



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 5, 2017

Mr. Brad Berryman
Site Vice President
Susquehanna Nuclear, LLC
769 Salem Boulevard
NUCSB3
Berwick, PA 18603-0467

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - REPORT FOR THE AUDIT OF LICENSEE RESPONSES TO INTERIM STAFF EVALUATION OPEN ITEMS RELATED TO NRC ORDER EA-13-109 TO MODIFY LICENSES WITH REGARD TO RELIABLE HARDENED CONTAINMENT VENTS CAPABLE OF OPERATION UNDER SEVERE ACCIDENT CONDITIONS (CAC NOS. MF4364 AND MF4365)

Dear Mr. Berryman:

On June 6, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13143A334), the U.S. Nuclear Regulatory Commission (NRC) issued Order EA-13-109, "Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Condition," to all Boiling Water Reactor licenses with Mark I and Mark II primary containments. The order requirements are provided in Attachment 2 to the order and are divided into two parts to allow for a phased approach to implementation. The order required licensees to submit for review overall integrated plans (OIPs) that describe how compliance with the requirements for both phases of Order EA-13-109 will be achieved.

By letter dated June 26, 2014 (ADAMS Accession Nos. ML14177A349, ML14177A364 and ML14177A731), Susquehanna Nuclear, LLC (the licensee) submitted its Phase 1 OIP for Susquehanna Steam Electric Station, Units 1 and 2 (Susquehanna). By letters dated December 23, 2014, June 23, 2015, December 23, 2015 (which included the combined Phase 1 and Phase 2 OIP), June 29, 2016, December 19, 2016, and June 15, 2017 (ADAMS Accession Nos. ML15040A155, ML15174A052, ML15362A528, ML16181A179, ML16355A294, and ML17166A472, respectively), the licensee submitted its 6-month updates to the OIP. The staff reviewed the information provided by the licensee and issued interim staff evaluations (ISEs) for Phase 1 and Phase 2 of Order EA-13-109 for Susquehanna by letters dated April 1, 2015 (ADAMS Accession No. ML15090A300), and August 25, 2016 (ADAMS Accession No. ML16231A509), respectively. When developing the ISEs, the staff identified open items where the staff needed additional information to determine whether the licensee's plans would adequately meet the requirements of Order EA-13-109.

The NRC staff is using the audit process described in the letters dated May 27, 2014 (ADAMS Accession No. ML14126A545), and August 10, 2017 (ADAMS Accession No. ML17220A328), to gain a better understanding of licensee activities as they come into compliance with the order. As part of the audit process, the staff reviewed the licensee's closeout of the ISE open items.

B. Berryman

- 2 -

The NRC staff conducted a teleconference with the licensee on September 14, 2017. The enclosed audit report provides a summary of that aspect of the audit.

If you have any questions, please contact me at 301-415-1025 or by e-mail at Rajender.Auluck@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Rajender Auluck". The signature is written in a cursive style with a prominent "R" and "A".

Rajender Auluck, Senior Project Manager
Beyond-Design-Basis Engineering Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

Docket Nos.: 50-387 and 50-388

Enclosure:
Audit report

cc w/encl: Distribution via Listserv



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION
AUDIT OF LICENSEE RESPONSES TO INTERIM STAFF EVALUATION OPEN ITEMS
RELATED TO ORDER EA-13-109 MODIFYING LICENSES
WITH REGARD TO RELIABLE HARDENED CONTAINMENT VENTS CAPABLE OF
OPERATION UNDER SEVERE ACCIDENT CONDITIONS
SUSQUEHANNA NUCLEAR, LLC
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NOS. 50-387 AND 50-388

BACKGROUND

On June 6, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13143A334), the U.S. Nuclear Regulatory Commission (NRC) issued Order EA-13-109, "Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Condition," to all Boiling Water Reactor (BWR) licenses with Mark I and Mark II primary containments. The order requirements are divided into two parts to allow for a phased approach to implementation.

Phase 1 of Order EA-13-109 requires license holders of BWRs with Mark I and Mark II primary containments to design and install a Hardened Containment Vent System (HCVS), using a vent path from the containment wetwell to remove decay heat, vent the containment atmosphere (including steam, hydrogen, carbon monoxide, non-condensable gases, aerosols, and fission products), and control containment pressure within acceptable limits. The HCVS shall be designed for those accident conditions (before and after core damage) for which containment venting is relied upon to reduce the probability of containment failure, including accident sequences that result in the loss of active containment heat removal capability or extended loss of alternating current power (ELAP). The order required all applicable licensees, by June 30, 2014, to submit to the Commission for review an overall integrated plan (OIP) that describes how compliance with the Phase 1 requirements described in Order EA-13-109 Attachment 2 will be achieved.

Phase 2 of Order EA-13-109 requires license holders of BWRs with Mark I and Mark II primary containments to design and install a system that provides venting capability from the containment drywell under severe accident conditions, or, alternatively, to develop and implement a reliable containment venting strategy that makes it unlikely that a licensee would need to vent from the containment drywell during severe accident conditions. The order required all applicable licensees, by December 31, 2015, to submit to the Commission for

review an OIP that describes how compliance with the Phase 2 requirements described in Order EA-13-109 Attachment 2 will be achieved.

By letter dated June 26, 2014 (ADAMS Accession Nos. ML14177A349, ML14177A364 and ML14177A731), Susquehanna Nuclear, LLC (SNL, the licensee) submitted its Phase 1 OIP for Susquehanna Steam Electric Station, Units 1 and 2 (Susquehanna, SSES). By letters dated December 23, 2014, June 23, 2015, December 23, 2015 (which included the combined Phase 1 and Phase 2 OIP), June 29, 2016, December 19, 2016, and June 15, 2017 (ADAMS Accession Nos. ML15040A155, ML15174A052, ML15362A528, ML16181A179, ML16355A294, and ML17166A472, respectively), the licensee submitted its 6-month updates to the OIP, as required by the order.

The staff reviewed the information provided by the licensee and issued interim staff evaluations (ISEs) for Phase 1 and Phase 2 for Susquehanna by letters dated April 1, 2015 (ADAMS Accession No. ML15090A300), and August 25, 2016 (ADAMS Accession No. ML16231A509), respectively. When developing the ISEs, the staff identified open items where the staff needed additional information to determine whether the licensee's plans would adequately meet the requirements of Order EA-13-109.

The NRC staff is using the audit process in accordance with the letters dated May 27, 2014, (ADAMS Accession No. ML14126A545), and August 10, 2017 (ADAMS Accession No. ML17220A328), to gain a better understanding of licensee activities as they come into compliance with the order. The staff reviews submitted information, licensee documents (via ePortals), and preliminary Overall Program Documents (OPDs)/OIPs, while identifying areas where additional information is needed. As part of this process, the staff reviewed the licensee closeout of the ISE open items.

AUDIT SUMMARY

As part of the audit, the NRC staff conducted a teleconference with the licensee on September 14, 2017. The purpose of the audit teleconference was to continue the audit review and provide the NRC staff the opportunity to engage with the licensee regarding the closure of open items from the ISEs. As part of the preparation for these audit calls, the staff reviewed the information and/or references noted in the OIP updates to ensure that closure of ISE open items and the HCVS design are consistent with the guidance provided in Nuclear Energy Institute (NEI) 13-02, Rev. 1 and related documents (e.g. white papers (ADAMS Accession Nos. ML14126A374, ML14358A040, ML15040A038 and ML15240A072) and frequently asked questions (FAQs, ADAMS Accession No. ML15271A148)) that were developed and reviewed as part of overall guidance development. The NRC staff audit members are listed in Table 1. Table 2 is a list of documents reviewed by the staff. Table 3 provides the status of the ISE open item closeout for Susquehanna. The open items are taken from the Phase 1 and Phase 2 ISEs issued on April 1, 2015, and August 25, 2016, respectively.

FOLLOW UP ACTIVITY

The staff continues to audit the licensee's information as it becomes available. The staff will issue further audit reports for Susquehanna, as appropriate.

Following the licensee's declarations of order compliance, the licensee will provide a final integrated plan (FIP) that describes how the order requirements are met. The NRC staff will

evaluate the FIPs, the resulting site-specific OPDs, as appropriate, and other licensee documents, prior to making a safety determination regarding order compliance.

CONCLUSION

This audit report documents the staff's understanding of the licensee's closeout of the ISE open items, based on the documents discussed above. The staff notes that several of these documents are still preliminary, and all documents are subject to change in accordance with the licensee's design process. In summary, the staff has no further questions on how the licensee has addressed the ISE open items, based on the preliminary information. The status of the NRC staff's review of these open items may change if the licensee changes its plans as part of final implementation. Changes in the NRC staff review will be communicated in the ongoing audit process.

Attachments:

1. Table 1 – NRC Staff Audit and Teleconference Participants
2. Table 2 – Audit Documents Reviewed
3. Table 3 – ISE Open Item Status Table

Table 1 - NRC Staff Audit and Teleconference Participants

Title	Team Member	Organization
Team Lead/Project Manager	Rajender Auluck	NRR/JLD
Project Manager Support/Technical Support – Containment / Ventilation	Brian Lee	NRR/JLD
Technical Support – Containment / Ventilation	Bruce Heida	NRR/JLD
Technical Support – Electrical	Kerby Scales	NRR/JLD
Technical Support – Balance of Plant	Kevin Roche	NRR/JLD
Technical Support – I&C	Steve Wyman	NRR/JLD
Technical Support – Dose	John Parillo	NRR/DRA

Table 2 – Audit Documents Reviewed

DPA-02-DI-2015-23844, "Evaluation for Deployment of FLEX Generators"
EC-030-1007, Revision 22, "Control Structure Transient Temperature Response"
EC-RADN-1180, Revision 0, "SSES HCVS Radiological Assessment"
EC-002-1081, Revision 0, "Hardened Containment Vent System Battery Sizing"
EC-073-1019, Revision 2, "HCVS Flow Capacity"
DPA-11-2015-23844 describes the environmental conditions for the instrumentation listed in the HCVS Engineering Change Package.
Disposition of AR-2015-17244, "Evaluate BWR-OG-TP-005 Missile Strike on HCVS Piping"
PLA-6927, "Susquehanna Communication Assessment"
PLA-7034, "Susquehanna Updated Communication Assesment"
EC-016-1043, Revision 3, "Flow Model of UHS Cooling Water Supply to Support Phase II and III FLEX Mitigating Strategy" (Revised for Simultaneous FLEX and SAWA)
EC-073-1018, Revision 0, "HCVS Compressed Air Bottle Sizing Calculation"
BWROG-TP-008, "Severe Accident Water Addition Timing"
BWROG-TP-011, "Severe Accident Water Management Supporting Evaluations"
Procedure ES-273-007, Revision 0, "Venting Suppressin Chamber Through the HCVS"
SNL Caclulation 13347-WP-08, Revision 0, "Time to Burst Rupture Disk"

**Susquehanna Steam Electric Station
Vent Order Interim Staff Evaluation Open Items:**

Table 3 - ISE Open Item Status Table

ISE Open Item Number Requested Action	Licensee Response – Information provided in six-month updates and on the ePortal	NRC Staff Close-out notes	SE status Closed; Pending; Open (need additional information from licensee)
<p>Phase 1 ISE OI 1</p> <p>Make available for NRC staff audit an evaluation that confirms that all load stripping to support HCVS operation can be accomplished within 45 minutes of event initiation.</p>	<p>DPA-08-DI-2015-23844.</p> <p>Not applicable since changed from station batteries to dedicated HCVS batteries.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>This item is not applicable since the licensee changed its strategy from using station batteries to dedicated HCVS batteries.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in safety evaluation (SE) Section 3.1.2.6]</p>
<p>Phase 1 ISE OI 2</p> <p>Make available for NRC staff audit the final sizing evaluation for HCVS batteries/battery charger including incorporation into FLEX DG loading calculation.</p>	<p>DPA-07-DI-2015-23844.</p> <p>Ref. EC-002-1081, Revision 0 in on the ePortal.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>The NRC staff reviewed licensee calculation EC-002-1081, “Hardened Containment Vent System Battery Sizing,” Revision 0, which verified the capability of HCVS battery for 24 hours of operation for HCVS functions.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.2.6]</p>
<p>Phase 1 ISE OI 3</p> <p>Make available for NRC staff audit documentation of the HCVS nitrogen pneumatic</p>	<p>DPA-04-DI-2015-23844.</p> <p>EC-073-1018, M-231 Sheet 1 IDCN 30, and AR-2015-23588 on the ePortal.</p>	<p>The NRC staff reviewed the information provided in the six-month updates and on the ePortal.</p> <p>Calculation EC-073-1018, Rev 0, “HCVS Compressed Air Bottle</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.2.6]</p>

<p>system design including sizing and location.</p>	<p>No longer using nitrogen. Gas supply lasts at least 7 days. The OIP states 8 cycles in 1st 24 hours.</p> <p>ES-273-997 has 30 psi control band for HCVS.</p>	<p>Sizing Calculation," estimated the licensee would have sufficient supply to operate the valves maintaining a minimum pressure of 2000 per square inch gauge (psig) in the compressed air supply bottles.</p> <p>No follow-up questions.</p>	
<p>Phase 1 ISE OI 4</p> <p>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>	<p>DPA-05-DI-2015-23844.</p> <p>Ref. EC-030-1007, Rev. 22 (pp. 694-719) and EC-RADN-1180, Rev. 0.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>Calculation EC-030-1007, Rev. 22, "ROS Ventilation and Hydrogen Control," estimated the maximum ROS temperature to be less than 100°F (99.7°F).</p> <p>Temperatures do not exceed 110 degrees fahrenheit (F°), which is acceptable for long-term personnel habitability. Radiological conditions result in low operator dose.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Sections 3.1.1.2 and 3.1.1.3]</p>
<p>Phase 1 ISE OI 5</p> <p>Make available for NRC staff audit analyses demonstrating that HCVS has the capacity to vent the steam/energy equivalent of one percent of licensed/rated thermal power (unless a lower value is justified), and that the suppression pool and the HCVS together are able to</p>	<p>DPA-09-DI-2015-23844.</p> <p>Section 5.4 of EC-073-1019, Rev. 1 in the ePortal.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>In response to the staff's question regarding HCVS capacity, the licensee provided Calculation DPA-09-DI-2015-23844. This document indicated that Per section 5.3 of EC-073-1019, Rev. 1, the vent flow required to remove 1% of rated reactor power at</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.2.1]</p>

<p>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>containment design pressure of 53 psig is 41.2 lbm/sec.</p> <p>The Unit 2 vent capacity at 53 psig was determined to be 48 lbm/sec and the Unit 1 vent capacity at 53 psig was determined to be 46.3 lbm/sec. Both provide adequate capacity to meet or exceed the order criteria.</p> <p>No follow-up questions.</p>	
<p>Phase 1 ISE OI 6</p> <p>Make available for NRC staff audit the seismic and tornado missile final design criteria for the HCVS stack.</p>	<p>DPA-10-DI-2015-23844.</p> <p>ES-273-007 has guidance to restore venting capability. Two other procedures have been revised for severe weather.</p>	<p>The NRC staff reviewed the information provided in the six-month updates and on the ePortal.</p> <p>DPA-10-DI-2015-23844 addresses the HCVS seismic and tornado missile design. The licensee's design is consistent with the endorsed white paper and meets all of the tornado missile assumptions identified in HCVS-WP-04.</p> <p>Calculation AR-2015-17244, "Evaluate BWROG-TP-15-005, "Missile Strike on HCVS Piping". AR 2015-28230 was issued to develop procedural guidance for compensatory actions if HCVS is damaged from wind generated missiles. Guidance placed in ES-273-007.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.2.2]</p>
<p>Phase 1 ISE OI 7</p> <p>Make available for NRC staff audit the descriptions of</p>	<p>DPA-11-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates.</p>	<p>Closed</p>

<p>local conditions (temperature, radiation and humidity) anticipated during ELAP and severe accident for the components (valves, instrumentation, sensors, transmitters, indicators, electronics, control devices, and etc.) required for HCVS venting including confirmation that the components are capable of performing their functions during ELAP and severe accident conditions.</p>		<p>DPA-11-2015-23844 describes the environmental conditions for the instrumentation listed in this design document. The NRC staff noted that the document only referenced the new variables, but did not mention the existing variables such as wetwell level. The staff found that the response is satisfactory because the existing variables are RG 1.97 variables that have previously been reviewed and determined to acceptable for the purposes of this vent order review.</p> <p>No follow-up questions.</p>	<p>[Staff evaluation to be included in SE Section 3.1.1.4]</p>
<p>Phase 1 ISE OI 8</p> <p>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.</p>	<p>DPA-12-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the six-month updates and on the ePortal.</p> <p>The communication methods are the same as accepted in Order EA-12-049.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.1.1]</p>
<p>Phase 1 ISE OI 9</p> <p>Provide a description of the final design of the HCVS to address hydrogen detonation and deflagration.</p>	<p>DPA-13-DI-2015-23844.</p> <p>SSES Technical Specification S-7452 for check valve is on the ePortal.</p> <p>See DPA-06-DI-2015-23844 response also.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>The licensee's design is consistent with option 5 of the endorsed white paper HCVS-WP-03.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.2.11]</p>
<p>Phase 1 ISE OI 10</p> <p>Provide a description of the strategies for hydrogen</p>	<p>DPA-14-DI-2015-23844.</p> <p>Totally separate systems.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p>	<p>Closed</p>

<p>control that minimizes the potential for hydrogen gas migration and ingress into the reactor building or other buildings.</p>		<p>The licensee's design for the Unit 1 and Unit 2 HCVS systems are independent and do not share components or connections with any existing containment purge/vent systems.</p> <p>No follow-up questions.</p>	<p>[Staff evaluation to be included in SE Section 3.1.2.12]</p>
<p>Phase 1 ISE OI 11</p> <p>Provide a justification for deviating from the instrumentation seismic qualification guidance specified in NEI 13-02, endorsed, in part, by JLD-ISG-2013 as an acceptable means for implementing applicable requirements of Order EA-13-109.</p>	<p>DPA-15-DI-2015-23844.</p> <p>Changed version in OIP to comply with ISG.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>The NRC confirmed the OIP change that now complies with the ISG. Further, the staff reviewed licensee document DPA-15-2015-23844 and confirmed that the methodology is acceptable and that the licensee used a review level ground motion that is beyond-design-basis.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.1.4]</p>
<p>Phase 1 ISE OI 12</p> <p>Make available for NRC staff audit descriptions of all instrumentation and controls (existing and planned) necessary to implement this order including qualification methods.</p>	<p>DPA-16-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>Instrumentation appears sufficient to monitor and control HCVS operation. Qualification standards are industry-accepted for this type of application.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 3.1.2.8]</p>
<p>Phase 2 ISE OI 1</p> <p>Licensee to evaluate the severed accident water</p>	<p>DPA-59-DI-2015-23844.</p> <p>DPA-02-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p>	<p>Closed</p>

<p>addition (SAWA) equipment and controls, as well as ingress and egress paths for the expected severe accident conditions (temperature, humidity, radiation) to ensure that operating personnel can safely access and operate controls and support equipment for the sustained operating period.</p>	<p>AR-2016-02782 (ES-273-007 note to warn people). DPA-05-DI-2015-23844. EC-30-1007, Rev. 22 (pp. 694-719) and EC-RADN-1180, Rev. 0. DPA-57-DI-2015-23844. Instrument is ok.</p>	<p>Control Room was evaluated under Order EA-12-049. Calc EC-030-1007, Rev. 22 was reviewed in Phase 1 ISE OI-4. No follow-up questions.</p>	<p>[Staff evaluation to be included in SE Section 4.1.1.4]</p>
<p>Phase 2 ISE OI 2 Licensee to demonstrate that SAWA components and connections external to protected buildings have been protected against the screened-in hazards of Order EA-12-049 for the station.</p>	<p>DPA-60-DI-2015-23844. SAWA uses the same components and connection points as FLEX.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal. Per DPA-60-DI-2015-23844 the components and collection points were evaluated under Order EA-12-049. No changes made for HCVS. No follow-up questions.</p>	<p>Closed [Staff evaluation to be included in SE Section 4.1.1.4]</p>
<p>Phase 2 ISE OI 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</p>	<p>DPA-61-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal. Calculation EC-073-1019 evaluating vent capacity was reviewed in Phase 1 ISE-OI-5. HCVS will be opened per procedure prior to exceeding Primary Containment Pressure Limit value of 65 psig. No follow-up questions.</p>	<p>Closed [Staff evaluation to be included in SE Sections 4.1 and 4.2]</p>
<p>Phase 2 ISE OI 4 Licensee shall demonstrate how the plant is bounded by</p>	<p>DPA-62-DI-2015-23844.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p>	<p>Closed</p>

<p>the reference plant analysis that shows the Severe Accident Water Management strategy is successful in making it unlikely that a drywell vent is needed. Section 3.3.3.1</p>		<p>Staff reviewed the parameters from the reference plant to those of Susquehanna. The staff concurs that it is unlikely the suppression chamber HCVS could become blocked. Therefore, it is unlikely a drywell vent would be required to maintain containment integrity.</p> <p>No follow-up questions.</p>	<p>[Staff evaluation to be included in SE Section 4.2.1.1]</p>
<p>Phase 2 ISE OI 5 Licensee to demonstrate that there is adequate communication between the Main Control Room and the Intake Structure operator at the FLEX manual valve during severe accident conditions. Section 3.3.3.4</p>	<p>DPA-63-DI-2015-23844. DPA-12-DI-2015-23844 + PA and Sat phones. Communications Assessment.</p>	<p>The NRC staff reviewed the information provided in the 6-month updates and on the ePortal.</p> <p>The communication methods are the same as accepted in Order EA-12-049.</p> <p>No follow-up questions.</p>	<p>Closed</p> <p>[Staff evaluation to be included in SE Section 4.1]</p>

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - REPORT FOR THE AUDIT OF LICENSEE RESPONSES TO INTERIM STAFF EVALUATION OPEN ITEMS RELATED TO NRC ORDER EA-13-109 TO MODIFY LICENSES WITH REGARD TO RELIABLE HARDENED CONTAINMENT VENTS CAPABLE OF OPERATION UNDER SEVERE ACCIDENT CONDITIONS DATED October 5, 2017

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