA-13-109 (Reference 1) Item 1.2.1, 1.2.8, 1.2.9

The instrumentation credited for initial operation and monitoring of the HCVS venting within the Phase 1 OIP requires updating to include the component identifiers and remove the system pressure indication from the JAF HCVS design. In addition, the existing MCR / Relay Room key parameters and indicators are refined to a more specific list of instrumentation. This refined list is consistent with the Phase 2 MCR / Relay Room instrumentation.

The Phase 1 OIP instrumentation tables are updated below:

<u>Key Parameter</u>	<u>Component Identifier</u>	<u>Indication Location</u>
HCVS Effluent Temperature	27TI-115	Admin Building Hallway (27CAD-PNL-1)
HCVS Pneumatic Supply Pressure	27PI-149 27PI-150 27PI-151 27PI-152 27PI-153	Admin Building Hallway
HCVS Valve Position Indication	27DC-117A, B 27DC-118A, B 27DC-142A, B	Admin Building Hallway (27CAD-PNL-1)
HCVS Radiation Monitor	27RM-106	Admin Building Hallway (27CAD-PNL-2)
HCVS Electrical Power Supply	27AM-1, 27VM-1 27AM-2, 27VM-2	Admin Building Hallway (27CAD-PNL-1); DC ‘A’ Equipment Room

<u>Key Parameter</u>	<u>Component Identifier</u>	<u>Indication Location</u>
Drywell Pressure	27PI-115A1, 2 27PI-115B1, 2	MCR
Torus Water Level	23LI-202A, B	MCR

Phase 2 Overall Integrated Plan (Reference 3): Sketch 3 FLEX / SAWA Equipment Location; Order EA-13-109 (Reference 1) Item 1.2.8, 2.1, 2.2, 2.3

The primary and alternate locations of the FLEX / Severe Accident Water Addition (SAWA) diesel generators have been switched. Sketch 3 has been updated to reflect this change.

James A. FitzPatrick (JAF) Nuclear Power Plant’s Fifth Six Month Status Report for the Implementation of Order EA-13-109, “Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions”

5 Need for Relief / Relaxation and Basis for the Relief / Relaxation

On September 8, 2016, Entergy Nuclear Operations, Inc. (ENOI) submitted a request for extension until June 30, 2018 to comply with requirements for implementation of Phase 1 (wetwell) vent at JAF (Reference 9). No extension for Phase 2 has been submitted.

6 Open Items from Overall Integrated Plan and Interim Staff Evaluation

The following table provides a summary of the open items documented in the Phase 1 and Phase 2 Overall Integrated Plan or the Interim Staff Evaluation (ISE) and the status of each item.

Overall Integrated Plan Open Items	Status
Phase 1	
None	
Phase 2	
<i>“Complete hydraulic analysis of diesel fire pump for SAWA / SAWM flowrates”</i>	In-Progress - Complete hydraulic analysis of diesel fire pump for Severe Accident Water Addition (SAWA) / Severe Accident Water Management (SAWM) flowrates
<i>“Identify and evaluate severe accident conditions for Phase 2 manual actions.”</i>	In-Progress
<i>“The FLEX Engineering Change (EC 52736) has not been completed; therefore, any reference to this information is considered unverified.”</i>	Complete; Approved December 2016

Open items from Phase 1 Interim Staff Evaluation (Reference 7) are provided in Attachment 2 to this letter.

Open items from Phase 2 Interim Staff Evaluation (Reference 8) are provided in Attachment 3 to this letter.

7 Interim Staff Evaluation Impacts

There are no potential impacts to the Phase 1 Interim Staff Evaluation (Reference 7) identified at this time.

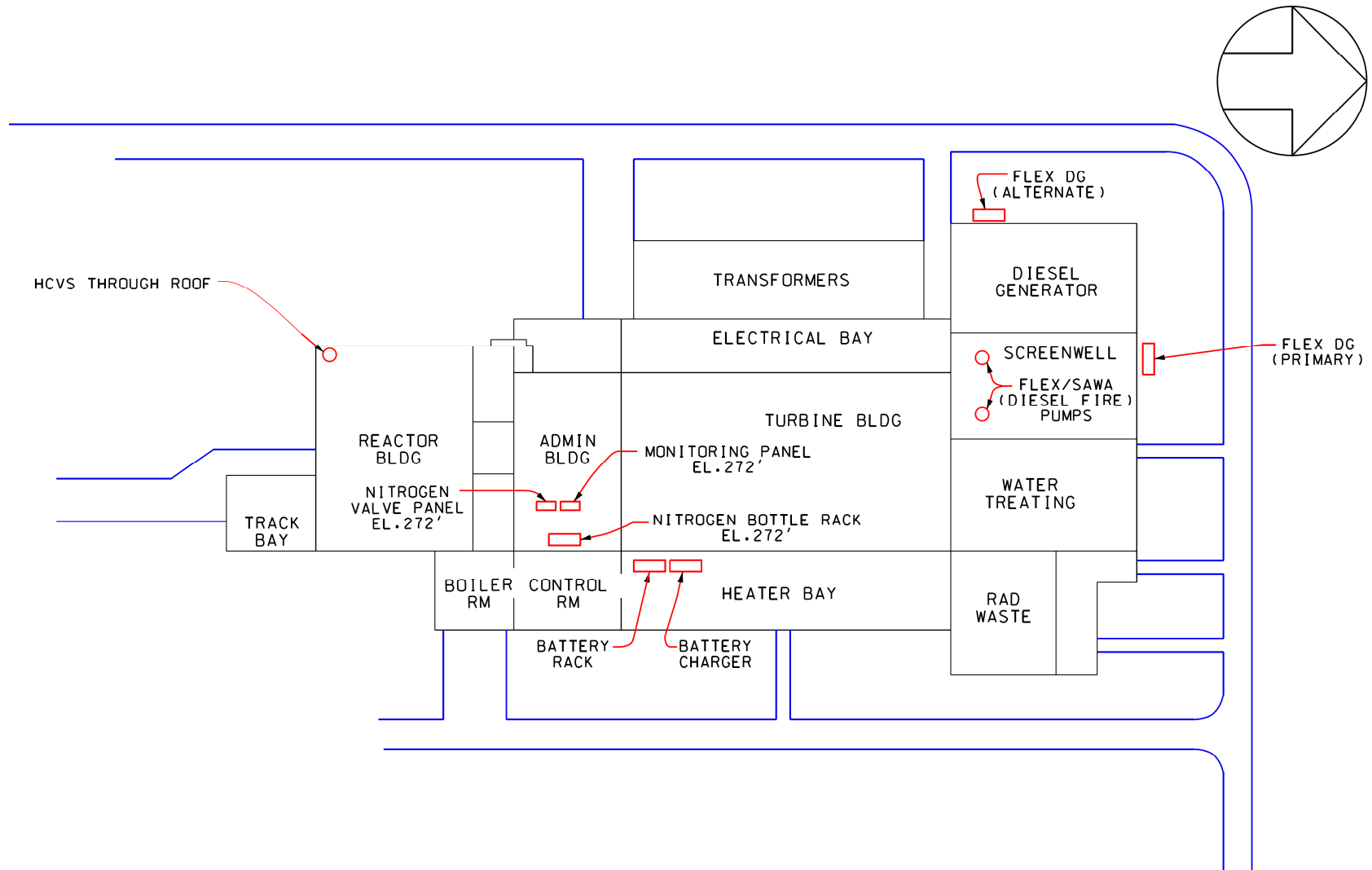
James A. FitzPatrick (JAF) Nuclear Power Plant's Fifth Six Month Status Report for the Implementation of Order EA-13-109, "Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions"

8 References

The following references support the updates to the Phase 1 & 2 Overall Integrated Plan described in this attachment.

1. NRC Order Number EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions dated June 6, 2013 (ML13143A321).
2. Letter JAFP-14-0075, James A. FitzPatrick Overall Integrated Plan in Response 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 30, 2014 (ML14181B117).
3. Letter JAFP-15-0149, James A. FitzPatrick Phase 2 Overall Integrated Plan In Response To June 6, 2013 Commission Order Modifying License With Regard To Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Order Number EA-13-109), dated December 29, 2015 (ML15365A593).
4. NEI 13-02, Industry Guidance for Compliance with Order EA-13-109: BWR Mark I & II Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, Revision 1, dated April 2015 (ML15113B318).
5. NRC Interim Staff Guidance, JLD-ISG-2013-02, Compliance with Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, Revision 0, dated November 2013 (ML13304B836).
6. NRC Interim Staff Guidance, JLD-ISG-2015-01, Compliance with Phase 2 of Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions, Revision 0, dated April 2015 (ML15104A118)
7. James A. FitzPatrick Nuclear Power Plant – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Phase 1 of Order EA-13-109 (Severe Accident Capable Hardened Vents), dated February 12, 2015, (ML15007A090).
8. James A. FitzPatrick Nuclear Power Plant – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Phase 2 of Order EA-13-109 (Severe Accident Capable Hardened Vents), dated December 16, 2016, (ML16343B030).
9. Letter JAFP-16-0148, 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," dated September 8, 2016 (ML16252A482).

**James A. FitzPatrick (JAF) Nuclear Power Plant's Fifth Six Month Status Report for the Implementation of Order EA-13-109,
"Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident
Conditions"**



Sketch 3: FLEX / SAWA Equipment Location

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Attachment 2

Response to Phase 1 Interim Staff Evaluation Open Items

(4 Pages)

Response to Phase 1 Interim Staff Evaluation Open Items

OI	Action	Comment	Response
1	<p>Make available for NRC staff audit analyses demonstrating that HCVS has the capacity to vent the steam/energy equivalent of one (1) percent of licensed/rated thermal power (unless a lower value is justified), and that the suppression pool and the HCVS together are able to absorb and reject decay heat, such that following a reactor shutdown from full power containment pressure is restored and then maintained below the primary containment design pressure and the primary containment pressure limit.</p>	<p>Section 3.2.2.1 Section 3.2.2.2</p>	<p>COMPLETE JAF is capable of (a) venting the equivalent of one (1) percent of licensed/rated thermal power and (b) the Torus is capable of absorbing the decay heat from full power to one (1) percent licensed/rated thermal power to maintain the integrity of primary containment.</p> <p>Auditable analyses to justify the capability of the Torus, as described in this action, have been issued as calculation JAF-CALC-14-00015 (part of the approved design change package EC 52721) and calculation JAF-CALC-15-00026 (part of the approved design change package EC 58158). For additional discussion, see EC 52721 Topic Notes Section 3.1.7 entitled “Hydraulic Requirements”.</p>
2	<p>Make available for NRC staff audit the seismic and tornado missile final design criteria for the HCVS stack.</p>	<p>Section 3.2.2.3</p>	<p>COMPLETE The HCVS piping from the Torus to the discharge above the RB Roof is designed to be seismically rugged as supported by calculations JAF-CALC-14-00017, JAF-CALC-15-00008, JAF-CALC-15-00033, and JAF-CALC-14-00016 (part of the approved design change package EC 52721).</p> <p>Protection from tornado missiles is acceptable in accordance with evaluations based on the HCVS-WP-04 guidance. See EC 52721 Topic Notes Section 3.1.6.1 entitled “Structural Requirements”. Specifically, see the associated subsection entitled “Tornado Missiles”.</p>

Response to Phase 1 Interim Staff Evaluation Open Items

OI	Action	Comment	Response
3	Make available for NRC staff audit the final sizing evaluation for HCVS batteries/battery charger including incorporation into FLEX DG loading calculation.	Section 3.2.2.4 Section 3.2.3.1 Section 3.2.3.2 Section 3.2.4.1 Section 3.2.4.2 Section 3.2.5.1 Section 3.2.5.2 Section 3.2.6	<p>COMPLETE</p> <p>The HCVS Battery System will support a minimum of 24 hours of operation. Refer to EC 52721 Topic Notes, Section 3.1.4 entitled "Electrical Requirements." Specifically, refer to the subsections entitled "Battery Selection and Sizing," "Battery Charger Selection and Sizing," and the associated EC attachment, P2e Sequence No. 6.003.</p> <p>The HCVS battery load has been incorporated into the FLEX DG via approved EC 52736 (FLEX Strategy) and associated calculation JAF-CALC-15-00031.</p>
4	Make available for NRC staff audit documentation of the HCVS nitrogen pneumatic system design including sizing and location.	Section 3.2.2.4 Section 3.2.3.1 Section 3.2.3.2 Section 3.2.4.1 Section 3.2.4.2 Section 3.2.5.1 Section 3.2.5.2 Section 3.2.6	<p>COMPLETE</p> <p>The HCVS pneumatic system design sizing will be capable of 12 cycles in the first 24 hours. The sizing of the nitrogen motive force and purge systems is provided in calculations JAF-CALC-15-00013 and JAF-CALC-15-00038, respectively (part of the approved design change package EC 52721). For additional discussion, see EC 52721 Topic Notes Section 3.1.6.3 entitled "Cross Flow & Hydrogen Detonation". Specifically, see the associated subsection entitled "HCVS Pipeline Protection".</p>
5	Provide a description of the final design of the HCVS to address hydrogen detonation and deflagration.	Section 3.2.2.6	<p>COMPLETE</p> <p>The JAF strategy for preventing hydrogen detonation and deflagration beyond the final isolation point (valve) is a nitrogen purge system. Concurrent with closing the isolation valve, the purge system will be initiated to purge the vented fluid from the HCVS pipeline. For additional discussion, see EC 52721 Topic Notes Section 3.1.6.3 entitled "Cross Flow & Hydrogen Detonation". Specifically, see the associated subsection entitled "HCVS Pipeline Protection".</p>

Response to Phase 1 Interim Staff Evaluation Open Items

OI	Action	Comment	Response
6	Provide a description of the strategies for hydrogen control that minimizes the potential for hydrogen gas migration and ingress into the reactor building or other buildings.	Section 3.2.2.6	<p>COMPLETE</p> <p>At JAF the interfaces between the RB and the HCVS pipeline are limited to normally closed, small bore drain and instrument valves minimizing the hydrogen gas migration and ingress into the Reactor Building. In addition, migration to the Standby Gas Treatment System is minimized through the use of existing Class VI MOVs that will be leak tested in accordance with NEI 13-02. For additional discussion, see EC 52721 Topic Notes Section 3.1.6.3 entitled "Cross Flow & Hydrogen Detonation". Specifically, see the associated subsection entitled "Interconnecting Systems".</p>
7	Make available for NRC staff audit descriptions of all instrumentation and controls (existing and planned) necessary to implement this order including qualification methods.	Section 3.2.2.10	<p>NOT COMPLETE</p> <p>The required instrumentation and controls (existing and new) are identified as part of the JAF OIP, Part 2. The qualification of the equipment has been described within the approved design change package EC 52721; however, additional documentation must be supplied by vendors before this item is completed.</p>
8	Make available for NRC staff audit documentation of a seismic qualification evaluation of HCVS components.	Section 3.2.2.9	<p>NOT COMPLETE</p> <p>The qualification of the equipment has been described within the approved design change package EC 52721; however, additional documentation must be supplied by vendors before this item is completed.</p>
9	Make available for NRC staff audit the descriptions of local conditions (temperature, radiation and humidity) anticipated during ELAP and severe accident for the components (valves, instrumentation, sensors, transmitters, indicators, electronics, control devices, etc.) required for HCVS venting including confirmation that the components are capable of performing their functions during ELAP and severe accident conditions.	<p>Section 3.2.2.3</p> <p>Section 3.2.2.5</p> <p>Section 3.2.2.9</p> <p>Section 3.2.2.10</p>	<p>NOT COMPLETE</p> <p>The approved design change package EC 52721 describes the conditions and capability of the equipment to function within the stated conditions. The qualification of the equipment has been described within the approved design change package EC 52721; however, additional documentation must be supplied by vendors before this item is completed.</p>

Response to Phase 1 Interim Staff Evaluation Open Items

OI	Action	Comment	Response
10	Make available for NRC staff audit documentation of an evaluation verifying the existing containment isolation valves, relied upon for the HCVS, will open under the maximum expected differential pressure during BDBEE and severe accident wetwell venting.	Section 3.2.2.9	<p>COMPLETE</p> <p>At Fitzpatrick, the existing PCIVs (27AOV-117 and -118) that will be part of the EA-13-109 HCVS flow path are currently a part of the GL 89-16 containment hardened pipe flow path. Calculation 14620.9011-US(N)-004 "Suppression Chamber (20") & Drywell (24") Vent & Purge Butterfly Valves based on RELAP 5/MOD2 56 psig and 62 psig Results" concludes the valves can be opened against the maximum expected differential pressure during an Order EA-13-109 event, the primary containment pressure limit of 62 psig.</p>
11	Make available for NRC staff audit documentation that demonstrates adequate communication between the remote HCVS operation locations and HCVS decision makers during ELAP and severe accident conditions.	Section 3.2.2.5	<p>COMPLETE</p> <p>The capability for communication between the HCVS operation locations and decision makers will be evaluated as part of EP-Communications modifications. The EP-Communications detailed design (EC 53903) has been approved and will be implemented prior to HCVS compliance is required.</p>
12	Make available for NRC staff audit an evaluation of temperature and radiological conditions to ensure that operating personnel can safely access and operate controls and support equipment.	<p>Section 3.2.1</p> <p>Section 3.2.2.3</p> <p>Section 3.2.2.4</p> <p>Section 3.2.2.5</p> <p>Section 3.2.2.10</p> <p>Section 3.2.4.1</p> <p>Section 3.2.4.2</p> <p>Section 3.2.5.2</p> <p>Section 3.2.6</p>	<p>COMPLETE</p> <p>The approved design change package EC 52721, along with supporting calculations, has identified the anticipated conditions during ELAP and a Severe Accident and confirm the capability for operating personnel to safely access and operate controls and support equipment. For additional discussion, see EC 52721 Topic Notes Section 3.1.11.3 entitled "HCVS Manual Actions".</p>

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Attachment 3

Response to Phase 2 Interim Staff Evaluation Open Items

(1 Page)

Response to Phase 2 Interim Staff Evaluation Open Items

OI	Action	Comment	Response
1	Licensee to evaluate the SAWA equipment and controls, as well as the ingress and egress paths for the expected severe accident conditions (temperature, humidity, radiation) for the sustained operating period.	Section 3.3.2.3	In progress
2	Licensee to demonstrate how instrumentation and equipment being used for SAWA and supporting equipment is capable to perform for the sustained operating period under the expected temperature and radiological conditions.	Section 3.3.2.3	In progress
3	Licensee to demonstrate that containment failure as a result of overpressure can be prevented without a drywell vent during severe accident conditions.	Section 3.3.3	In progress
4	Licensee to demonstrate that there is adequate communication between the primary HCVS operating station and the operator at the FLEX supply hose splitter valve during severe accident conditions.	Section 3.3.3.4	In progress
5	Licensee to demonstrate the SAWA/SAWM flow instrumentation qualification for the expected environmental conditions.	Section 3.3.3.4	In progress