NEXTera ENERGY POINT BEACH

March 5, 2010

NRC 2010-0026
10 CFR 50.54(f)

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

Point Beach Nuclear Plant, Unit 2
Docket 50-301
Renewed License No. DPR-27

Point Beach Nuclear Plant, Unit 2,
Nine-Month Supplemental (Post-Outage)
Response to NRC Generic Letter 2008-01

References:
(1) U.S. Nuclear Regulatory Commission, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Generic Letter 2008-01, dated January 11, 2008 (ML072910759)
(2) FPL Energy Point Beach, LLC letter to NRC, dated May 12, 2008, Three-Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems" (ML081340756)
(3) NRC letter to FPL Energy Point Beach, LLC, dated September 25, 2008, Point Beach Nuclear Plant, Units 1 and 2 Re: Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Proposed Alternative Course of Action (ML081360263)
(4) FPL Energy Point Beach, LLC letter to NRC dated October 14, 2008, Nine-Month Response to NRC Generic Letter 2008-01, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems (ML082880659)

The Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2008-01 (Reference 1) to request that each licensee evaluate the licensing basis, design, testing, and corrective action program (CAP) for the emergency core cooling systems (ECCS), shutdown cooling (RHR) system, and containment spray (CS) system, to ensure that gas accumulation is maintained less than the void volume that challenges operability of these systems, and that appropriate action is taken when conditions adverse to quality are identified.

By letter dated May 12, 2008 (Reference 2), NextEra Energy Point Beach, LLC (NextEra), formerly FPL Energy Point Beach, LLC submitted a Three-Month Response to GL 2008-01 for Point Beach Nuclear Plant (PBNP). The NRC Staff's assessment of the response for PBNP is contained in Reference (3).

Summary of Regulatory Commitments

This supplemental response fulfills the following regulatory commitment in Reference (2):

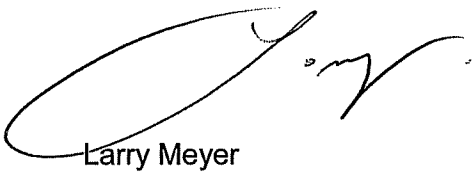
- FPL Energy Point Beach will provide a complete Unit 2 GL 2008-01 submittal 90 days after the end of the fall 2009 refueling outage. This submittal will complete the design evaluation review based on detailed walk downs of inaccessible GL piping sections performed during the Unit 2 refueling outage.

NextEra has concluded that the subject systems and functions at PBNP Unit 2 are operable and that they are currently in compliance with the licensing basis documentation and applicable regulations, including 10 CFR 50 Appendix B, Criterion III, V, XI, XVI, and XVII, with respect to the concerns outlined in GL 2008-01. GL response activities that remain to be accomplished, such as the long-term items identified in Reference (4), are considered to be confirmatory.

I declare under penalty of perjury that the foregoing information is true and correct. Executed on March 5, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC



Larry Meyer
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
PSCW

ENCLOSURE

NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNIT 2

NINE-MONTH SUPPLEMENTAL (POST-OUTAGE)
RESPONSE TO NRC GENERIC LETTER 2008-01

As requested by the NRC in Reference (1), this enclosure provides the Nine-Month Supplemental (Post-Outage) Response to NRC Generic Letter (GL) 2008-01 for actions that were deferred until the next scheduled refueling outage.

The following information is provided in this enclosure:

a) A description of the results of evaluations that were performed pursuant to GL 2008-01 on the previously incomplete activities. This includes the results of the system piping walkdowns, laser scans inside containment and ultrasonic testing of the inaccessible piping at Point Beach Nuclear Plant (PBNP) Unit 2 (See Section A of this enclosure).

b) A description of any additional commitments and corrective actions including a schedule and a basis for that schedule determined necessary to assure system operability and compliance with 10 CFR 50, Appendix B, Criterion III, V, XI, XVI, and XVII, and the licensing basis and operating license with respect to the subject systems (See Section B.1 of this enclosure).

c) A summary of any changes or updates to previous commitments and corrective actions, including any schedule changes and the basis for the change (See Section B.2 of this enclosure).

The original conclusions documented in the Nine-Month Response (Reference 2) with respect to the licensing basis, design basis, testing and corrective action evaluations have not changed.

A. PBNP UNIT 2 EVALUATION RESULTS

1. Design Basis Documents

Changes to PBNP Unit 2 design basis documentation were required as part of the modification process to incorporate 16 new high point vent valves that were installed during the fall 2009 refueling outage. The locations of these valves are discussed below in Section A.3.

Calculations and analyses have been prepared to determine the potential void volumes in unvented high points, and to establish the acceptance criteria for gas accumulation at these unvented high points in the suction and discharge piping of the Unit 2 safety injection (SI) system, the residual heat removal (RHR) system and the containment spray (CS)

system. In addition to generic acceptance criteria transmitted in Reference (2), gas transport computer model analyses have been performed for select suction and discharge piping locations. These analyses used the GOTHIC™ computer code to model the gas transport and pressure transient in emergency core cooling system (ECCS) suction and discharge piping upon a pump start-up when gas voids were present. The results of the GOTHIC™ analysis are considered to be the acceptance criteria for the specific piping locations that have been evaluated. Use of the GOTHIC™ acceptance criteria does not invalidate the acceptability of any previously evaluated voids. These calculations, with current revisions, are identified below in Table 1.

Table 1: GL 2008-01 PBNP Specific Analyses

NAI-1418-001, Rev. 1	Evaluation of Gas Accumulation in Point Beach Suction Piping
NAI-1400-004, Rev. 0	Evaluation of Gas Accumulation in FPL Plants ECCS Discharge Piping
PBNP-994-40-M01, Rev. 3	ECCS Discharge Piping Gas Void Calculation and Operability Determination
PBNP-994-40-M02, Rev. 4	ECCS Suction Piping Gas Void Calculation and Operability Determination

The results of these analyses are reported in Section A.2 below.

2. Confirmatory Walkdowns

a. Overview

System walkdowns were performed on the SI and RHR system piping in containment during the PBNP Unit 2 fall 2009 refueling outage. The inaccessible portions of the CS system piping were not included in the walkdown scope as this piping is maintained empty when aligned in the standby configuration. A combination of drawing reviews, laser scanning, manual slope measurements and analyses were used to identify high points where gas could accumulate and challenge system function. Unvented high point locations were evaluated to determine if the maximum gas volume that could be present at that location exceeded pre-established screening criteria. The unvented high points with maximum gas volumes that exceeded the screening criteria were subjected to ultrasonic testing (UT) examination to determine the size of voids present in these locations.

The results of the UT examinations were entered into the Corrective Action Program (CAP), as required by Section 4.6 of the Gas Accumulation Management Program (GAMP), to ensure that appropriate corrective actions were established for any detected gas voids.

b. Acceptance Criteria

Gas voids that were found to be less than the acceptance criteria, provided below in Tables 2 and 3, were considered to be acceptable without further evaluation. Gas voids that were found to be greater than the acceptance criteria required further evaluation to determine if system operability was a concern.

i. Pump Suction Piping

The acceptance criteria for gas accumulation in the pump suction piping are based on limiting the gas entrainment after a pump start. A Pressurized Water Reactor Owners Group (PWROG) program has established interim pump gas ingestion limits that may be employed by member utilities. These limits have been used to establish the acceptance criteria for the SI, RHR and CS pumps at PBNP. The limits have not changed from those presented in the initial Nine-Month Response (Reference 2).

A plant-specific evaluation was performed for use in operability determinations to define generic acceptance criteria for gas voids in the suction piping of the GL 2008-01 systems based upon the above PWROG pump gas ingestion limits. These generic acceptance criteria apply to the entire pipe line and, as such, are conservative. The acceptance criteria is consistent with the guidance for operation inside and outside ECCS pump best efficiency point (BEP) limits. A summary of pump suction void size generic acceptance criteria is given below in Table 2.

Table 2: Allowable Initial Void Volume - Suction Piping

System	Location	Acceptable Void Size
RH	Pump Suction Piping >18 ft Above the Pump	0.300 ft^3
RH	Pump Suction Piping <18 ft Above the Pump	0.087 ft^3
RH	RH Hot Leg Suction Piping at Standby Conditions	1.421 ft^3
CS/SI	All CS/SI Pump Suction Piping Excluding Piggyback Piping	0.039 ft^3
CS/SI	Piggyback Piping from RH Discharge	0.103 ft^3

Some of the pump suction void size generic acceptance criteria have been revised from that which was originally communicated in the Nine-Month Response (Reference 2). The revised acceptance criteria is more conservative than the original acceptance criteria and is based on the use of more conservative assumptions when applying the industry

guidance for assessing the transport of gas to the suction of the ECCS pumps. Unvented high points that were previously excluded from requiring a UT examination based on the original criteria were reevaluated using the revised criteria. Use of the revised acceptance criteria did not result in any additional UT examinations of unvented high points nor did it result in any previously evaluated points becoming unacceptable.

Since the development of the generic acceptance criteria, a gas transport computer model analysis was performed for select suction piping locations. This analysis used the GOTHIC™ computer code to model the propagation and attenuation of voids at specific locations in the ECCS suction piping which have potential for gas accumulation. Benchmarking simulations to the PWROG testing have been performed by Numerical Applications, Inc. (NAI) for their GOTHIC™ software, which demonstrate the applicability of GOTHIC™ for gas transport analysis in piping systems. The results of the plant specific GOTHIC™ analysis are considered to be the acceptance criteria for the specific suction piping locations that have been evaluated, and in these specific cases, are utilized in lieu of the generic criteria.

In addition, please refer to References (3) and (4) for the NRC staff's request for additional information on development of plant-specific void size acceptance criteria and the NextEra response to this request for additional information, respectively.

ii. Pump Discharge Piping

For the discharge piping, generic acceptance criteria were based on limiting the void size such that peak pressure pulsations did not exceed the design pressure capacity for the associated piping class, exceed relief valve set points on the particular piping system or cause transient loading of piping supports in excess of their design limits. As is noted below, the discharge criteria has been revised from the original GL submittal. A summary of the pump discharge void size generic acceptance criteria is provided below in Table 3.

Table 3: Allowable Initial Void Volume - Discharge Piping

System	Location	Acceptable Void Size
RH	RH Pump Discharge Piping	0.250 ft^3
CS	CS Pump Discharge Piping Upstream of Pump Discharge Isolation Valve	0.250 ft^3
CS	CS Pump Discharge Piping Downstream of Pump Discharge Isolation Valve	N/A - See Note Below
SI	SI Pump Discharge (4" & Larger Piping)	0.250 ft^3
SI	SI Pump Discharge (2" & Under Piping)	0.100 ft^3

Note: CS piping is normally full of air by design.

The pump discharge void acceptance criteria have been revised from what was originally communicated in the Nine-Month Response (Reference 2). The acceptance criteria have been supplemented to include an acceptable void size for SI pump discharge piping two inch nominal diameter and smaller.

Since the development of the generic acceptance criteria, a gas transport computer model analysis was performed for select discharge piping locations. This analysis used the GOTHIC™ computer code to model the pressure transient in ECCS discharge piping when pressurized by a pump start-up when gas voids were present. The results of the GOTHIC™ analysis are considered to be the acceptance criteria for the specific discharge piping locations that have been evaluated. Use of the GOTHIC™ acceptance criteria does not invalidate the acceptability of any previously evaluated voids.

iii. Cumulative Void Limits

Cumulative void limits have been established for non-condensable gases entering the reactor coolant system (RCS) to ensure that the gas will not prevent the ECCS from performing its core cooling function. These limits were described in the Nine-Month Response (Reference 2) and have not changed.

c. Results of Walkdown and UT Examinations

As a result of the piping drawing review, laser scanning, manual slope measurements and analyses, 43 inaccessible locations were identified as requiring UT examination. These UT examinations detected gas voids at six locations. The following is

a summary of the UT examination results where gas voids were detected inside Unit 2 containment.

Table 4: Gas Voids Detected by UT Examination

High Point No.	System	Location	Acceptance Criteria	Measured Void Size
IC-2-SI-D01	SI	LHSI Train A	0.700 ft^3 See Note 1	1.279 ft^3
IC-2-RH-D03	RH	RHR Shutdown Cooling Return / LHSI Train A	0.250 ft^3	
IC-2-RH-D04	RH	RHR Shutdown Cooling Return / LHSI Train A	0.250 ft^3	
IC-2-SI-D02	SI	LHSI Train A	0.250 ft^3	0.327 ft^3
IC-2-SI-D33	SI	LHSI Train A	0.250 ft^3	0.018 ft^3
IC-2-RH-S05	RH	RHR Shutdown Cooling Hot Leg Suction	1.421 ft^3	0.011 ft^3

Note 1: This acceptance criterion was obtained from a GOTHIC™ computer analysis performed for this specific high point location.

<u>High Points IC-2-SI-D01, IC-2-RH-D03 and IC-2-RH-D04</u>

A void was detected in the RHR shutdown cooling return/LHSI Train A line that spanned three adjacent high points. High point IC-2-SI-D01 is in the LHSI Train A injection line and high points IC-2-RH-D03 and IC-2-RH-D04 are in the RHR shutdown cooling return line. The size of the total void volume was calculated to be 1.279 cubic feet, which exceeded the acceptance criteria of 0.700 cubic feet for high point IC-2-SI-D01, and 0.0250 cubic feet for high points IC-2-RH-D03 and IC-2-RH-D04. Because Unit 2 was operating in MODE 3 (Hot Standby) when the void was discovered, and because the void could not be vented, ECCS Train A was declared inoperable. RHR shutdown cooling was subsequently placed into operation per normal operating procedures as the potential for a pressure transient did not exist.

A past operability determination of ECCS Train A was performed. As part of this determination, a detailed GOTHIC™ computer analysis of this void was performed. This analysis included the evaluation of the void that was subsequently discovered at high point IC-2-SI-D02, as it had the potential to combine with the void at high points IC-2-SI-D01, IC-2-RH-D03 and IC-2-RH-D04. The analysis concluded that the presence of the void would not have resulted in an excessive pressure transient upon ECCS actuation. Therefore, past operability had not been affected.

The past operability determination concluded that the probable source of the gas void was gas intrusion via back leakage of the B ECCS accumulator into the RHR shutdown cooling return line through valve 2RH-720, RHR return to RCS. The past operability determination also concluded that valve 1RH-720, RHR return to RCS, represented a gas intrusion point into the LHSI system, from the HHSI system, for Unit 1. Therefore, a corrective action was established to initiate UT examinations of this location in both units on a monthly basis. If a gas void is detected at this location in Unit 2 in the future, it will be vented via valve 2SI-V-31, low head SI core deluge, Train B, first-off isolation valve, which was installed during the fall 2009 outage. This vent is located in the LHSI Train A piping directly upstream of valve 2SI-852A, low head SI core deluge isolation. Installation of this vent during the outage had been planned prior to discovery of the void as this location had been identified as an unvented high point. A similar vent on Unit 1 is planned for installation during the Unit 1 spring 2010 outage.

High Point IC-2-SI-D02

The size of the gas void detected at high point IC-2-SI-D02 was 0.327 cubic feet, which exceeded the acceptance criteria of 0.25 cubic feet. This high point is located in the LHSI Train A piping, between valves 2SI-852A, low head SI core deluge isolation, and 2SI-853A, low head SI core deluge check. Since Unit 2 was in MODE 5 (Cold Shutdown) when the void was discovered, no immediate action was required.

Since the void at high point IC-2 SI-D02 had the potential to combine with the void at high points IC-2-SI-D01, IC-2-RH-D03 and IC-2-RH-D04 (via ECCS actuation and the opening of valve 2SI-852A.), its volume was included in the detailed GOTHIC™ computer analysis described above. The analysis concluded that presence of the combined void would not have resulted in an excessive pressure transient upon ECCS actuation.

High Point IC-2-SI-D33

High point IC-2-SI-D33 is located in the LHSI Train A piping, downstream of valve 2SI-853A. The UT examination of this high point was not part of the original scope of planned examinations. The examination was added based on the voids detected at upstream adjacent locations IC-2 SI-D02, IC-2-SI-D01, IC-2-RH-D03 and IC-2-RH-D04.

The size of the gas void detected at high point IC-2-SI-D33 was 0.018 cubic feet, which was less than the acceptance criteria of 0.25 cubic feet. The past operability determination performed for high points IC-2-SI-D01, IC-2-RH-D03 and IC-2-RH-D04

concluded that this void would not combine with the voids at the upstream adjacent high points.

High Point IC-2-RH-S05

High point IC-2-RH-S05 is located in the RHR shutdown cooling suction piping from the hot leg of the RCS. The size of the gas void detected at high point IC-2-RH-S05 was 0.011 cubic feet, which was less than the acceptance criteria of 1.421 cubic feet. Therefore, no further action was required.

3. Vent Valves

During the fall 2009 refueling outage, a total of 16 new vent valves were installed in the SI, RHR and CS systems. Two new vent valves were installed inside containment and 14 new vent valves were installed outside containment.

The UT examinations performed on these systems during the fall of 2008, while Unit 2 was on-line, did not detect any gas voids in excess of the acceptance criteria. These UT results indicate that the existing system venting and flushing procedures which are performed during an outage were effective in ensuring that these systems were sufficiently full prior to placing them in service. However, the need for additional venting capability was identified to ensure that the systems could be adequately vented if gas voids were subsequently introduced by a gas intrusion event or by on-line system maintenance. Typically, the new vents were installed at high points that had the potential to accumulate gas volumes in excess of the acceptance criteria and for which no venting or flushing path exists during normal power operation.

Procedure changes have been implemented to specify use of the new vent valves during normal system filling and venting, and during the monthly surveillances which vent the ECCS and CS System. The revised procedures are listed in Section A.4 below.

Modifications to existing vent valves were not required in any of the three affected systems.

4. The results of the walkdowns and UT examinations performed on inaccessible piping during the fall 2009 refueling outage did not identify any high points that required the addition of new vent valves, other than the two vent valves that had already been planned for installation during the outage.

Procedures

Changes to incorporate the addition of 16 new vent valves installed during the fall 2009 refueling outage were completed for the procedures listed below in Table 5.

Table 5: Procedure Changes for New Vent Valves

Procedure	Procedure Title	Affected System(s)
CL 1B	Containment Barrier Checklist, Unit 2	CS/RHR/SI
CL 1E	Containment Closure Checklist, Unit 2	CS/RHR/SI
CL 7A	Safety Injection System Checklist, Unit 2	CS/RHR/SI
CL 7B	Safety Injection System Checklist, Unit 2	CS/RHR/SI
IT 535C	Leakage Reduction and Preventive Maintenance Program Train "A" HHSI and RHR "Piggyback" Test MODE 1, 5, 6 (Refueling), Unit 2	HHSI/RHR
IT 535D	Leakage Reduction and Preventive Maintenance Program Train "B" HHSI and RHR "Piggyback" Test MODE 1, 5, 6 (Refueling), Unit 2	HHSI/RHR
IT 535E	Leakage Reduction and Preventive Maintenance Program Test of the LHSI and RHR System, Unit 2	LHSI/RHR
IT 545C	Leakage Reduction and Preventive Maintenance Program Test of Containment Spray System When ≥ 350°F Unit 2	CS
OI 129	SI System Fill and Vent, Unit 2	HHSI
OI 129C	Fill and Vent Train A SI Pump Modes 1-3, Unit 2	HHSI
OI 129D	Fill and Vent Train B SI Pump Modes 1-3, Unit 2	HHSI
OI 133	Containment Spray System Restoration, Unit 2	CS
OI 136	Fill and Vent the RHR System, Unit 2	RHR
OI 136A	Fill and Vent Train A RHR System, Unit 2	RHR
OI 136B	Fill and Vent Train B RHR System, Unit 2	RHR
OI 136C	Fill and Vent A RHR Pump, Unit 2 MODES 1-3	RHR
OI 136D	Fill and Vent B RHR Pump, Unit 2 MODES 1-3	RHR
OP-1A	Cold Shutdown to Hot Standby	ECCS/RHR
OP-7B	Removing Residual Heat Removal System From Operation	RHR
2-TS-ECCS-002	Safeguards System Venting (Monthly), Unit 2	SI/RHR/CS

B. DESCRIPTION OF NECESSARY ADDITIONAL COMMITMENTS AND CORRECTIVE ACTIONS

1. Additional Commitments and Corrective Actions

a. Additional Commitments

No additional Regulatory Commitments are being made in this response.

b. Additional Corrective Actions

The analyses, field walkdowns and UT examinations completed prior to and during the Unit 2 fall 2009 refueling outage have resulted in the following corrective actions:

i. A total of 16 new vent valves were installed at high points in the SI, RHR and CS systems which had the potential to accumulate gas in excess of acceptance criteria. See Section A.3 above.

ii. Twenty procedure revisions have been implemented to incorporate the use of the 16 new vent valves that were installed during the fall 2009 refueling outage. These procedures govern the use of the new valves for filling and venting operations and during monthly surveillances which vent the ECCS and CS systems. See Section A.4 above.

iii. Preventive maintenance callups have been created to perform monthly UT examinations of high points in the inaccessible LHSI piping on both Units 1 and 2.

iv. The GAMP will be updated to incorporate the results of the Unit 2 inside containment walkdowns performed during the fall 2009 refueling outage. This action is being tracked by the CAP and will be completed by June 11, 2010.

2. Commitment and Corrective Action Updates

a. Commitment Updates

Four Regulatory Commitments were made in the Nine-Month Response (Reference 2). They are reaffirmed and updated below, as appropriate.

i. FPL Energy Point Beach will provide a complete Unit 1 GL 2008-01 submittal 90 days following the completion of the fall 2008 refueling outage. The submittal will include the complete evaluation reviews based upon detailed walk downs and ultrasonic testing of both accessible and

inaccessible GL 2008-01 piping sections performed prior to and during the Unit 1 refueling outage.

Status: This regulatory commitment was satisfied via the FPL Energy Point Beach, LLC, Unit 1 Supplemental Response dated February 11, 2009 (ML090420473).

ii. FPL Energy Point Beach will provide a complete Unit 2 GL 2008-01 submittal 90 days following the completion of the fall 2009 refueling outage. The submittal will include the complete evaluation reviews based upon detailed walk downs and necessary ultrasonic testing of inaccessible GL 2008-01 piping sections performed prior to and during the Unit 2 refueling outage.

Status: This response satisfies the Regulatory Commitment.

iii. FPL Energy Point Beach will monitor and support the industry and Nuclear Energy Institute (NEI) Gas Accumulation Management Team activities regarding the resolution of generic TS changes via the Technical Specification Task Force (TSTF) traveler process. FPL Energy Point Beach will review and evaluate the resolution of TS issues with respect to the changes contained in the TSTF traveler following NRC approval and Consolidated Line Item Improvement Process (CLIIP) Notice of Availability of the TSTF traveler in the Federal Register. A license amendment request will be submitted to the NRC within 180 days following the evaluation, if necessary. Appropriate Bases changes associated with the potential TS will also be made. The completion date for this regulatory commitment is contingent upon the approval of the TSTF.

Status: The efforts of the TSTF regarding generic TS changes to address gas accumulation are ongoing. Please refer to a requested clarification of this Regulatory Commitment contained in the Staff's request for additional information contained in Reference (3) and NextEra's response contained in Reference (4). This action is being tracked by the CAP.

iv. FPL Energy Point Beach will implement a long-term gas accumulation management program including creation of new and/or revising existing associated procedures. The program will consider ongoing industry efforts as well as developing site-specific criteria. The program will be implemented by June 30, 2009.

Status: The PBNP GAMP has been implemented. This included issuance of a GAMP program document with supporting operating, administrative, and surveillance procedures including preventive maintenance (PM) call-ups. This commitment is complete.

b. Corrective Action Updates

Corrective actions previously identified in the Nine-Month Response (Reference 2) and in the FPL Energy Point Beach, LLC, Unit 1 Supplemental Response dated February 11, 2009 (ML090420473), as in-progress are summarized below, along with their present status.

ECCS Corrective Actions

i. The current design change process will be evaluated to determine if additional guidance is needed regarding the potential for gas accumulation. This item will be completed by June 30, 2009.

Status: The design input checklist has been revised to identify system modifications that have the potential to affect gas accumulation. This corrective action is complete.

ii. The ongoing industry activities will be monitored to determine if additional changes to the PBNP Units 1 and 2 design may be required or desired to provide additional margin. Identified modifications will be tracked by the CAP. Completion of these items is dependent upon completion of the industry activities.

Status: This corrective action is in progress. Completion is dependent upon completion of the industry activities.

iii. PBNP procedures will provide assurance that the total gas accumulation in all sections of the low head safety injection system cold leg and hot leg piping is verified to be less than 5 cubic feet of non-condensable gas at 100 psig. PBNP procedures will also provide assurance that the total gas accumulation in all sections of the high head safety injection cold leg and hot leg piping is verified to be less than 5 cubic feet of non-condensable gas at 400 psig.

Specific values may change based upon further analyses. This action will be completed by June 30, 2009.

Status: Implementation of the GAMP ensures that the gas accumulation limits for the high head and low head safety injection systems are not exceeded. This corrective action is complete. The GAMP is a living document, subject to periodic update.

iv. FPL Energy Point Beach will consider procedure changes to perform appropriate post-maintenance fill UT verifications of the ECCS and CS systems. This corrective action will be completed prior to maintenance on the applicable systems, but no later than June 30, 2009.

Status: Plant procedures and forms have been revised. PM call-ups and model work orders have been created to define specific locations within the ECCS and CS systems to be examined. This corrective action is complete.

v. FPL Energy Point Beach will consider appropriate procedure revisions to include the location, the acceptance criteria, and the required frequency of monitoring for locations identified for periodic monitoring. Note that the location, acceptance criteria and frequency may be adjusted based upon operating history and additional analyses. This action will be completed by June 30, 2009.

Status: The PBNP GAMP has been implemented. The GAMP includes the location, the acceptance criteria and required frequency of monitoring for locations identified for periodic monitoring. This corrective action is complete. The GAMP is a living document, subject to periodic update.

vi. FPL Energy Point Beach will implement a long-term gas accumulation management program including creating new and revising existing associated procedures. The program will consider ongoing industry efforts as well as developing specific acceptance criteria. This will be completed by June 30, 2009.

Status: The PBNP GAMP has been implemented. This included issuance of a GAMP document with supporting operating, administrative, and surveillance procedures including PM call-ups. This corrective action is complete. The GAMP is a living document, subject to periodic update.

vii. The procedure review identified proposed changes and provided recommendations for procedure revisions. Those procedures for which procedure revisions are to be made will be revised to ensure the system is "free of gas quantities that could jeopardize ECCS operability." These changes will be entered into the CAP. The CAP will establish the priorities for completion of the procedure revisions. Procedure revisions will be completed by June 30, 2009.

Status: Seventeen ECCS operating and test procedures were revised based on the changes proposed by the procedure review. This corrective action is complete.

viii. If new valves are installed in suction or discharge piping for the GL 2008-01 in-scope systems, the appropriate procedures will be revised in accordance with the modification process installing the new valves.

Status: During the fall 2009 refueling outage, 16 new vent valves were installed in Unit 2 and all applicable procedures which govern their use have been revised (See Sections A.3 and A.4). However, this corrective action will remain open until new vent valves that are currently planned for installation in Unit 1 are installed during the spring 2010 refueling outage. This action is being tracked by the CAP.

ix. A review of RHR system operating, testing and surveillance procedures is ongoing to ensure that all possible RHR system operating scenarios provide the necessary direction for venting and/or flushing of the Unit 1 LHSI Train B injection line. Procedure revisions will be implemented as required. This action is being tracked by the CAP. Procedure revisions, if required, will be completed by June 30, 2009.

Status: Three test procedures have been revised to include venting steps after operation of Train B of the Unit 1 RHR system. This corrective action is complete.

Shutdown Cooling Corrective Action

i. Fill and vent procedures were reviewed. Procedure enhancements were identified that will be entered into the CAP and completed by June 30, 2009.

Status: Eight shutdown cooling procedures were revised to incorporate the identified enhancements. This corrective action is complete.

ii. Procedure revisions are being developed to minimize the fluid shrinkage that can occur in the RHR shutdown cooling suction piping after the RHR system is secured from the shutdown cooling mode of operation. This action is being tracked by the Corrective Action Program and will be completed by June 30, 2009.

Status: One operating procedure has been revised to minimize the fluid shrinkage. This corrective action is complete.

Containment Spray Corrective Action

i. As an interim measure prior to implementation for the TSTF CLIIP, new procedures will be implemented or existing procedures will be appropriately enhanced to include a post outage verification (frequency based upon operating history) that the CS system suction piping and the CS pumps and piping up to the first closed discharge line isolation valve are maintained sufficiently full of water by statically or dynamically venting system high points, UT or other acceptable methods. The identified procedure changes will be completed by June 30, 2009.

Status: Two CS system procedures were revised to ensure that system venting was performed during cold shutdown after the performance of maintenance which included system draining. Two PM call-ups with a refueling outage frequency were created to perform UT examination of CS system high points. This corrective action is complete.

Generic Corrective Actions

i. FPL Energy Point Beach will monitor the results of industry testing and analytical programs associated with allowable gas volume limits for pumps and piping. This corrective action will evaluate the results of industry testing and analytical efforts to determine if any additional changes to the applicable gas volume acceptance criteria are required. The completion date for this corrective action is dependent upon the completion of the industry testing and analytical programs which were not completed prior to October 11, 2008. If changes to the acceptance criteria are needed, the changes will be entered into the CAP.

Status: These testing and analytical programs are in progress and to date the results are not available for evaluation. Monitoring of these programs is ongoing.

ii. FPL Energy Point Beach will monitor the results of industry testing and analytical programs related to gas accumulation. FPL Energy Point Beach will evaluate the results of the industry testing and analytical efforts to determine if additional changes to licensing basis documents are required. The completion date for this corrective action is dependent upon the completion of the industry testing and analytical programs which were not complete prior to October 11, 2008.

Status: These testing and analytical programs are in progress however, to date the results are not available for evaluation. Monitoring of these programs will continue. This action is being tracked by the CAP.

iii. FPL Energy Point Beach will monitor the long-term industry tasks identified that will provide additional tools to address GL 2008-01 with respect to pump gas void ingestion tolerance limits. These tools will be evaluated for incorporation into the PBNP processes and procedures. Those identified for use will be tracked by the CAP. Completion of these items is dependent upon the industry task completion.

Status: These long-term industry tasks are in progress, however, to date, additional tools are not available for evaluation. Monitoring of these tasks will continue.

iv. Ongoing industry activities will be monitored by FPL Energy Point Beach to determine if additional changes to the PBNP Unit 1 and Unit 2 designs may be required or desired to provide additional margin. If modifications are determined to be necessary, they will be entered into the CAP. Completion of these items is dependent on the industry task completion.

Status: Results from ongoing industry activities have not indicated that additional design changes are required or desired to date. Monitoring of these activities will continue.

v. Dynamic venting will be evaluated and where appropriate added to venting procedures. Identified changes will be entered into the CAP. The evaluation and appropriate procedure changes will be completed by June 30, 2009.

Status: Eleven operating and test procedures were revised to incorporate the use of dynamic venting. This corrective action is complete.

vi. A discussion of the long-term gas accumulation management program will be inserted into the design basis documents for the SI, RHR and CS. These document revisions will be completed within 90 days following completion of the gas accumulation management program documents.

Status: The SI, RHR and CS design basis documents have been revised to include a discussion of the GAMP. This corrective action is complete.

vii. The existing Operations checklists and procedures will be updated as required to include the use of any vent valves not currently credited in the venting procedures. For the procedures needing revision, changes will be tracked via the CAP. This action will be completed by June 30, 2009.

Status: Four procedures were revised to add venting steps for existing vent valves that had not been credited for venting. This corrective action is complete.

viii. A review of Unit 1 high points will be performed to identify locations where new vent valves would provide enhanced venting capability during future system maintenance and venting evolutions. This action is being tracked by the CAP. This action will be complete by September 30, 2009.

Status: The Unit 1 high point review identified 16 locations where new vent valves would provide enhanced venting capability. Installation of vents at these locations is planned during the spring 2010 refueling outage. This corrective action is complete.

Conclusion

NextEra Energy Point Beach, LLC has evaluated the previously unevaluated portions of the applicable systems at PBNP Unit 2 that perform the functions described in the GL and has concluded that these systems are operable.

References

(1) NRC letter to FPL Energy Point Beach, LLC, dated September 25, 2008, Point Beach Nuclear Plant, Units 1 and 2 Re: Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Proposed Alternative Course of Action (ML081360263)

(2) FPL Energy Point Beach, LLC letter to NRC dated October 14, 2008, Nine-Month Response to NRC Generic Letter 2008-01, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems (ML082880659)

(3) NRC letter to NextEra Energy Point Beach, LLC, dated September 25, 2009, Point Beach Nuclear Plant, Units 1 and 2 - Request for Additional Information Re: Response to Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems" (TAC Nos. MD7864 and MD7865) (ML092650687)

(4) NextEra Energy Point Beach, LLC letter to NRC, dated October 24, 2009, Response to Request for Additional Information Regarding Generic Letter 2008-01, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal and Containment Spray Systems (ML093000085)