



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
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Plymouth, MA 02360

John A. Dent, Jr.
Site Vice President

February 27, 2015

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

SUBJECT: Pilgrim Nuclear Power Station's Fourth Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

LETTER NUMBER 2.15.005

REFERENCE:

1. NRC Order Number EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events", dated March 12, 2012 (PNPS Letter 1.12.013)
2. NRC Interim Staff Guidance JLD-ISG-2012-01, Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, Revision 0, dated August 29, 2012 (ML 12229A174)
3. Nuclear Energy Institute (NEI) 12-06, Revision 0, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide", dated August 2012
4. Pilgrim Nuclear Power Station Letter to NRC, "Initial Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)", dated October 29, 2012 (PNPS Letter 2.12.072)
5. Pilgrim Nuclear Power Station Letter to NRC, "Overall Integrated Plan Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)", dated February 28, 2013 (PNPS Letter 2.13.012)
6. NRC Order Number EA-12-050, "Order to Modify Licenses With Regard To Reliable Hardened Containment Vents", dated March 12, 2012 (PNPS Letter 1.12.014)

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7. NRC Order Number EA-13-109, "Order to Modify Licenses With Regard To Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions", dated June 6, 2013 (PNPS Letter 1.13.028)
8. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated August 28, 2013 (PNPS Letter 2.13.069)
9. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's Second Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated February 28, 2014 (PNPS Letter 2.14.011)
10. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's Third Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated August 28, 2014 (PNPS Letter 2.14.061)

Dear Sir or Madam:

On March 12, 2012, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an order (Reference 1) to Entergy. Reference 1 was immediately effective and directs Entergy to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (Reference 2) and an overall integrated plan pursuant to Section IV, Condition C. Reference 2 endorses industry guidance document NEI 12-06, Revision 0 (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the Pilgrim Station initial status report regarding mitigation strategies. Reference 5 provided the Pilgrim Overall Integrated Plan.

Reference 1 requires submission of a status report at six-month intervals following submittal of the overall integrated plan. Reference 3 provides direction regarding the content of the status reports. Reference 8 provided the first six-month status report. Reference 9 provided the second six-month status report. Reference 10 provided the third six-month status report. The purpose of this letter is to provide the fourth six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1. The attached 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 FLEX strategies in the Overall Implementation Plan currently rely on the current conceptual design of the reliable hardened vent (RHV) system that was developed in response to Reference 6, NRC Order EA-12-050. Reference 7, NRC Order EA-13-109, dated June 6, 2013,

rescinds the requirements of NRC Order EA-12-050. Compliance with the requirements of NRC Order EA-12-050, including applicable schedule deadlines for submittals or implementation, is no longer required. The industry, through NEI and the owners' group, is addressing the new requirements provided in NRC Order EA-13-109 on the schedule outlined in NRC Order EA-13-109. Because of the new order (NRC Order EA-13-109), there will be additional independent instrumentation improvements made to the hardened containment vent, but the wetwell vent is otherwise not changing from what is already required and being prepared for the FLEX Strategy Containment Venting.

Should you have any questions concerning the content of this letter, please contact Mr. Everett (Chip) Perkins Jr. at (508) 830-8323.

This letter contains no new regulatory commitments.

I declare under penalty of perjury that the foregoing is true and correct; executed on February 27, 2015.

Sincerely,



John A. Dent Jr.
JAD/rmb

Attachment: Pilgrim Nuclear Power Station's Fourth Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

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NRC Resident Inspector
Pilgrim Nuclear Power Station

ATTACHMENT

To

PNPS Letter 2.15.005

**PILGRIM NUCLEAR POWER STATION'S
FOURTH SIX-MONTH STATUS REPORT IN RESPONSE TO
MARCH 12, 2012 COMMISSION ORDER MODIFYING
LICENSES WITH REGARD TO REQUIREMENTS FOR
MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS
EXTERNAL EVENTS
(ORDER NUMBER EA-12-049)**

Attachment

Pilgrim Nuclear Power Station's Fourth Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses With Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

1 Introduction

Entergy Nuclear Operations, Inc. (Entergy) developed an Overall Integrated Plan (Reference 1) for Pilgrim Nuclear Power Station (PNPS), documenting the diverse and flexible strategies (FLEX), in response to Reference 2. This attachment provides an update of milestone accomplishments since submittal of the last status report (Reference 10), 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 July 31, 2014, and are current as of January 31, 2015.

- Third Six-Month Status Report - August 2014
- Procedure Changes Training Material Complete - October 2014
- Fourth Six-Month Status Report - Complete with submission of this document in February 2015.

3 Milestone Schedule Status

The following provides an update to Attachment 2 of the 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.

- No new additions or changes to target completion dates for this report.

Milestone	Target Completion Date*	Activity Status	Revised Target Completion Date
Submit 60 Day Status Report	October 2012	Complete	
Submit Overall Integrated Implementation Plan	February 2013	Complete	
Submit Six-Month Status Report	August 2013	Complete	
Submit Six-Month Status Report	February 2014	Complete	

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Milestone	Target Completion Date*	Activity Status	Revised Target Completion Date
Modifications Approved for Implementation	February 2014	Complete	
Develop Training Plan	March 2014	Complete	
Submit Six-Month Status Report	August 2014	Complete	
Procedure Changes Training Material Complete	October 2014	Complete	
Submit Six-Month Status Report	February 2015	Complete	
Implement Training (Schedule LORT Plan to Support Implementation)	March 2015	Started	
Modification Implementation Complete	May 2015	In Progress	
Demonstration / Functional Test	May 2015	Not Started	
Submit Post Outage 60-day Report	July 2015	Not Started	
Submit Six-Month Status Report	August 2015	Not Started	
Submit Completion Report	December 2015	Not Started	

*Target Completion Date is the last submitted date from either the Overall Integrated Plan or previous Six-month Status Report.

4 Changes to Compliance Method

There are no changes to the compliance method as documented in the Overall Integrated Plan (Reference 1).

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

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

6 Open Items from Overall Integrated Plan and Interim Staff Evaluation

The following tables provide a summary and status of any open items documented in the Overall Integrated Plan (OIP) and any open items or confirmatory items documented in the Interim Staff Evaluation (ISE). A fourth table includes the FLEX related NRC Audit Visit Open Items, which includes open items on previously issued Audit Questions and new Safety Evaluation (SE) Open Items that were not closed during the October 2014 NRC Audit Visit as documented in the NRC's Report for the PNPS Onsite Audit (Reference 11). A fifth table includes a listing of all Audit Questions and their status.

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Note that during the October 2014 NRC Audit Visit (documented in Reference 11 of this attachment), the NRC utilized a spreadsheet entitled Pilgrim Nuclear Plant, SE Item Tracker to maintain a status of Open Items associated with development of the NRC's Safety Evaluation. The SE Tracker numbered each item with an Audit Item No. based on the category of the Open Item. The categories were:

- A. ISE Open and Confirmatory Items (Audit Item x-A)
- B. Audit Questions (Audit Item x-B)
- C. Licensee OIP Open Items (Audit Item x-C)
- D. Order 051 SFPI ISE RAIs (Audit Item x-D)
- E. Combined SE Template Technical Review Gaps (Audit Item x-E)

The open items in the NRC's Report for the PNPS Onsite Audit (Reference 11 of this attachment) did not utilize the SE Tracker Audit Item Numbers and did not address all of the SE Tracker Items that were closed during the Onsite Audit Visit. The Audit Item Numbers utilized below are in some cases from the SE Tracker spreadsheet and in some cases from the NRC's Report for the PNPS Onsite Audit (Reference 11); the source of the Audit Item Numbers have been identified.

Additionally, in the Status columns of the following tables, the phrase "This item was closed during [following] the October 2014 NRC Audit Visit" indicates that since the item is not listed as an Open Item in the NRC's Report for the PNPS Onsite Audit Report (Reference 11 of this attachment) the item is considered closed.

Overall Integrated Plan Open Item	Status
1. Beyond-design-basis external event impact on requirements in existing licensing documents will be determined based on input from the industry groups and direction from the NRC.	Entergy has determined that no FSAR changes are required to reflect FLEX. This item was closed following the October 2014 NRC Audit Visit (SE Tracker Audit Item 1-C).
2. Structure, content and details of the Regional Response Center playbook will be determined.	This item was closed following the October 2014 NRC Audit Visit (SE Tracker Audit Items 2-C and 4-E).

Interim Staff Evaluation Open Items	Status
3.2.1.4.A — On pages 16, 23, and 63 of the Integrated Plan regarding Portable Equipment to Maintain Core Cooling, the licensee describes the use of portable pumps to provide RPV injection. No technical basis or a supporting analysis was provided for the diesel-driven FLEX pump capabilities	The PNPS ISE Open and Confirmatory Items are addressed in a single document that has been uploaded to the ePortal.

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<p>considering the pressure within the RPV and the loss of pressure along with details regarding the FLEX pump supply line routes, length of hoses runs, connecting fittings, and elevation changes to show that the pump is capable of injecting water into the RPV with a sufficient rate to maintain and recover core inventory for both the primary and alternate flow paths.</p>	<p>This item was stauted as Open as documented in Reference 11. (SE Tracker Audit Item 12-A, NRC Audit Report Audit Item ISE OI 3.2.1.4.A).</p>
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Interim Staff Evaluation Confirmatory Items	Status
<p>3.1.1.1.A — The Integrated Plan does not specify procedures and programs will provide for securing large portable equipment to protect them during a seismic event or to ensure unsecured and/or non-seismic components do not damage the equipment as is specified in NEI 12-06, Section 5.3.1, considerations 2 and 3.</p>	<p>The PNPS ISE Open and Confirmatory Items are addressed in a single document that has been uploaded to the ePortal. This item was closed following the October 2014 NRC Audit Visit (SE Tracker Audit Item 1-A) as documented in Reference 11.</p>
<p>3.1.1.2.A — The licensee identified that access to at least one connection point for the equipment will require access through routes that are not FSAR Seismic Class I, however they have been evaluated and the potential for large scale debris field that would prevent access to the equipment needed to be repowered is not present. Their evaluation should be validated during the site audit.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 2-A). See Reference 11.</p>
<p>3.1.1.3.A — The licensee was requested to provide additional information concerning coping strategies for the failure of seismically qualified electrical equipment that can be affected by beyond-design-basis seismic events as discussed in NEI 12-06, Section 5.3.3 consideration 1.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 3-A). See Reference 11.</p>
<p>3.1.3.1.A — The storage of the FLEX equipment is in sea vans. The licensee is in the process of performing a calculation to demonstrate conformance with NEI 12-06, Section 7.3.1.b, bullet 4 related to adequate tie down of the sea vans. Evaluation of the completed calculation must be completed to determine if it demonstrates conformance to guidance in NEI 12-06, Section 7.3.1.b, bullet 4.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 4-A). See Reference 11.</p>
<p>3.1.3.2.A — During the audit process, the licensee identified that there are existing plant procedures that address hurricanes. The procedures need to be evaluated for conformance to NEI 12-06, considerations 1, 2, and 5.</p>	<p>Complete. This item was considered closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 5-A), however, Reference 11 indicates the item is open. Response</p>

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Interim Staff Evaluation Confirmatory Items	Status
	available on the ePortal (FW Parking Locations for FLEX pickup trucks.msg)
3.2.1.1.A — From the June 2013 position paper, benchmarks must be identified and discussed which demonstrate that the Modular Accident Analysis Program (MAAP) 4 is an appropriate code for the simulation of an Extended Loss of AC Power (ELAP) event at your facility.	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 6-A). See Reference 11.
3.2.1.1.B — The collapsed level must remain above Top of Active Fuel (TAF) and the cool down rate must be within technical specification limits.	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 7-A). See Reference 11.
3.2.1.1.C — MAAP4 must be used in accordance with Sections 4.1, 4.2, 4.3, 4.4, and 4.5 of the June 2013 position paper.	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 8-A). See Reference 11.
3.2.1.1.D — In using MAAP4, the licensee must identify and justify the subset of key modeling parameters cited from Tables 4-1 through 4-6 of the "MAAP4 Application Guidance, Desktop Reference for Using MAAP4 Software, Revision 2" (Electric Power Research Institute Report 1 020236). This should include response at a plant-specific level regarding specific modeling options and parameter choices for key models that would be expected to substantially affect the ELAP analysis performed for that licensee's plant.	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 9-A). See Reference 11.
3.2.1.1.E —The specific MAAP4 analysis case that was used to validate the timing of mitigating strategies in the integrated plan must be identified and should be available on the ePortal for NRC staff to view. Alternately, a comparable level of information may be included in the supplemental response. In either case, the analysis should include a plot of the collapsed vessel level to confirm that TAF is not reached (the elevation of the TAF should be provided) and a plot of the temperature cool down to confirm that the cool down is within tech spec limits.	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 10-A). See Reference 11.
3.2.1.2.A —The following is requested: <ol style="list-style-type: none"> 1. Justification for the assumptions made regarding primary system leakage from the recirculation pump seals and other sources. 2. Assumed pressure-dependence of the leakage rate. 3. Clarification on whether the leakage was determined 	This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 11-A). See Reference 11.

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Interim Staff Evaluation Confirmatory Items	Status
<p>or assumed to be single-phase liquid, two-phase mixture, or steam at the donor cell and discuss how mixing of the leakage flow with the drywell atmosphere is modeled.</p>	
<p>3.2.1.5.A — The integrated plan does not identify non-powered local instrumentation other than Containment pressure and RPV level and pressure. The integrated plan identifies that phase 2 equipment will have installed local instrumentation needed to operate the equipment. The licensee needs to identify the instrumentation that will be used to monitor portable FLEX electrical power equipment.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 13-A). See Reference 11.</p>
<p>3.2.4.2.A — The licensee was requested to provide the maximum calculated MCR temperature and a detailed summary of the analysis used to determine the temperature and the procedure for control of MCR temperature. The licensee response was that existing procedure 2.4.149 addresses "Loss of MCR H&V". The procedure is symptom driven, containing temperature limits to perform actions, and it is not time driven. Pilgrim will provide the referenced "GOTHIC" evaluation. Evaluation of the "GOTHIC" analysis is needed to evaluate the MCR temperature.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 14-A).</p>
<p>3.2.4.4.A — The licensee needs to provide complete details of portable lighting.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 15-A). See Reference 11.</p>
<p>3.2.4.4.B — The licensee provided its communications assessment in letters dated October 31, 2012 and February 21, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML12321A051 and ML13058A032) in response to the NRC letter dated March 12, 2012, 50.54(f) request for information letter. The NRC staff provided its evaluation on May 21, 2013 (ADAMS Accession No. ML13127A179). The NRC staff has determined that the assessment for communications is reasonable, and the analyzed existing systems, proposed enhancements, and interim measures will help to ensure that communications are maintained. This has been identified for confirmation that upgrades to the site's communications systems have been completed.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 16-A). See Reference 11.</p>
<p>3.2.4.5.A — The Integrated Plan does not identify procedures/guidance with regard to the access to the Protected Area and internal locked areas. During the audit process, the licensee identified existing security doors that provide egress capability and have key access in the event</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 17-A).</p>

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Interim Staff Evaluation Confirmatory Items	Status
<p>of a power loss. Operations and Security are currently researching options, the intention is to include it in the Emergency procedures addressing DDBEE perimeters, the site declaration of 50.54(x), and recognizing resource needs, including Security, and compensatory measures based on the event.</p>	
<p>3.2.4.8.A — During the audit process, the licensee was requested to provide electrical Single Line Diagrams showing the proposed connections of Phase 2 and 3 electrical equipment to permanent plant equipment. The licensee responded that Engineering Change markup of the One-Line Diagrams E13 and E14Sh1 (EC45555 & EC45556), will be posted to the ePortal. The NRC staff will complete the review after they are posted.</p>	<p>The PNPS ISE Open and Confirmatory Items are addressed in a single document that has been uploaded to the ePortal.</p> <p>This item was closed following the October 2014 NRC Audit Visit (SE Tracker Audit Item 18-A) as documented in Reference 11.</p>
<p>3.2.4.8.B — During the audit process, the licensee identified Engineering Changes are being developed to support the FLEX project which requires electrical studies to be performed. This includes the electrical diesel loading and load flow studies. The addition of the transfer switches and additional cable lengths are being incorporated into the Pilgrim design calculations (load flow, short circuit and coordination.) The FLEX diesel generator sizes need to be verified after the loading calculations are finalized.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 19-A). See Reference 11.</p>
<p>3.2.4.10.A — Attachment 1 A of the Integrated Plan notes that at one hour, the ELAP decision is made and deep dc load shedding begins at one hour (item 3), and at 2 hours the dc load shed is complete (item 4). The licensee was requested to provide the dc load profile with the required loads for the mitigating strategies to maintain core cooling, containment, and spent fuel pool cooling. During the audit process, the licensee responded that the dc load flow profiles are being developed as part of a new electrical battery FLEX extended operation load flow and battery sizing study PS258.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 20-A). See Reference 11.</p>
<p>3.2.4.10.B — The licensee was requested to provide a detailed discussion on the loads that will be shed from the dc bus, the equipment location (or location where the required action needs to be taken). During the audit process, the licensee responded by identifying that a tentative list of loads proposed to isolate, isolation time and panel locations are available and provided in the ePortal. The licensee will finalize the load-shed list after a review by Operations.</p>	<p>This item was closed during the October 2014 NRC Audit Visit (SE Tracker Audit Item 21-A).</p>

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Interim Staff Evaluation Confirmatory Items	Status
3.2.4.A — The licensee's plans for the use of off-site resources did not address considerations 2 through 10 of NEI 12-06, Section 12.2.	<p>The PNPS ISE Open and Confirmatory Items are addressed in a single document that has been uploaded to the ePortal.</p> <p>This item was closed following the October 2014 NRC Audit Visit (SE Tracker Audit Item 22-A) as documented in Ref. 11.</p>

October 2014 NRC Audit Visit FLEX Related Open Items (Reference 11)			
Audit Item Reference	Item Description	Licensee Input Needed	Status
ISE OI 3.2.1.4.A (SE Tracker Audit Item 12-A)	Pages 16, 23, and 63 of the Integrated Plan [NRC Order EA-12-049, dated February 28, 2013, (ADAMS Accession No. ML 13063A063)], regarding Portable Equipment to Maintain Core Cooling, Entergy describes the use of potable pumps to provide reactor pressure vessel injection. No technical basis or supporting analysis was provided for the diesel driven FLEX pump capabilities considering the pressure within the RPV and the loss of pressure along with details regarding the FLEX pump supply line routes, length of hose runs, connecting fittings, and elevation changes to show that the pump is capable of injecting water into the RPV with a sufficient rate to maintain and recover core inventory for both the primary and alternate flow paths.	Entergy has action to provide the revised hydraulic calculations and analysis that demonstrate that the portable pump has sufficient net positive suction head.	Hydraulic calculation has been revised and available on the ePortal (Calc M1384 EC45558 ECN54090.pdf).

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October 2014 NRC Audit Visit FLEX Related Open Items (Reference 11)			
Audit Item Reference	Item Description	Licensee Input Needed	Status
AQ 60 (SE Tracker Audit Item 48-B)	Describe plans for supplying fuel oil to FLEX equipment (i.e., fuel oil storage tank volume, supply pathway, etc.). Also, explain how fuel quality will be assured if stored for extended periods of time.	Entergy to provide NRC staff of procedure to refuel Phase 3 equipment.	Response is available on the ePortal (Answer to 48-B.docx).
AQ 69 (SE Tracker Audit Item 53-B)	Entergy plans to use ground water well pumps during phases 2 and 3. The staff requested information on the seismic qualification of the pumps.	NRC staff waiting for shaker test on pump. Entergy has not completed this test.	In progress. Shaker test on pump is in progress.
RAI SE No. 5 (SE Tracker Audit Item 9-E)	The NRC staff needs to review the ventilation analysis for areas containing electrical equipment to ensure the equipment can perform as expected during a loss of ventilation as a result of ELAP (Primary Areas will included HPCI/RCIC Pump Rooms, Switchgear Rooms, Main Control Room, and Battery Rooms).	Entergy to finalize their ventilation analysis on the electrical switchgear room.	In Progress. Loss of ventilation evaluations for HPCI/RCIC Pump Rooms, Switchgear Rooms, Main Control Room and Battery Rooms are in progress.
RAI SE No. 6 (SE Tracker Audit Item 10-E)	As described in Item 5 on page 8 of the integrated plan, confirm that the stresses associated with passing liquid phase water through the SRV tail pipe, including those on the tail pipe, the tail pipe supports, the quencher and the quencher supports are evaluated with acceptable results.	Entergy to confirm whether it has evaluated the issue previously and consider whether additional review from structural experts is necessary to assist in review.	Evaluation of SRV tail pipes and supports and the quenchers is available on the ePortal (PNPS Audit Item 10-E Liquid Phase Water through SRV Tail Pipe 12-15-2014.docx).

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October 2014 NRC Audit Visit FLEX Related Open Items (Reference 11)			
Audit Item Reference	Item Description	Licensee Input Needed	Status
RAI SE No. 7 (SE Tracker Audit Item 11-E)	Extended loss of alternating current during low power modes.	Entergy developing procedures.	Response is available on the ePortal (Open Audit Item 11-E Response – 11-06-2014.docx)
RAI SE No. 8 (SE Tracker Audit Item 12-E)	Flex support guidelines for transitioning from Phase 2 to Phase 3.	Entergy to develop procedures to use equipment from the Regional Response Center.	Response is available on the ePortal (Answer to 12-E.docx)
RAI SE No. 9 (SE Tracker Audit Item 13-E)	Diesel 'N' Storage - Entergy believes one 86 KW diesel generator is sufficient as 'N' if the 250 volt battery lasts 10 hours.	Generic issue, NRC staff is evaluating this battery.	Response available on the ePortal (FW Audit Item 13E.msg)

Audit Questions	Status	Completion or Target Date
PNPS-002 (SE Tracker Audit Item 1-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-003 (SE Tracker Audit Item 2-B)	This item was closed during the October 2014 NRC Audit Visit (Associated with ISE Confirmatory Item 3.1.1.2.A)	N/A
PNPS-004 (SE Tracker Audit Item 3-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-006 (SE Tracker Audit Item 4-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-007 (SE Tracker Audit Item 5-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A

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Audit Questions	Status	Completion or Target Date
PNPS-008 (SE Tracker Audit Item 6-B)	In Progress. The associated ISE CI was considered closed during the October 2014 NRC Audit Visit, however, Reference 11 indicates the ISE CI is open (associated with ISE confirmatory Item 3.1.3.2.A). This AQ response will be updated when information is available.	March 2015
PNPS-009 (SE Tracker Audit Item 7-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.1.3.1.A) See Reference 11.	N/A
PNPS-010 (SE Tracker Audit Item 8-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-011 (SE Tracker Audit Item 9-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-012 (SE Tracker Audit Item 10-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-013 (SE Tracker Audit Item 11-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-014 (SE Tracker Audit Item 12-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-015 (SE Tracker Audit Item 13-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Items 3.2.1.1.A and 3.2.1.1.E)	N/A
PNPS-016 (SE Tracker Audit Item 14-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.1.1.C)	N/A
PNPS-017 (SE Tracker Audit Item 15-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Items 3.2.1.1.B and 3.2.1.1.D)	N/A

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PNPS-018 (SE Tracker Audit Item 16-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-019 (SE Tracker Audit Item 17-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.1.1.A)	N/A
PNPS-020 (SE Tracker Audit Item 18-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-021 (SE Tracker Audit Item 19-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-022 (SE Tracker Audit Item 20-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-024 (SE Tracker Audit Item 21-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-025 (SE Tracker Audit Item 22-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-026 (SE Tracker Audit Item 23-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-027 (SE Tracker Audit Item 24-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-030 (SE Tracker Audit Item 25-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-032 (SE Tracker Audit Item 26-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-033 (SE Tracker Audit Item 27-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.2.A)	N/A

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PNPS-034 (SE Tracker Audit Item 28-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-035 (SE Tracker Audit Item 29-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-036 (SE Tracker Audit Item 30-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-037 (SE Tracker Audit Item 31-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-038 (SE Tracker Audit Item 32-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-039 (SE Tracker Audit Item 33-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Items 3.2.4.4.A and 3.2.4.4.B)	N/A
PNPS-040 (SE Tracker Audit Item 34-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.5.A)	N/A
PNPS-042 (SE Tracker Audit Item 35-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-043 (SE Tracker Audit Item 36-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-044 (SE Tracker Audit Item 37-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-046 (SE Tracker Audit Item 38-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-047 (SE Tracker Audit Item 39-B)	This item was closed following the October 2014 NRC Audit Visit as documented in Reference 11 (associated with ISE Confirmatory Item 3.4.A)	N/A

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PNPS-049 (SE Tracker Audit Item 40-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-053 (SE Tracker Audit Item 41-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-054 (SE Tracker Audit Item 42-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.10.A)	N/A
PNPS-055 (SE Tracker Audit Item 43-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.10.B)	N/A
PNPS-056 (SE Tracker Audit Item 44-B)	This item was closed during the October 2014 NRC Audit Visit.	NA/
PNPS-057 (SE Tracker Audit Item 45-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.8.B)	N/A
PNPS-058 (SE Tracker Audit Item 46-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-059 (SE Tracker Audit Item 47-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-060 (SE Tracker Audit Item 48-B, NRC Audit Report Audit Item AQ 60)	This item was stasured as Open (Audit Item 48-B) as documented in Reference 11. Updated Response available on the ePortal.	March 2015
PNPS-065 (SE Tracker Audit Item 49-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A
PNPS-066 (SE Tracker Audit Item 50-B)	This item was closed during the October 2014 NRC Audit Visit (associated with ISE Confirmatory Item 3.2.4.8.A)	N/A
PNPS-067 (SE Tracker Audit Item 51-B)	This item was closed during the October 2014 NRC Audit Visit. See Reference 11.	N/A

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PNPS-068 (SE Tracker Audit Item 52-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-069 (SE Tracker Audit Item 53-B, NRC Audit Report Audit Item AQ 69)	In progress. This item was stasured as Open as documented in Reference 11. This AQ response will be updated when information is available.	March 2015
PNPS-070 (SE Tracker Audit Item 54-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A
PNPS-071 (SE Tracker Audit Item 55-B)	This item was closed during the October 2014 NRC Audit Visit.	N/A

7 Potential Interim Staff Evaluation Impacts

Entergy has not identified any additional potential impacts to the Interim Staff Evaluation since the previous six month status report (Reference 10).

8 References

The following references support the updates to the Overall Integrated Plan described in this enclosure.

1. Pilgrim Nuclear Power Station's "Overall Integrated Plan in Response To March 12, 2012, Commission Order Modifying Licenses With Regard To Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 28, 2013.
2. NRC Order Number EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012.
3. NRC Order Number EA-12-050, Order to Modify Licenses with Regard to Reliable Hardened Containment Vents, dated March 12, 2012.
4. NRC Order Number EA-13-109, Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, dated June 6, 2013.

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5. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated August 28, 2013 (PNPS Letter 2.13.069).
6. NRC Letter, "Pilgrim Nuclear Power Station - Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies) (TAC No. MF0777)," dated December 16, 2013.
7. NRC Letter to NEI (ML13275A318), dated October 3, 2013.
8. "Use of Modular Accident Analysis Program (MAAP4) in Support of Post-Fukushima Applications," Report No. 3002001785, EPRI, June 2013 (ML13190A201).
9. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's Second Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated February 28, 2014 (PNPS Letter 2.14.011)
10. Pilgrim Nuclear Power Station Letter to NRC, "Pilgrim Nuclear Power Station's Third Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)" dated August 28, 2014 (PNPS Letter 2.14.061)
11. Pilgrim Nuclear Power Station - Report for the Audit Regarding Implementation of Mitigating Strategies and Reliable Spent Fuel Pool Instrumentation Related to Orders EA-12-049 and EA-12-051 (TAC NOS. MF0777 and MF0778) dated January 26, 2015 (PNPS Letter 1.15.003) (ML14349A518)