



September 4, 2009

NRC 2009-0086
10 CFR 50.90

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

Point Beach Nuclear Plant, Units 1 and 2
Dockets 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

License Amendment Request 241
Alternative Source Term
Response to Request for Additional Information

- References:
- (1) FPL Energy Point Beach, LLC letter to NRC, dated December 8, 2008, License Amendment Request 241, Alternative Source Term (ML083450683)
 - (2) FPL Energy Point Beach, LLC Letter to NRC, dated January 27, 2009, Supplement to License Amendment Request 241, Transmittal of Proposed License Conditions (ML090280348)
 - (3) NRC letter to NextEra Energy Point Beach, LLC, dated August 7, 2009, Point Beach Nuclear Plant, Units 1 and 2 – Request for Additional Information from Electrical Engineering Branch Re: Alternate Source Term (TAC Nos. ME0219 and ME0220) (ML092150092)

NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 241 (Reference 1) and transmitted proposed License Conditions related to LAR 241 in a letter dated January 27, 2009 (Reference 2) pursuant to 10 CFR 50.90. The license amendment would revise the current licensing basis to implement the alternative source term (AST) through reanalysis of the radiological consequences of the Point Beach Nuclear Plant (PBNP) Final Safety Analysis Report (FSAR) Chapter 14 accidents.

Via Reference (3), the NRC staff determined that additional information was required to enable the staff's review of the proposed amendment. Enclosure 1 provides the NextEra response to this request. Enclosure 2 provides the PBNP Control Room heating, ventilation, and air conditioning (HVAC) piping and instrumentation diagram (P&ID) supporting the NextEra response to Question 4. Enclosure 3 provides the PBNP Primary Auxiliary Building HVAC P&ID supporting the NextEra response to Question 4.

This letter contains no new commitments and no revisions to existing commitments.

The information contained in this letter does not alter the no significant hazards consideration contained in Reference (1) and continues to satisfy the criteria of 10 CFR 51.22 for categorical exclusion from the requirements for an environmental assessment.

In accordance with 10 CFR 50.91, a copy of this letter is being provided to the designated Wisconsin Official.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on September 4, 2009.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in cursive script, appearing to read "Larry Meyer for".

Larry Meyer
Site Vice President

Enclosures

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

ENCLOSURE 1

NEXTERA ENERGY POINT BEACH, LLC POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

LICENSE AMENDMENT REQUEST 241 ALTERNATIVE SOURCE TERM RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

The NRC staff determined that additional information was required (Reference 1) to enable the Electrical Engineering Branch to complete the review of License Amendment Request (LAR) 241, Alternative Source Term (AST) (Reference 2). The following information is provided by NextEra Energy Point Beach, LLC (NextEra) in response to the NRC staff's request.

Question 1

Provide the loading sequence for each emergency diesel generator (EDG) at Point Beach Nuclear Plant (PBNP). In your response, describe the changes that have been made to the EDG loading sequence to support this license amendment request (LAR).

NextEra Response

Modifications required for the AST LAR will add a control room recirculation fan and control room charcoal filter fan to the initial loading of each train of the emergency diesel generators (EDGs). These loads are not sequenced on the EDG, but are loaded immediately upon EDG breaker closure coincident with a High Containment Radiation or Containment Isolation signal.

The loading sequence for each EDG after EDG breaker closure is listed below, along with the equipment loading sequence nominal time, as listed in Point Beach Nuclear Plant (PBNP) Final Safety Analysis Report (FSAR), Section 8.8.3. The following loading sequences have not changed to support the AST LAR.

EDG G-01:

1.	Safety Injection Pump	1P-15A	0.00 seconds
2.	Residual Heat Removal Pump	1P-10A	5.50 seconds
3.	Motor-Driven Auxiliary Feedwater Pump	P-38A	10.50 seconds
4.	Service Water Pump	P-32A	15.50 seconds
5.	Service Water Pump	P-32B	20.50 seconds
6.	Service Water Pump	P-32F	25.75 seconds
7.	Containment Accident Recirculation Fan	1W-1A1	39.40 seconds
8.	Containment Accident Recirculation Fan	1W-1B1	46.75 seconds

EDG G-02:

1.	Safety Injection Pump	2P-15A	0.00 seconds
2.	Residual Heat Removal Pump	2P-10A	5.50 seconds
3.	Motor-Driven Auxiliary Feedwater Pump	P-38A	10.50 seconds
4.	Service Water Pump	P-32A	15.50 seconds
5.	Service Water Pump	P-32B	20.50 seconds
6.	Service Water Pump	P-32F	25.75 seconds
7.	Containment Accident Recirculation Fan	2W-1A1	39.40 seconds
8.	Containment Accident Recirculation Fan	2W-1B1	46.75 seconds

EDG G-03:

1.	Safety Injection Pump	1P-15B	0.00 seconds
2.	Residual Heat Removal Pump	1P-10B	5.50 seconds
3.	Motor-Driven Auxiliary Feedwater Pump	P-38B	10.50 seconds
4.	Service Water Pump	P-32C	15.50 seconds
5.	Service Water Pump	P-32D	20.50 seconds
6.	Service Water Pump	P-32E	25.75 seconds
7.	Containment Accident Recirculation Fan	1W-1C1	39.40 seconds
8.	Containment Accident Recirculation Fan	1W-1D1	46.75 seconds

EDG G-04:

1.	Safety Injection Pump	2P-15B	0.00 seconds
2.	Residual Heat Removal Pump	2P-10B	5.50 seconds
3.	Motor-Driven Auxiliary Feedwater Pump	P-38B	10.50 seconds
4.	Service Water Pump	P-32C	15.50 seconds
5.	Service Water Pump	P-32D	20.50 seconds
6.	Service Water Pump	P-32E	25.75 seconds
7.	Containment Accident Recirculation Fan	2W-1C1	39.40 seconds
8.	Containment Accident Recirculation Fan	2W-1D1	46.75 seconds

There is also a containment spray pump associated with each of the four EDGs. Starting of the containment spray pump is independent of the starting sequence above. It occurs 10 seconds after a containment high pressure signal with the associated emergency bus energized. Start may occur simultaneously with or any time after the start of the motor-driven auxiliary feedwater pump. This is also not changed for the AST LAR.

The start of containment spray pumps and the primary auxiliary building ventilation system (VNPAB) fans during the emergency core cooling system (ECCS) recirculation phase will not affect the initial EDG load sequencing since they are manually loaded later in the event of a Loss of Coolant Accident (LOCA) coincident with a Loss of Offsite Power (LOOP).

Question 2

Describe how the loads being added to the PBNP EDGs (i.e., control room emergency filtration system (CREFS) and primary auxiliary building ventilation system (VNPAB) components) affect the capability and capacity of the EDGs (e.g., describe the impact of the proposed change on the EDG ratings).

NextEra Response

The control room emergency filtration system (CREFS) fans are currently manually loaded on the EDGs following a LOOP. The AST LAR proposes to change the manual loading to automatic loading upon receipt of a Containment Isolation signal or Control Room High Radiation signal coincident with a LOOP. This change will result in an additional automatic load of 25 kW on each train of EDGs, assuming most limiting loading conditions.

For Train A (EDG G-01 and/or G-02), the new most limiting automatic load, including 25 kW for the CREFS fans, is 2,779 kW. Changes being implemented for AST will result in a net decrease in the total automatic load on Train B (EDG G-03 and/or G-04). The 25 kW automatic load addition on Train B will be offset by the removal of a 35.6 kW nonessential automatic load (heat tracing circuits). As a result, the new most limiting automatic load on Train B is 2,890 kW.

Proposed control room operator actions are required to restore the VNPAB within 30 minutes following the alignment of residual heat removal (RHR) to containment sump recirculation mode of operation. If a LOCA occurs coincident with a LOOP, the VNPAB system will be manually restarted to ensure that the primary auxiliary building (PAB) vent stack is the source of the release associated with ECCS equipment leakage during the recirculation phase of the event. These loads, 116.3 kW for Train A fans and 110.6 kW for Train B fans, will have no impact on the current EDG ratings since they will be manually loaded during the phase of the accident when EDG loads are managed within the 2,000-hour rating.

The evaluation of the above loading (for CREFS and VNPAB) concluded that the Train A EDGs will continue to operate within their 2,000 hour rating of 2,850 kW for the worst case design basis accident EDG electrical loading condition. Train B EDGs will continue to operate within their 200-hour rating of 2,951 kW for up to 24 hours and then remain within their 2,000-hour rating of 2,848 kW for the most limiting design basis accident EDG electrical loading condition. The following table shows the AST EDG loading following approval:

Load Description	Train A Loading	Train B Loading
Automatic (Sequenced) Plus Required Operator Initiated	2,774 kW	2,922 kW
CREFS Fans	25 kW	25 kW
Strip Facade Freeze Protection	N/A	-35.6 kW
Adjustment for Containment Fan Cooler/Spray Pump	-22 kW	-22.0 kW
Service Water Pump (P-32E)	1.7 kW	N/A
Projected EDG Load	2779 kW	2,890 kW
200-hour Rating	N/A	2,951 kW
2,000-hour Rating	2,850 kW	2,848 kW

Question 3

Given that the VNPAB is a non-safety-related system, describe how this system will be electrically separated from the safety-related system (i.e., provide a detailed discussion on how a fault on the non-Class 1E electrical circuit will not propagate to the Class 1E electrical circuit). Also describe the independence (e.g., electrical and physical separation) and redundancy of these systems.

NextEra Response

VNPAB fans required for the PAB exhaust system include the exhaust stack fans (W-21A/B) and the exhaust filter fans (W-30A/B). The fans are mechanically redundant because only one exhaust stack fan and one exhaust filter fan are required to perform the credited function. Additionally, although these fans are not safety-related, they are powered from independent and redundant safety-related electrical sources, that are aligned to the EDGs during LOOP conditions. Safety-related Class 1E supply breakers for these VNPAB fans provide a means to electrically separate the non-Class 1E circuits from the Class 1E circuits.

The VNPAB fans are isolated from the safety-related Class 1E system by safety-related circuit breakers. Modifications will be designed to demonstrate that the VNPAB load circuit breaker will coordinate with the main breaker that supplies the motor control center (MCC) and the breaker will be within its short circuit current capability. VNPAB load circuit breakers will isolate a fault on the non-class 1E electrical circuit and the fault will not propagate to the safety-related class 1E system.

Exhaust stack fan W-21A and exhaust filter fan W-30A are powered from the safety-related Class 1E, safeguards 480 V MCC 1B-42. Power to 1B-42 is supplied from 4.16 kV bus 1A-06, which is supplied from Train B emergency on-site power. Exhaust stack fan W-21B and exhaust filter fan W-30B are powered from the safety-related Class 1E, safeguards 480 V MCC 2B-32. Power to 2B-32 is supplied from 4.16 kV bus 2A-05, which is supplied from Train A emergency on-site power.

For the safety-related portion of the power supply to the VNPAB Fans (through the MCCs), physical separation is maintained per Section 8.0.1 of the PBNP FSAR, such that redundant protection channels or trains are not intermixed within the same wireway. For the non-safety-related portions of the power supply (from the MCC to the associated fan motors), physical separation requirements do not apply. Cables from the 480 V MCCs to the VNPAB fans are routed in cable trays from the MCC to the fan room. Within the fan rooms, cables are routed to their associated motor in conduit.

Question 4

Describe how the CREFS and VNPAB meet the single-failure criterion.

NextEra Response

Enclosure 2 contains the control room heating, ventilation, and air conditioning (HVAC) piping and instrument diagram (P&ID). The CREFS portions of this system credited in the AST analysis include:

- Inlet ductwork from outside air and the control room
- Control room charcoal/high efficiency particulate/roughing filter (F-16) and housing
- Control room charcoal filter fans (W-14A/B), discharge dampers, and associated suction and discharge ductwork
- Control/computer room outside/return air filter (F-43) and housing
- Control room recirculation fans (W-13B1/B2), discharge dampers and associated suction and discharge ductwork
- Discharge ductwork to control room envelope areas

Modifications to CREFS in support of the AST LAR ensure that no single active failure of a mechanical component, or single active or passive failure of an electrical or control component, will prevent the system from performing its required function.

With regard to mechanical design, redundant fans are provided. Additionally, for dampers required to change position in shifting from the normal operating mode (Mode 1) to the accident mode (Mode 5), redundant dampers are provided. Dampers not required to change position in shifting from Mode 1 to Mode 5 fail in their required positions, and thus, do not require redundancy.

For electrical power supplies, redundancy is provided as follows:

- Control room recirculation fan W-13B1 is powered from safety-related Class 1E, safeguards 480 V MCC 2B-32. Power to 2B-32 is supplied from 4.16 kV bus 2A-05, which is supplied from Train A emergency on-site power.
- Control room recirculation fan W-13B2 is powered from safety-related Class 1E, safeguards 480 V MCC 1B-42. Power to 1B-42 is supplied from 4.16 kV bus 1A-06, which is supplied from Train B emergency on-site power.
- Control room charcoal filter fan W-14A is powered from safety-related Class 1E, safeguards 480 V MCC 1B-32. Power to 1B-32 is supplied from 4.16 kV bus 1A-05, which is supplied from Train A emergency on-site power.

- Control room charcoal filter fan W-14B is powered from safety-related Class 1E, safeguards 480 V MCC 2B-42. Power to 2B-42 is supplied from 4.16 kV bus 2A-06, which is supplied from Train B emergency on-site power.

Redundancy in controls is provided as follows:

- A separate flow switch and relay is provided for each control room recirculation fan.
- A separate temperature switch and relay is provided for each control room recirculation fan.
- Each control room recirculation fan circuit has a relay which prevents start of the other fan.
- A separate time delay relay and control relay is provided for each control room charcoal filter fan.
- Each control room charcoal filter fan circuit has a relay which prevents start of the other fan.

Enclosure 3 contains the VNPAB P&ID. The portions of this system credited in the AST analysis include:

- Two exhaust stack fans (W-21A/B), outlet dampers and associated suction and discharge ductwork
- Two exhaust filter fans (W-30A/B), outlet dampers and associated suction and discharge ductwork
- Ductwork from various PAB inlets
- PAB exhaust filter (F-29) housings
- PAB exhaust charcoal filter (F-23) housings
- Auxiliary and service building vent stack

Modifications to VNPAB in support of the AST LAR ensure that no single active failure of a mechanical component, or single active or passive failure of an electrical or control component, will prevent the system from performing its required function.

With regard to mechanical design, redundant fans are provided. Damper redundancy is as follows:

- There are single, fail closed discharge dampers for PAB Exhaust Fan (W-32) and as well as south service building exhaust fans (W-27A/B). A failure to close of one of these dampers could open an additional flow path to the exhaust stack fan (W-21A/B) suction. During operation, this portion of the system is under negative pressure, and as such, a failure of any one of these dampers to close would not impact the ability of the VNPAB to perform its AST function of ensuring that the PAB vent stack is the release point associated with ECCS equipment leakage during the containment sump recirculation phase of an event.
- Backdraft dampers are provided for each of the exhaust stack fans (W-21A/B) and the exhaust filter fans (W-30A/B) to eliminate the potential for a recirculation path through a non-operating train.
- There are three parallel dampers on the inlet, and five parallel dampers on the outlet of the PAB charcoal filter (F-23), which fail open on a loss of electrical signal or loss of air. A failure of any one of these dampers would reduce the VNPAB flows but would not jeopardize the ability of the VNPAB to perform its AST function of ensuring that the PAB vent stack is the release point associated with ECCS equipment leakage during the containment sump recirculation phase of an event.
- There are two parallel dampers on the inlet, and four parallel dampers on the outlet of the PAB exhaust filter (F-29), which fail closed on a loss of electrical signal or loss of air. A failure of any one of these dampers to close per design would not impact the ability of the VNPAB to perform its AST function of ensuring that the PAB vent stack is the release point associated with ECCS equipment leakage during the containment sump recirculation phase of an event.

For electrical power supplies, redundancy is provided as described in the response to Question 3 above.

Redundancy in controls is provided as follows:

- An interlock driven by the starter in the associated MCC is provided for each exhaust filter fan (W-30A/B) to prevent the manual starting of both fans.
- Contacts on the exhaust stack fan (W-21A/B) hand switches are used in the other fan control circuit. No credible active failure of the switches could both prevent starting of the second fan and cause the first fan to fail to start.
- Independent and redundant relays are provided for the interlocks between the exhaust stack fans (W-21A/B) and the exhaust filter fans (W-30A/B).

Question 5

Describe how the operators will be notified in the event that either the CREFS or the VNPAB would become inoperable (e.g., control room annunciators).

NextEra Response

Control room annunciator C01 B 4-10, Control Room A/C Units Air Flow Low, is provided to alert operators that low air flow conditions exist for the control room HVAC system. Flow switches for control room recirculation fan discharge and control room charcoal filter fan discharge provide signals to actuate this annunciator. Additionally, a status light is provided on control room panel C-67 to indicate a low flow condition for the control room HVAC system.

Control room annunciator 1C04 1C 2-9, Containment or Aux Bldg Vent System Air Flow Low, is provided to alert operators that low air flow conditions exist for the VNPAB. Flow switches for the auxiliary building stack fan discharge and the auxiliary building filter fan discharge provide signals to actuate the annunciator.

Question 6

Provide a list and description of components being added to your 10 CFR 50.49 program due to this LAR. Confirm that these components are qualified for the environmental conditions they are expected to be exposed to.

NextEra Response

The components being credited in AST LAR and their locations were reviewed against the environmental conditions (including radiological, temperature and pressure) that would exist in those areas following design basis accidents. Based on the results of the review, certain components were determined to be located in areas classified as harsh environments from a radiological perspective. Accordingly, the following components will be added to the 10 CFR 50.49 program:

- Power cables for exhaust stack fan motor (W-21A-M)
- Power cables for exhaust stack fan motor (W-21B-M)
- Exhaust filter fan motor (W-30A-M), associated power cables, and motor terminations
- Exhaust filter fan motor (W-30B-M), associated power cables, and motor terminations
- Power and control cables for control room recirculation fan motor (W-13B1-M)
- Power and control cables for control room recirculation fan motor (W-13B2-M)
- Power and control cables for control room charcoal filter fan motor (W-14A-M)
- Power and control cables for control room charcoal filter fan motor (W-14B-M)

The addition of these components to the PBNP 10 CFR 50.49 Environmental Qualification (EQ) program is being implemented as part of the AST modifications and ensures they are qualified for the environmental conditions.

Question 7

The licensee proposed utilizing the containment spray (CS) during the sump recirculation phase, if required due to radiological conditions and/or core damage. In addition, the licensee proposed modifying the CS and residual heat removal (RHR) systems to provide throttling capability of CS and RHR during the emergency core cooling system recirculation phase. Describe the impact of the above proposed actions on environmental conditions (such as temperature, pressure) and any impact on equipment qualification (EQ).

NextEra Response

The proposed modifications to the containment spray (CS) and RHR systems do not affect the performance of these systems during the ECCS injection phase of a LOCA, so there is no impact on the containment post-LOCA pressure or temperature profiles in the short term. The pressure and temperature profiles for the LOCA containment integrity analysis of record remain bounding at AST conditions, including the continued operation of CS while on sump recirculation and the throttled operation of the CS and RHR systems during the ECCS recirculation phase. Therefore, the proposed modifications to CS and RHR will not adversely affect EQ.

Question 8

The licensee has submitted extended power uprate and auxiliary feedwater modification submittals. Describe any impact of these submittals on alternate source term (AST) LAR.

NextEra Response

NextEra submitted planned AFW modifications as part of LAR 261, Extended Power Uprate (EPU). Neither EPU nor AFW modifications will have an effect on the AST LAR. While the EPU LAR references AST for radiological consequences, the EPU/AFW evaluations assume that AST modifications are implemented. The AST LAR does not credit EPU or AFW modifications.

Question 9

The licensee stated that the radiation monitors actuation signals are diverse and that the radiation monitors are of augmented quality status. The licensee also stated that VNPAB components credited for AST will be upgraded to an augmented quality status. Explain, what is meant by augmented quality status.

NextEra Response

The three classifications for systems and components at PBNP are safety-related, augmented quality, and non-safety-related. Augmented quality (or quality related) is defined in the Quality Assurance Topical Report (Reference 3) for PBNP as follows:

“This classification is applied to selected equipment, components, structures and services designed to support and/or protect the safety function of safety-related equipment. Quality Assurance Program elements are applied with a graded approach to quality to an extent that is commensurate with the item's importance to safety. Implementing documents establish program element applicability.

These include those items or related services that are not safety-related and are in one or more of the following categories:

1. Equipment, components and structures designed to meet seismic requirements or whose failure could:
 - (a) damage safety-related equipment such that the equipment would be prevented from performing its safety function, or
 - (b) result in releases exceeding the exposure guidelines of the Offsite Dose Calculation Manual.
2. Fire protection equipment:
 - (a) required to protect safety-related equipment, or
 - (b) whose failure could result in water damage to safety-related equipment which could prevent the equipment from performing its safety function, or
 - (c) required to maintain the integrity of a fire barrier necessary to protect safety-related equipment.
3. A partial or total loss of function of a radioactive confinement system that could result in an accidental, unplanned, or uncontrolled release of radioactivity exceeding the Offsite Dose Calculation Manual limits.
4. Equipment whose failure under normal operating conditions or an anticipated transient, results in:
 - (a) exceeding a safety limit specified in the Technical Specifications, or

- (b) initiation of a FSAR Design Basis Accident, or
 - (c) the reactor coolant system not being in a controlled or design condition while operating or shutdown.
5. Instrumentation, equipment, components, or structures required to be operable by the Technical Specifications.
 6. Instrumentation that is essential to preventing or monitoring release of radioactive material to the environment which could exceed the guidelines of the Offsite Dose Calculation Manual.”

Systems and components are evaluated according to their level of importance, and if it is determined they fall into one or more of the above categories, they are classified as augmented quality. Design control, procurement, maintenance and operational activities associated with augmented quality components fall under the 10 CFR 50, Appendix B, Quality Assurance Program, which ensures that the augmented quality status is maintained.

Technical Specification (TS) 3.7.9, Control Room Emergency Filtration System, requires CREFS to be operable. Proposed TS for the VNPAB were provided to the NRC Staff via Reference (4).

Question 10

The licensee stated that boron concentration in the refueling water storage tank is conservatively assumed to be 3500 ppm. Explain the basis for this assumption. In your response, describe the change in chemical composition of the chemical spray and its impact on EQ.

NextEra Response

The Large Break LOCA and Reactor Vessel Head Drop dose analyses in the AST LAR conservatively assume a refueling water storage tank (RWST) boron concentration of 3,500 ppm in the evaluation of back-leakage to the RWST.

ECCS back-leakage to the RWST is assumed to be at a rate of 500 cc/min. The iodine in the sump solution is assumed to all be in nonvolatile iodide or iodate form. However, when the solution leaks into the RWST, the iodine will be in an acidic solution, such that there is the possibility of conversion of iodine compounds to form elemental iodine. The amount of iodine that will convert to the elemental form is dependent both on the concentration of iodine in the solution and the pH of the solution. The boron concentration referenced above relates to the calculation of the elemental iodine fraction in the RWST. The initial boron concentration in the RWST is conservatively assumed to be 3,500 ppm versus the maximum boric acid concentration Technical Specification of 3,200 ppm to minimize RWST solution pH and thus obtain the largest possible elemental iodine fraction.

The Technical Specification range for boron concentration in the RWST is not changing for this AST LAR. As a result, during the injection phase, the current EQ evaluated range for a containment spray pH of 7.0 – 10.5 is not changing. Consequently, there is no effect on EQ of equipment located inside containment during the ECCS injection phase.

The AST containment sump analysis was performed using a containment sump boron concentration of 3,200 ppm . The analysis concluded that the minimum sump pH at the end of CS chemical addition

is between 7 and 8, and accounts for the long-term potential effects of radiolysis of containment contents (including air, water, and chloride bearing electrical cable insulation and jacketing), core inventory spilled to the sump, and accumulations of dry boric acid due to a postulated pre-existing leak. The EQ evaluated range for pH is 7.0 – 10.5. Consequently, there is no effect on EQ of equipment located inside containment during the recirculation phase.

References

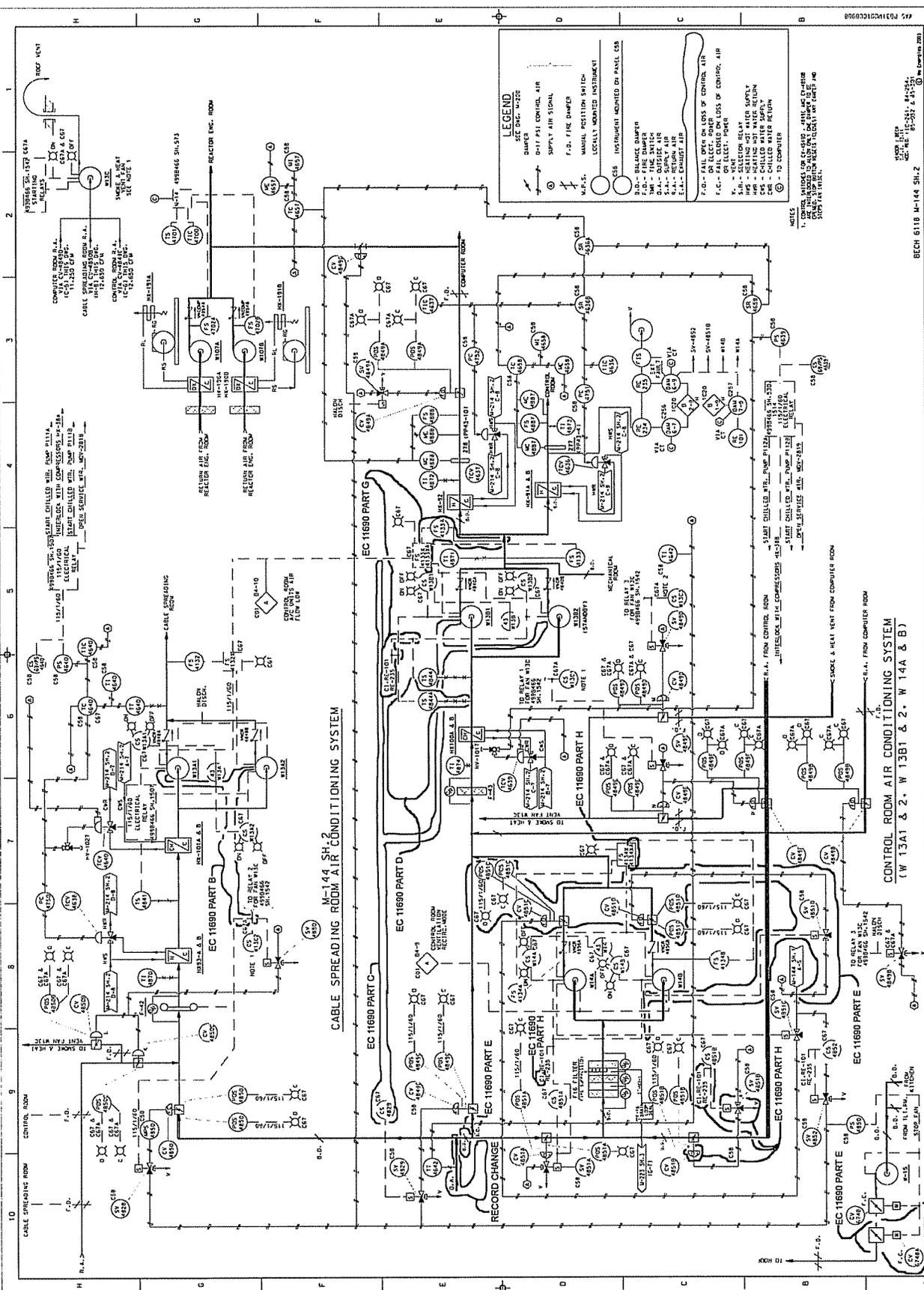
- (1) NRC letter to NextEra Energy Point Beach, LLC, dated August 7, 2009, Point Beach Nuclear Plant, Units 1 and 2 – Request for Additional Information from Electrical Engineering Branch Re: Alternate Source Term (TAC Nos. ME0219 and ME0220) (ML092150092)
- (2) FPL Energy Point Beach, LLC Letter to NRC, dated December 8, 2008, License Amendment Request 241, Alternative Source Term (ML083450683)
- (3) NextEra Energy Point Beach, LLC, Quality Assurance Topical Report (FPL-1), Revision 4, dated June 29, 2009 (ML091820158)
- (4) NextEra Energy Point Beach, LLC letter to NRC, dated April 17, 2009, Supplement to License Amendment Request 241, Proposed Technical Specifications for Primary Auxiliary Building Ventilation (VNPAB) (ML091100182)

ENCLOSURE 2

**NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**CONTROL ROOM HVAC PIPING AND
INSTRUMENTATION DIAGRAM (P&ID)**

1 page follows



BECH 6118 M-14 SH-2

205154

HEATING & VENTILATION
TEMPERATURE CONTROL PAID
TEMPERATURE CONTROL
POINT BECH-NY-UNIT 142

REV. 1.0
REV. 2.0
REV. 3.0
REV. 4.0
REV. 5.0
REV. 6.0
REV. 7.0
REV. 8.0
REV. 9.0
REV. 10.0

NO.	DATE	BY	CHKD.	DESCRIPTION
1	11/15/60	J. W. B.	J. W. B.	ISSUED FOR CONSTRUCTION
2	11/15/60	J. W. B.	J. W. B.	REVISIONS
3	11/15/60	J. W. B.	J. W. B.	REVISIONS
4	11/15/60	J. W. B.	J. W. B.	REVISIONS
5	11/15/60	J. W. B.	J. W. B.	REVISIONS
6	11/15/60	J. W. B.	J. W. B.	REVISIONS
7	11/15/60	J. W. B.	J. W. B.	REVISIONS
8	11/15/60	J. W. B.	J. W. B.	REVISIONS
9	11/15/60	J. W. B.	J. W. B.	REVISIONS
10	11/15/60	J. W. B.	J. W. B.	REVISIONS

NOTES:
1. SYSTEM TO BE INSTALLED IN CABLE SPREADING ROOM.
2. SYSTEM TO BE INSTALLED IN CONTROL ROOM.
3. SYSTEM TO BE INSTALLED IN RECORD CHANGE ROOM.
4. SYSTEM TO BE INSTALLED IN MECHANICAL ROOM.
5. SYSTEM TO BE INSTALLED IN CABLE SPREADING ROOM.
6. SYSTEM TO BE INSTALLED IN CONTROL ROOM.
7. SYSTEM TO BE INSTALLED IN RECORD CHANGE ROOM.
8. SYSTEM TO BE INSTALLED IN MECHANICAL ROOM.
9. SYSTEM TO BE INSTALLED IN CABLE SPREADING ROOM.
10. SYSTEM TO BE INSTALLED IN CONTROL ROOM.
11. SYSTEM TO BE INSTALLED IN RECORD CHANGE ROOM.
12. SYSTEM TO BE INSTALLED IN MECHANICAL ROOM.

LEGEND:
DAMPERS: 4800 - 4800
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ENCLOSURE 3

**NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**PRIMARY AUXILIARY BUILDING HVAC PIPING AND
INSTRUMENTATION DIAGRAM (P&ID)**

