Exelon Generation

Order No. EA-13-109

RS-17-155

December 15, 2017

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

Peach Bottom Atomic Power Station, Unit 2
Renewed Facility Operating License No. DPR-44
NRC Docket No. 50-277

Subject: Seventh Six-Month Status Report For Phases 1 and 2 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)

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. 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 14, 2013
3. NRC Interim Staff Guidance JLD-ISG-2015-01, "Compliance with Phase 2 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
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
5. Exelon Generation Company, LLC's 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
6. Exelon Generation Company, LLC Phase 1 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 (RS-14-062)
7. Exelon Generation Company, LLC First Six-Month Status Report Phase 1 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 December 19, 2014 (RS-14-305)
8. Exelon Generation Company, LLC Second Six-Month Status Report Phase 1 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, 2015 (RS-15-151)

9. Exelon Generation Company, LLC Phase 1 (Updated) and Phase 2 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 December 15, 2015 (RS-15-303)
10. Exelon Generation Company, LLC Fourth Six-Month Status Report For Phases 1 and 2 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, 2016 (RS-16-109)
11. Exelon Generation Company, LLC Fifth Six-Month Status Report For Phases 1 and 2 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 December 15, 2016 (RS-16-235)
12. Exelon Generation Company, LLC Sixth Six-Month Status Report For Phases 1 and 2 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, 2017 (RS-17-068)
13. NRC letter to Exelon Generation Company, LLC, Peach Bottom Atomic Power Station, Units 2 and 3 – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Phase 1 of Order EA-13-109 (Severe Accident Capable Hardened Vents) (TAC Nos. MF4416 and MF4417), dated February 12, 2015
14. NRC letter to Exelon Generation Company, LLC, Peach Bottom Atomic Power Station, Units 2 and 3 – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Phase 2 of Order EA-13-109 (Severe Accident Capable Hardened Vents) (TAC Nos. MF4416 and MF4417), dated August 2, 2016
15. NRC letter to Exelon Generation Company, LLC, Peach Bottom Atomic Power Station, Units 2 and 3 – 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 November 30, 2017

On June 6, 2013, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an Order (Reference 1) to Exelon Generation Company, LLC (EGC). Reference 1 was immediately effective and directs EGC to require their BWRs with Mark I and Mark II containments to take certain actions to ensure that these facilities have 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.

Reference 1 required submission of an Overall Integrated Plan (OIP) by June 30, 2014 for Phase 1 of the Order, and an OIP by December 31, 2015 for Phase 2 of the Order. The interim staff guidance (References 2 and 3) provide direction regarding the content of the OIP for Phase 1 and Phase 2. Reference 3 endorses industry guidance document NEI 13-02, Revision 1 (Reference 4) with clarifications and exceptions identified in References 2 and 3. Reference 5

provided the EGC initial response regarding reliable hardened containment vents capable of operation under severe accident conditions. Reference 6 provided the Peach Bottom Atomic Power Station, Units 2 and 3, Phase 1 OIP pursuant to Section IV, Condition D.1 of Reference 1. References 7 and 8 provided the first and second six-month status reports pursuant to Section IV, Condition D.3 of Reference 1 for Peach Bottom Atomic Power Station. Reference 9 provided the Peach Bottom Atomic Power Station, Units 2 and 3, Phase 1 updated and Phase 2 OIP pursuant to Section IV, Conditions D.2 and D.3 of Reference 1. References 10, 11, and 12 provided the fourth, fifth, and sixth six-month status reports pursuant to Section IV, Condition D.3 of Reference 1 for Peach Bottom Atomic Power Station.

The purpose of this letter is to provide the seventh six-month update report for Phases 1 and 2, pursuant to Section IV, Condition D.3 of Reference 1, that delineates progress made in implementing the requirements of Reference 1 for Peach Bottom Atomic Power Station, Unit 2. The enclosed report provides an update of milestone accomplishments since the last status report, including any changes to the compliance method, schedule, or need for relief and the basis, if any. The enclosed report also addresses the NRC Interim Staff Evaluation open items contained in References 13, 14, and 15.

This letter contains no new regulatory commitments. If you have any questions regarding this report, please contact David J. Distel at 610-765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 15th day of December 2017.

Respectfully submitted,

D. P. Helker

David P. Helker
Manager - Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Enclosure:

Peach Bottom Atomic Power Station, Unit 2 Seventh Six-Month Status Report for Phases 1 and 2 Implementation of Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions

cc: Director, Office of Nuclear Reactor Regulation
NRC Regional Administrator - Region I
NRC Senior Resident Inspector - Peach Bottom Atomic Power Station
NRC Project Manager, NRR - Peach Bottom Atomic Power Station
Mr. Raj Auluck, NRR/JLD/TSD/JCBB, NRC
Mr. Brian E. Lee, NRR/JLD/JCBB, NRC
Mr. Peter Bamford, NRR/JLD/JOMB, NRC
Director, Bureau of Radiation Protection – Pennsylvania Department of Environmental Resources
R. R. Janati, Chief, Division of Nuclear Safety, Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection
S. T. Gray, State of Maryland

Enclosure

Peach Bottom Atomic Power Station, Unit 2

Seventh Six-Month Status Report for Phases 1 and 2 Implementation of Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions

(10 pages)

Enclosure

Peach Bottom Atomic Power Station, Unit 2
Seventh Six-Month Status Report for Phases 1 and 2 Implementation of Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions"

1 Introduction

Peach Bottom Atomic Power Station (PBAPS) developed an Overall Integrated Plan (Reference 1 in Section 8), documenting the installation of a Hardened Containment Vent System (HCVS) that provides a reliable hardened venting capability for pre-core damage and under severe accident conditions, including those involving a breach of the reactor vessel by molten core debris, in response to Reference 2. This is the seventh six-month status report updating milestone accomplishments based on the combined Phases 1 and 2 Overall Integrated Plan dated December 15, 2015.

PBAPS developed an updated and combined Phases 1 and 2 Overall Integrated Plan (Reference 6 in Section 8), documenting:

1. The installation of a Hardened Containment Vent System (HCVS) that provides a reliable hardened venting capability for pre-core damage and under severe accident conditions, including those involving a breach of the reactor vessel by molten core debris, in response to Reference 2.

2. An alternative venting strategy that makes it unlikely that a drywell vent is needed to protect the containment from overpressure related failure under severe accident conditions, including those that involve a breach of the reactor vessel by molten core debris, in response to Reference 2.

This enclosure provides an update of milestone accomplishments since submittal of the Sixth Six-Month Status Report for Phase 1 and Phase 2 Overall Integrated Plan, 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 combined Phases 1 and 2 Overall Integrated Plan (Reference 6), and are current as of December 1, 2017:

- Seventh Six-Month Update (complete with this submittal)
- Unit 3 achieved compliance with Phase 1 and Phase 2 requirements on November 6, 2017

3 Milestone Schedule Status

The following provides an update to Attachment 2 of the combined Phases 1 and 2 Overall Integrated Plan. It provides the activity 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
Phases 1 and 2 HCVS Milestone Table			
Submit Overall Integrated Plan	Jun. 2014	Complete	
Submit 6 Month Updates			
Update 1	Dec. 2014	Complete	
Update 2	Jun. 2015	Complete	
Update 3 [Simultaneous with Phase 2 OIP]	Dec. 2015	Complete	
Update 4	Jun. 2016	Complete	
Update 5	Dec. 2016	Complete	
Update 6	Jun. 2017	Complete	
Update 7	Dec. 2017	Complete with this submittal	
Update 8	Jun. 2018	Not Started	
Update 9	Dec. 2018	Not Started	
Phase 1 Specific Milestones			
Phase 1 Unit 2 Modifications			
Begin Conceptual Design	Apr. 2014	Complete	
Complete Conceptual Design	Jun. 2015	Complete	
Begin Detailed Design	Jun. 2015	Complete	
Complete Detailed Design and Issue Modification Package	Jun. 2016	Complete	
Begin Online Portion of the Installation	Jun. 2016	Complete	
Complete Online Installation	Oct. 2016	Complete	
Begin Outage Portion of the Installation	Oct. 2016	Complete	
Complete Outage Installation	Nov. 2016	Complete	
Phase 1 Procedure Changes Active			
Operations Procedure Changes Developed	Nov. 2016	Complete	

Milestone	Target Completion Date	Activity Status	Comments
Phases 1 and 2 HCVS Milestone Table			
Site Specific Maintenance Procedure Developed	Nov. 2016	Complete	
Procedure Changes Active	Nov. 2016	Complete	
Phase 1 Training			
Training Complete	Nov. 2016	Complete	
Phase 1 Completion			
Unit 2 Phase 1 HCVS Implementation	Nov. 2016	Complete	
Phase 1 Unit 3 Modifications			
Begin Conceptual Design	N/A	N/A	
Complete Conceptual Design	N/A	N/A	
Begin Detailed Design	May 2016	Complete	
Complete Detailed Design and Issue Modification Package	Feb. 2017	Complete	
Begin Online Portion of the Installation	Mar. 2017	Complete	
Complete Online Installation	Oct. 2017	Complete	
Begin Outage Portion of the Installation	Oct. 2017	Complete	
Complete Outage Installation	Nov. 2017	Complete	
Phase 1 Procedure Changes Active			
Operations Procedure Changes Developed	Nov. 2017	Complete	
Site Specific Maintenance Procedure Developed	Nov. 2017	Complete	
Procedure Changes Active	Nov. 2017	Complete	
Phase 1 Training			
Training Complete	Nov. 2017	Complete	
Phase 1 Completion			
Unit 3 Phase 1 HCVS Implementation	Nov. 2017	Complete	

Milestone	Target Completion Date	Activity Status	Comments
Phases 1 and 2 HCVS Milestone Table			
Phase 2 Specific Milestones			
Phase 2 Unit 3 Modifications			
Begin Conceptual Design	May 2016	Complete	
Complete Conceptual Design	Nov. 2016	Complete	
Begin Detailed Design	Dec. 2016	Complete	
Complete Detailed Design and Issue Modification Package	Jul. 2017	Complete	
Begin Online Portion of the Installation	Sep. 2017	Complete	
Complete Online Installation	Oct. 2017	Complete	
Begin Outage Portion of the Installation	Oct. 2017	Complete	
Complete Outage Installation	Nov. 2017	Complete	
Phase 2 Procedure Changes Active			
Operations Procedure Changes Developed	Nov. 2017	Complete	
Site Specific Maintenance Procedure Developed	Nov. 2017	Complete	
Procedure Changes Active	Nov. 2017	Complete	
Phase 2 Training			
Training Complete	Nov. 2017	Complete	
Phase 2 Completion			
Unit 3 Phase 2 HCVS Implementation	Nov. 2017	Complete	
Submit Full Compliance Report for Phase 1 & Phase 2 for Unit 3	Jan. 2018	Started	
Phase 2 Unit 2 Modifications			
Begin Conceptual Design	N/A	N/A	
Complete Conceptual Design	N/A	N/A	
Begin Detailed Design	Jun. 2017	Complete	

Milestone	Target Completion Date	Activity Status	Comments
Phases 1 and 2 HCVS Milestone Table			
Complete Detailed Design and Issue Modification Package	Sep. 2017	Complete	
Begin Online Portion of the Installation	Feb. 2018	Not Started	
Complete Online Installation	Oct. 2018	Not Started	
Begin Outage Portion of the Installation	Oct. 2018	Not Started	
Complete Outage Installation	Nov. 2018	Not Started	
Phase 2 Procedure Changes Active			
Operations Procedure Changes Developed	Nov. 2018	Started	
Site Specific Maintenance Procedure Developed	Nov. 2018	Started	
Procedure Changes Active	Nov. 2018	Started	
Phase 2 Training			
Training Complete	Nov. 2018	Started	
Phase 2 Completion			
Unit 2 Phase 2 HCVS Implementation	Nov. 2018	Not Started	
Submit Full Compliance Report for Phase 1 & Phase 2 for Unit 2	Jan. 2019	Not Started	

4 Changes to Compliance Method

There are no changes to the compliance method outlined in Reference 6 in addition to those communicated in the previous six-month updates.

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

PBAPS expects to comply with the order implementation date and no relief/relaxation is required at this time.

6 Open Items from Combined Phases 1 and 2 Overall Integrated Plan and Interim Staff Evaluations

The following tables provide a summary of the open items documented in the combined Phases 1 and 2 Overall Integrated Plan or the Interim Staff Evaluation (ISE) for Phase 1 and Phase 2 and the status of each item. Phase 1 open item responses were discussed with the NRC on May 18, 2017, and all items were adequately addressed and resolved. All additional information has been provided, and the Phase 1 open items are considered closed based on NRC review.

Combined Phases 1 and 2 OIP Open Item	Status
Phase 1 Open Items	
OI-1. Confirm that the Remote Operating Station (ROS) will be in an accessible area following a Severe Accident (SA).	Deleted. Closed to ISE Open Item number 09.
OI-2. Provide procedures for HCVS Operation	Deleted. Closed to ISE Open Item number 01.
OI-3. Identify site specific controlling document for HCVS out of service and compensatory measures	Deleted. Closed to ISE Open Item number 02.
OI-4. Determine the approach for combustible gases.	Deleted. Closed to ISE Open Item number 08.
OI-5. Perform radiological evaluation for Phase 1 vent line impact on ERO response actions.	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).

Phase 1 Interim Staff Evaluation Open Item	Status
ISE-1. Make available for NRC staff audit guidelines and procedures for HCVS operation. (Section 3.2.3.1)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-2. Make available for the NRC staff audit the site specific controlling document for HCVS out of service and compensatory measures. (Section 3.4.1)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-3. Make available for NRC staff audit a technical justification for use of jumpers in the HCVS strategy. (Section 3.1.3)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-4. Make available for NRC staff audit analyses demonstrating that the 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 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. (Sections 3.2.2.1 and 3.2.2.2)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-5. Make available for NRC staff audit descriptions or diagrams of reactor building ventilation including exhaust dampers failure modes to support licensee justification for the HVAC release point being below and 150 feet from the reactor building ventilation release point. (Section 3.2.2.3)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-6. Make available for NRC staff audit details to justify the deviation from tornado protection standards provided in NEI 13-02 or make available a description of how the HCVS will comply with the tornado protection standards provided in NEI-13-02. (Section 3.2.2.3)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-7. 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 condition. (Section 3.2.2.5)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-8. Provide a description of the final design of the HCVS to address hydrogen detonation and deflagration. (Section 3.2.2.6)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-9. 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. (Sections 3.2.1, 3.2.2.3, 3.2.2.4, 3.2.2.5, 3.2.2.10, 3.2.4.1, 3.2.4.2, 3.2.5.2, and 3.2.6)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).

Phase 1 Interim Staff Evaluation Open Item	Status
ISE-10. Make available for NRC staff audit descriptions of all instrumentation and controls (existing and planned) necessary to implement this order including qualification methods. (Sections 3.2.2.9 and 3.2.2.10)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-11. Make available for NRC staff audit the final sizing evaluation for HCVS batteries/battery charger including incorporation into FLEX DG loading calculation. (Sections 3.2.2.4, 3.2.3.1, 3.2.3.2, 3.2.4.1, 3.2.4.2, 3.2.5.1, 3.2.5.2, and 3.2.6)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-12. 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. (Sections 3.2.2.3, 3.2.2.5, 3.2.2.9, and 3.2.2.10)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-13. 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)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-14. 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 and 3.2.2.7)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).
ISE-15. Make available for NRC audit documentation confirming that HCVS will remain isolated from standby gas treatment system during ELAP and severe accident conditions. (Section 3.2.2.7)	Complete Completion support information is contained in the fifth six month update dated December 15, 2016 (Reference 8).

Phase 2 Interim Staff Evaluation Open Item	Status
ISE-1. Licensee to demonstrate the SAWA equipment and controls, as well as ingress and egress paths for the expected severe accident conditions (temperature, humidity, radiation) remain operational throughout the sustained operating period. (Section 3.3.2.3)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).
ISE-2. Licensee to demonstrate that instrumentation and equipment being used for SAWA and supporting equipment is capable to perform for the sustained operating period under the expected temperature and radiologqical conditions. (Section 3.3.2.3)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).
ISE-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)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).
ISE-4 Licensee shall demonstrate whether a site specific MAAP evaluation will be used to determine an initial SAWA flow rate. If the evaluations performed in BWROG TP-15-011 is considered, provide a description of how the plant is bounded by the reference plant analysis that shows the SAWM strategy is successful in making it unlikely that a drywell vent is needed. (Section 3.3.3.1)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).
ISE-5 Licensee to demonstrate that there is adequate communication between the MCR and the Intake Structure operator at the FLEX manual valve during severe accident conditions. (Section 3.3.3.4)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).
ISE-6 Licensee to demonstrate the SAWM flow instrumentation qualification for the expected environmental conditions. (Section 3.3.3.4)	Complete Completion support information is contained in the sixth six-month update dated June 30, 2017 (Reference 9).

7 Interim Staff Evaluation Impacts

There are no potential impacts to the Interim Staff Evaluation(s) identified at this time.

8 References

The following references support the updates to the combined Phases 1 and 2 Overall Integrated Plan described in this enclosure.

1. Peach Bottom Atomic Power Station, Units 2 and 3, 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.

2. 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.

3. NEI 13-02, "Industry Guidance for Compliance with NRC Order EA-13-109, 'To Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions," Revision 1, dated April 2015.

4. 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 (Accession No. ML13304B836).

5. NRC Endorsement of Industry "Hardened Containment Venting System (HCVS) Phase 1 Overall Integrated Plan Template (EA-13-109) Rev 0" (Accession No. ML14128A219).

6. Peach Bottom Atomic Power Station, Units 2 and 3, Combined Phases 1 and 2 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 December 15, 2015.

7. 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 (Accession No. ML15104A118).

8. Peach Bottom Atomic Power Station, Units 2 and 3, Fifth Six-Month Status Report for Phase 1 and Phase 2 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 December 15, 2016 (RS-16-235).

9. Peach Bottom Atomic Power Station, Units 2 and 3, Sixth Six-Month Status Report for Phase 1 and Phase 2 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, 2017 (RS-17-068).