NEXTera ENERGY POINT BEACH

September 10, 2009

NRC 2009-0090
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) NRC letter to FPL Energy Point Beach, LLC, dated August 26, 2009, Point Beach Nuclear Plant, Units 1 and 2 - Request for Additional Information from Containment and Ventilation Branch Related to the Proposed Alternate Source Term Amendment (TAC Nos. ME0219 and ME0220) (ML092360535)

NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 241 (Reference 1) to the NRC 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.

The NRC staff determined that additional information was required (Reference 2) to enable the staff's review of the amendment request. Enclosure 1 provides the NextEra response to this request for additional information. Enclosure 2 provides marked up boundary drawings for the control room emergency filtration system (CREFS) and the primary auxiliary building ventilation (VNPAB) system supporting the NextEra response to Question SCVB#1. Enclosure 3 lists augmented quality (quality related) equipment for CREFS and VNPAB supporting the NextEra response to Question SCVB#1.

This letter contains no new regulatory 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 10, 2009.

Very truly yours,

NextEra Energy Point Beach, LLC

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 is required (Reference 1) to enable the Staff's 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 SCVB#1

Provide the extent of the control room emergency filtration system (CREFS) and the primary auxiliary building ventilation system (VNPAB) that would be required to be functional to support the alternate source term (AST) licensing amendment request (LAR) by providing drawings suitably marked with the system boundaries and a list of structures, systems, and components that would be upgraded to augmented quality status. Include in the response, all new equipment that will be added to modify the CREFS and VNPAB to provide redundancy along with a discussion of the quality status to which such equipment will be designed, procured, installed and tested.

NextEra Response

Drawings marked to show the system boundaries for the control room emergency filtration system (CREFS) and the primary auxiliary building ventilation (VNPAB) system are provided in Enclosure 2. Structures, systems, and components that will be classified as augmented quality (quality related) for CREFS and VNPAB are listed in Enclosure 3.

New equipment that will be added or replaced to modify the CREFS and the VNPAB system to provide redundancy is listed below:

CREFS

- FS-4133A (W-13B1/B2 control room recirculation fan low alarm flow switch)
- TS-4844A (HX-100A/B control room chilled water cooling coil temperature switch)
- W-13B1/B2 and W-14A/B fan control circuits
- VNCR-4851C/D (W-14A/B control room charcoal filter fan discharge control dampers)

VNPAB

- VNPAB-3248 and VNPAB-3249 (W-21A/B PAB exhaust stack fan discharge control dampers being replaced by backdraft dampers)

- VNPAB-3265 and VNPAB-3266 (W-30A/B PAB exhaust filter fan discharge control dampers being replaced by backdraft dampers)

This equipment will meet the requirements of NextEra's augmented quality status. Design control, procurement, installation, testing, operation and maintenance of the equipment will fall under NextEra's 10 CFR 50, Appendix B, Quality Assurance Program.

Question SCVB#2a

The CREFS consists of a single filter train with redundant fans. It was stated that four control room ventilation fans, which include the two CREFS fans, will auto-start on the emergency diesel generators upon receipt of a containment isolation signal or high radiation signal. Provide the following information:

2a. When both the CREFS fans are operating in parallel, discuss the maximum air flow through the filter system and the performance of the emergency air filter with particular attention to residence time for the charcoal filter and the assumptions used in the accident analysis.

NextEra Response

The two CREFS emergency fans will not operate in parallel. Therefore, there will be no change in the original design as a result of the AST modification. Although the CREFS emergency and recirculation fans will be included in the emergency diesel generator loading profile for automatic starting, interlocks will only permit one emergency fan and one recirculation fan to operate at one time which results in an air flow of 4,950 cubic feet per minute (cfm) $\pm$10%. Maximum air flow through the filter system with one CREFS recirculation fan and one emergency fan operating is 4,950 cfm +10%, or 5,445 cfm. The filter system is designed for the flow of one emergency fan, and the performance of the emergency high efficiency particulate air (HEPA)/charcoal filter will not be compromised. The accident analysis assumes a minimum total flow rate of 4,950 cfm –10%, or 4,455 cfm, to maximize radiological releases. Filter residence time and filter testing is based on a flow rate of 4,950 cfm $\pm$10% through the emergency HEPA/charcoal filter unit.

Question SCVB#2b

2b. For the situation when all four control room ventilation fans (i.e., the two control building heating, ventilation, and air conditioning (HVAC) fans and the two CREFS fans) are auto-started, discuss the pressure changes that could occur through the ductwork on a four-fan operation versus two-fan operation (i.e. one control building HVAC fan and one CREFS fan) and the capability of the ductwork to withstand these conditions. Describe the construction and leakage characteristics of the ductwork, potential for unfiltered in-leakage of air that could occur, and its impact on the accident analysis using the AST.

NextEra Response

The two CREFS emergency fans and the two recirculation fans will not auto-start together. As stated in NextEra's response to Question SCVB#2a, interlocks only permit one CREFS emergency fan and one recirculation fan to operate at one time. The system is designed for the pressure changes that occur through the ductwork for this two-fan operation, and the ductwork is capable of withstanding these pressure changes. The ductwork is constructed in accordance with Sheet Metal and Air Conditioning Contractors National Association, Duct Manual and Sheet Metal Construction for Ventilating and Air Conditioning Systems (SMACNA). The system is tested per Technical Specification (TS) 3.7.9, Control Room Emergency Filtration System (CREFS), to ensure proper operation. Additionally, tracer gas testing on the control room envelope (CRE) was completed in 2003, and the control room unfiltered air in-leakage results were within the limit assumed in the AST dose analysis.

Question SCVB#2c

2c. Describe, according to the emergency operation procedures, how long all four fans will operate until operator action secures one train of fans. Indicate if any other operator actions are also required by any of the emergency operation procedures and the priority of stopping one train of fans relative to the other operator actions.

NextEra Response

As stated in NextEra's response to Question SCVB#2a, interlocks will only permit one CREFS emergency fan and one recirculation fan to operate at one time. There is no priority or requirement established for stopping the operating fans.

Question SCVB#3

Technical specification (TS) surveillance Requirement 3.7.9.6 requires verification that each CREFS emergency fan can maintain a positive pressure of ≥0.125 inches water gauge in the control room envelope (CRE), relative to the adjacent turbine building during the emergency mode of operation. For the AST amendment, is the CRE required to be pressurized with respect to any other adjacent spaces, including spaces above and below the CRE? If not, provide justification.

NextEra Response

The CRE is surrounded by the turbine building, cable spreading room (below the CRE), and CREFS mechanical room (above the CRE), and is required to be pressurized with respect to these three areas. The cable spreading room is cooled by the cable spreading room ventilation (VNCSR) system. During normal operation and design basis events, the VNCSR system will be operating in the recirculation mode and as a result, pressure in the cable spreading room will be controlled by turbine building pressure. The CREFS mechanical equipment room is cooled by CREFS during normal operation and design basis events. The CREFS air flow into the room exits into the turbine building, resulting in the pressure in the room also being controlled by turbine building pressure. As a result, maintenance of a positive pressure in the CRE with respect to the turbine building alone ensures adequate leakage control during the emergency mode of operation and is the appropriate measurement for TS Surveillance Requirement (SR) 3.7.9.6.

Question SCVB#4a

The LAR states that new control room actions are required to restore the VNPAB within 30 minutes following alignment of residual heat removal to containment sump recirculation mode of operation. The LAR also states that if a loss-of-coolant accident occurs coincident with a loss of offsite power, the VNPAB system will be manually restarted to ensure that the primary auxiliary building vent stack is the source of the release associated with the emergency core cooling system (ECCS) leakage phase of the event. Provide the following additional information:

4a. Section 5.1.2 of regulatory guide 1.183 states that "assumptions regarding the occurrence and timing of a loss of offsite power should be selected with the objective of maximizing the postulated radiological consequences." Provide a discussion on how this guidance is factored in the AST analysis, and in the emergency operating procedures with respect to starting the VNPAB system.

NextEra Response

As stated in Reference (3), "In general, the LOOP was used to limit equipment availability. Where credited, safety related mitigating structures, systems, and components were assumed to operate consistent with single failure, design basis, emergency power, and other requirements."

For the loss-of-coolant accident (LOCA) AST analyses, loss of offsite power (LOOP) is assumed to occur concurrently with the LOCA event, maximizing the postulated radiological

consequences. The 30-minute requirement to restore VNPAB is specifically tied to alignment of residual heat removal (RHR) on recirculation, not on occurrence of the LOOP. Delaying the LOOP would only reduce the time the VNPAB exhaust fans are not operating, and thus, the analysis assuming a LOOP concurrent with a LOCA will remain bounding.

Emergency operating procedure (EOP) 1.3, Transfer to Containment Sump Recirculation – Low Head Injection, is being revised to require the start of the VNPAB within 30 minutes following the alignment of RHR to the containment sump recirculation mode of operation. For additional details on proposed EOP-1.3 changes, see letter dated July 24, 2009 (Reference 4), for NextEra's response to Question 1 from the Human Performance Branch.

Question SCVB#4b

4b. Your letter (NRC 2009-0045) dated April 17, 2009, provided proposed TS requirements for the VNPAB. This subject was briefly discussed with your staff in a phone call on June 23, 2009. The U.S. Nuclear Regulatory Commission staff's concern is that the surveillance requirement did not include a performance check of the VNPAB in terms of flow, pressure, etc. Please provide a discussion in how credit for VNPAB is taken in the AST dose analysis. Explain how the vent stack becomes the source of all releases during the ECCS leakage phase of the event by mere operation of the VNPAB fans, with no regard for any minimum amount of flow that the fans need to operate at.

NextEra Response

The LOCA control room dose analysis assumes that the emergency core cooling system (ECCS) equipment leakage activity release pathway atmospheric dispersion factor (χ/Q) to be at the location of the primary auxiliary building (PAB) vent stack, with no credit for dilution due to ventilation system airflow. Operation of the VNPAB exhaust system (i.e., one filter fan and one stack fan) assures this release point to be at the PAB vent stack. The PAB rooms with potential ECCS leakage sources are connected by ventilation ducts directly to the suction of the VNPAB fans. No minimum flow to the stack was assumed for the dose analysis.

Proposed TS SR 3.7.14.1 requires the VNPAB exhaust system to be operated for $\geq$15 minutes every 31 days, which allows problems to be identified and corrected. This surveillance approach is consistent with the approach taken at the Edwin I. Hatch Nuclear Plant for the turbine building ventilation exhaust system fans credited in the AST analysis, as approved in NRC letter dated August 28, 2008 (Reference 5).

During normal plant operation, one VNPAB filter fan and one stack fan are in operation, allowing for prompt problem identification and correction via the corrective action program, if required. To further ensure the flow path to the PAB vent stack, NextEra currently trends stack flows in the plant process computer system (PPCS) and airflow readings are manually taken per plant procedure.

Question SCVB#4c

4c. The LAR states that credit is not taken for the VNPAB air filters. However, performance readiness of the VNPAB fans depends on the filter loading conditions. Explain how operators verify that filter plugging will not adversely affect the performance of the VNPAB fans.

NextEra Response

Proposed TS SR 3.7.14.1 requires the VNPAB to be operated for ≥15 minutes every 31 days, which allows problems with filter plugging to be identified and corrected. Dioctyl phthalate (DOP) and freon filter performance testing are conducted, typically every 18 months, to determine the condition of the filters and to perform repairs as necessary. In addition, one VNPAB filter fan and one stack fan are normally in operation, and air flows are trended in PPCS which would provide early indication of a filter problem. Filter plugging would be identified and corrected via the corrective action program as a result of either performance of the SR, filter performance testing or normal operation of the system.

References

(1) NRC letter to FPL Energy Point Beach, LLC, dated August 26, 2009, Point Beach Nuclear Plant, Units 1 and 2 - Request for Additional Information from Containment and Ventilation Branch Related to the Proposed Alternate Source Term Amendment (TAC Nos. ME0219 and ME0220) (ML092360535)

(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 letter to NRC, dated May 8, 2009, Supplement to License Amendment Request 241, Regulatory Guide 1.183 Compliance Matrix (ML091320437)

(4) NextEra Energy Point Beach, LLC letter to NRC, dated July 24, 2009, License Amendment Request 241, Alternative Source Term, Response to Request for Additional Information (ML092080441)

(5) NRC Letter to Edwin I. Hatch Nuclear Plant dated August 28, 2008, Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, Issuance of Amendments Regarding Alternate Source Term (TAC Nos. MD2934 and MD2935) (ML081770071)

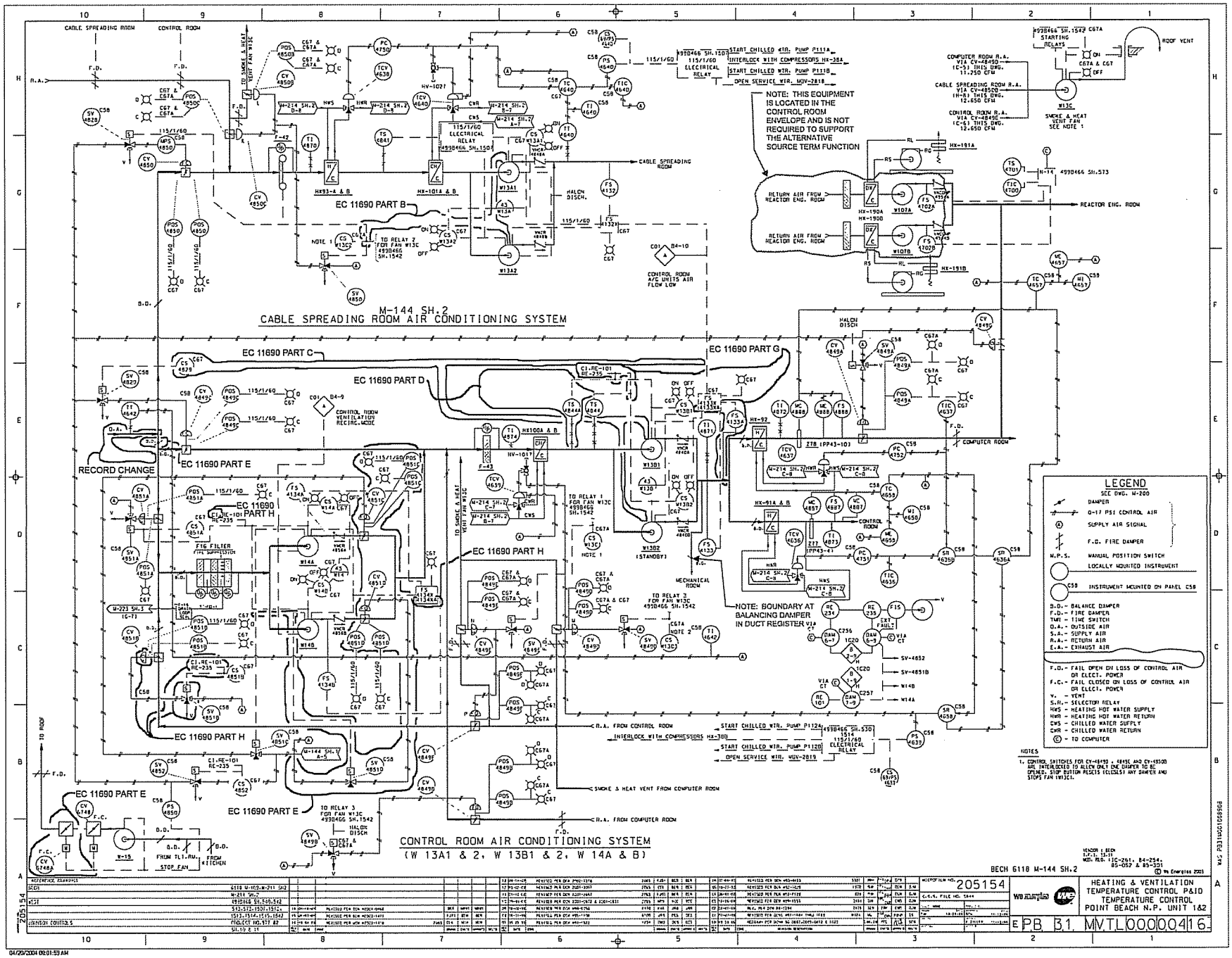
ENCLOSURE 2

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

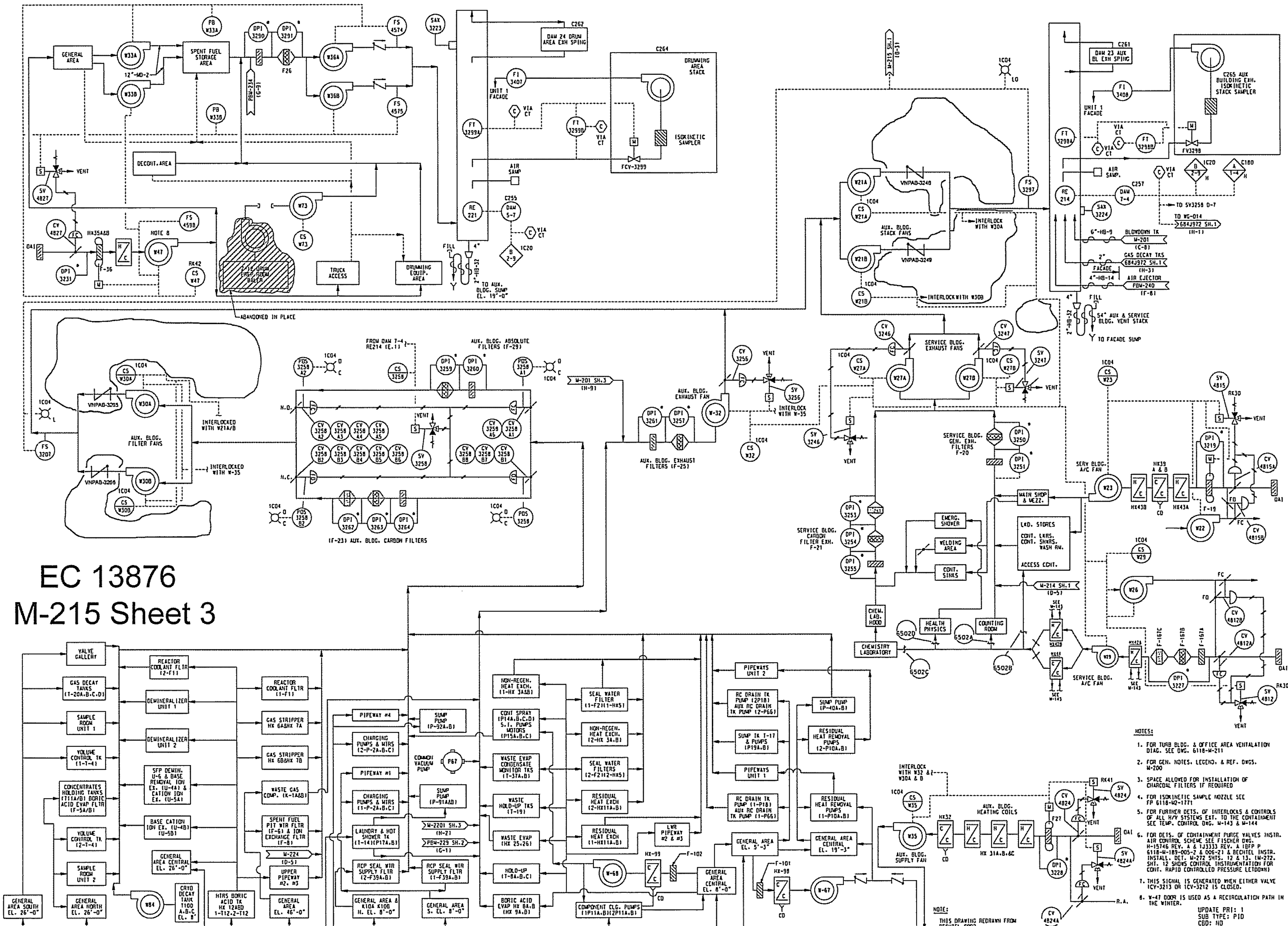
LICENSE AMENDMENT REQUEST 241
ALTERNATIVE SOURCE TERM
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

CREFS AND VNPAB BOUNDARY DRAWINGS SUPPORTING
THE NEXTERA RESPONSE TO QUESTION SCVB#1

2 pages follow


M-144 SH.2
CABLE SPREADING ROOM AIR CONDITIONING SYSTEM
CONTROL ROOM AIR CONDITIONING SYSTEM
(W 13A1 & 2, W 13B1 & 2, W 14A & B)
EC 11690 PART B
EC 11690 PART C
EC 11690 PART D
EC 11690 PART E
EC 11690 PART G
EC 11690 PART H
RECORD CHANGE
NOTE: THIS EQUIPMENT IS LOCATED IN THE CONTROL ROOM ENVELOPE AND IS NOT REQUIRED TO SUPPORT THE ALTERNATIVE SOURCE TERM FUNCTION
NOTE: BOUNDARY AT BALANCING DAMPER IN DUCT REGISTER VIA
LEGEND
SEE DWG. M-200
DAMPER
0-17 PSI CONTROL AIR
SUPPLY AIR SIGNAL
F.D. FIRE DAMPER
M.P.S. MANUAL POSITION SWITCH
LOCALLY MOUNTED INSTRUMENT
C58 INSTRUMENT MOUNTED ON PANEL C58
B.D.- BALANCE DAMPER
F.D.- FIRE DAMPER
TMR - TIME SWITCH
O.A.- OUTSIDE AIR
S.A.- SUPPLY AIR
R.A.- RETURN AIR
E.A.- EXHAUST AIR
F.O.- FAIL OPEN ON LOSS OF CONTROL AIR OR ELECT. POWER
F.C.- FAIL CLOSED ON LOSS OF CONTROL AIR OR ELECT. POWER
V. - VENT
S.R.- SELECTOR RELAY
HWS - HEATING HOT WATER SUPPLY
HWR - HEATING HOT WATER RETURN
CWS - CHILLED WATER SUPPLY
CWR - CHILLED WATER RETURN
C - TO COMPUTER
NOTES
1. CONTROL SWITCHES FOR CV-4890 - 4895E AND CV-4850D ARE INTERLOCKED TO ALLOW ONLY ONE DAMPER TO BE OPENED. STOP BUTTON RESETS (CLOSES) ANY DAMPER AND STOPS FAN (W13C).
BECH 6118 M-144 SH.2
205154
HEATING & VENTILATION
TEMPERATURE CONTROL P&ID
TEMPERATURE CONTROL
POINT BEACH N.P. UNIT 1&2
EPB 3.1 MVTL0000004116

EC 13876
M-215 Sheet 3



GENERAL AREA
W33A
W33B
12"-HD-2
SPENT FUEL STORAGE AREA
PB W33A
PB W33B
DPI 3290
DPI 3291
F26
PBM-234 (G-3)
W36A
W36B
FS 4574
FS 4575
SAX 3223
DAM 24 DRUM AREA EXH SPING
C262
C264
DRUMMING AREA STACK
FI 3407
UNIT 1 FACADE
VIA CT
FT 3299A
FT 3299B
ISOKINETIC SAMPLER
FCV-3299
AIR SAMP
RE 221
C255
DAM 5-7
1C20
FILL
TO AUX. BLDG. SUMP EL. 19'-0"
2"-HB-32
DECONT. AREA
SV 4827
VENT
CV 4827
FC
HX35A&B
OA1
DPI 3231
F-36
NOTE 8
W47
FS 4598
RK42
CS W47
W73
CS W73
TRUCK ACCESS
DRUMMING EQUIP. AREA
2-10 DRUM CRIP ROOM BALER
ABANDONED IN PLACE
CS W30A
1C04
VNPAD-3265
W30A
W30B
VNPAD-3266
CS W30B
INTERLOCKED WITH W21A/B
INTERLOCKED WITH W-35
AUX. BLDG. FILTER FANS
FS 3207
FROM DAM 7-4 RE214 (E.1)
AUX. BLDG. ABSOLUTE FILTERS (F-29)
CS 3258
DPI 3259
DPI 3260
POS 3258 A2
POS 3258 A1
POS 3258 B2
POS 3258
CV 3258 A2
CV 3258 A3
CV 3258 A4
CV 3258 A5
CV 3258 A6
CV 3258 A1
CV 3258 B2
CV 3258 B3
CV 3258 B4
CV 3258 B5
CV 3258 B6
CV 3258 B8
CV 3258 B7
CV 3258 B1
SV 3258
N.O.
N.C.
DPI 3262
DPI 3263
DPI 3264
(F-23) AUX. BLDG. CARBON FILTERS
M-201 SH.3 (H-9)
AUX. BLDG. EXHAUST FAN
W-32
DPI 3261
DPI 3257
AUX. BLDG. EXHAUST FILTERS (F-25)
CV 3256
SV 3256
INTERLOCK WITH W-35
CS W32
M-215 SH.1 (D-3)
1C04
LO
W21A
W21B
CS W21A
CS W21B
VNPAD-3248
VNPAD-3249
AUX. BLDG. STACK FANS
INTERLOCK WITH W30A
INTERLOCK WITH W30B
FS 3297
C261
DAM 23 AUX BL EXH SPING
FI 3408
C265 AUX BUILDING EXH. ISOKINETIC STACK SAMPLER
FT 3298A
FT 3298B
FV3298
AIR SAMP.
RE 214
C257
DAM 7-4
1C20
C180
TO SV3258 D-7
TO WG-014 684J972 SH.1 (H-1)
SAX 3224
6"-HB-9
BLOWDOWN TK M-201 (C-8)
GAS DECAY TKS 684J972 SH.1 (H-3)
FACADE
4"-HB-14
AIR EJECTOR PBM-240 (F-8)
54" AUX & SERVICE BLDG. VENT STACK
TO FACADE SUMP
CV 3246
CV 3247
SERVICE BLDG. EXHAUST FANS
CS W27A
CS W27B
W27A
W27B
SV 3247
SV 3246
CS W23
SERVICE BLDG. GEN. EXH. FILTERS F-20
DPI 3250
DPI 3251
SERV BLDG. A/C FAN
W23
HX39 A & B
HX43B
HX43A
CD
SV 4815
RK30
DPI 3219
CV 4815A
CV 4815B
F-19
W22
MAIN SHOP & MEZZ.
SERVICE BLDG. CARBON FILTER EXH. F-21
DPI 3253
DPI 3254
DPI 3255
EMERG. SHOWER
WELDING AREA
CONT. SINKS
LKD. STORES CONT. LKRS. CONT. SHWRS. WASH RM. ACCESS CONT.
CS W29
W26
M-214 SH.1 (D-5)
CV 4812B
CV 4812A
CHEM. LAB. HOOD
CHEMISTRY LABORATORY
HEALTH PHYSICS
COUNTING ROOM
6502D
6502A
6502C
6502B
SEE M-143
HX42B
HX42A
W29
SERVICE BLDG. A/C FAN
F-167C
F-167B
F-167A
DPI 3227
SV 4812
VALVE GALLERY
GAS DECAY TANKS (T-20A,B,C,D)
SAMPLE ROOM UNIT 1
VOLUME CONTROL TK (1-T-4)
CONCENTRATES HOLDING TANKS (T11A/B) BORIC ACID EVAP FLTR (F-5A/B)
VOLUME CONTROL TK (2-T-4)
SAMPLE ROOM UNIT 2
GENERAL AREA SOUTH EL. 26'-0"
GENERAL AREA NORTH EL. 26'-0"
REACTOR COOLANT FLTR (2-F1)
DEMINERALIZER UNIT 1
DEMINERALIZER UNIT 2
SFP DEMIN. U-6 & BASE REMOVAL ION EX. (U-4A) & CATION ION EX. (U-5A)
BASE CATION ION EX. (U-4B) (U-5B)
GENERAL AREA CENTRAL EL. 26'-0"
W84
CRYO DECAY TANK T100 A,B,C, EL. 8'
HTRS BORIC ACID TK HX 12A&D 1-T12-2-T12
REACTOR COOLANT FLTR (1-F1)
GAS STRIPPER HX 6A&HX 7A
GAS STRIPPER HX 6B&HX 7B
WASTE GAS COMP. (K-1A&B)
SPENT FUEL PIT WTR FLTR (F-6) & ION EXCHANGE FLTR (F-8)
M-224 (D-5)
UPPER PIPEWAY #2, #3
GENERAL AREA EL. 46'-0"
PIPEWAY #4
CHARGING PUMPS & MTRS (2-P-2A,B,C)
PIPEWAY #1
CHARGING PUMPS & MTRS (1-P-2A,B,C)
LAUNDRY & HOT SHOWER TK (T-14)(P17A,B)
RCP SEAL WTR SUPPLY FLTR (2-F39A,B)
GENERAL AREA & K10A K10B N. EL. 8'-0"
SUMP PUMP (P-92A,B)
COMMON VACUUM PUMP
P67
SUMP PUMP (P-91A&B)
M-2201 SH.3 (H-2)
PBM-229 SH.2 (G-1)
RCP SEAL WTR SUPPLY FLTR (1-F39A,B)
GENERAL AREA S. EL. 8'-0"
NON-REGEN. HEAT EXCH. (1-HX 3A&B)
CONT SPRAY (P14A,B,C,D) S.I. PUMPS MOTORS (P15A,B,C)
WASTE EVAP CONDENSATE MONITOR TKS (T-37A,B)
WASTE HOLD-UP TKS (T-19)
WASTE EVAP (HX 25,26)
HOLD-UP (T-8A,B,C)
BORIC ACID EVAP HX 8A,B (HX 9A,B)
SEAL WATER FILTER (1-F2)(1-HX5)
NON-REGEN. HEAT EXCH. (2-HX 3A,B)
SEAL WATER FILTERS (2-F2)(2-HX5)
RESIDUAL HEAT EXCH (2-HX11A,B)
RESIDUAL HEAT EXCH (1-HX11A,B)
LWR PIPEWAY #2 & #3
W-68
HX-99
F-102
COMPONENT CLG. PUMPS (1P11A,B)(2P11A,B)
GENERAL AREA CENTRAL EL. 8'-0"
PIPEWAYS UNIT 2
RC DRAIN TK PUMP (2P18) AUX RC DRAIN TK PUMP (2-P66)
SUMP TK T-17 & PUMPS (P19A,B)
PIPEWAYS UNIT 1
RC DRAIN TK PUMP (1-P18) AUX RC DRAIN TK PUMP (1-P66)
GENERAL AREA EL. 5'-3"
F-101
HX-98
W-67
SUMP PUMP (P-40A,B)
RESIDUAL HEAT REMOVAL PUMPS (2-P10A,B)
RESIDUAL HEAT REMOVAL PUMPS (1-P10A,B)
GENERAL AREA CENTRAL EL. 19'-3"
INTERLOCK WITH W32 & W30A & B
CS W35
W35
AUX. BLDG. SUPPLY FAN
HX32
AUX. BLDG. HEATING COILS
HX 31A,B,&C
F27
DPI 3228
CV 4824
SV 4824
RK41
SV 4824A
CV 4824A
R.A.

NOTES:

1. FOR TURB BLDG. & OFFICE AREA VENTALATION DIAG. SEE DWG. 6118-M-211
2. FOR GEN. NOTES, LEGEND, & REF. DWGS. M-200
3. SPACE ALLOWED FOR INSTALLATION OF CHARCOAL FILTERS IF REQUIRED
4. FOR ISOKINETIC SAMPLE NOZZLE SEE FP 6118-MQ-1771
5. FOR FURTHER DETS. OF INTERLOCKS & CONTROLS OF ALL H/V SYSTEMS EXT. TO THE CONTAINMENT SEE TEMP. CONTROL DWG. M-143 & M-144
6. FOR DETS. OF CONTAINMENT PURGE VALVES INSTR. AIR CONTROL SCHEME SEE FISCHER DWG. H-15746 REV. A & 1J3333 REV. A (BFP P 6118-M-189-005-2 & 006-2) & BECHTEL INSTR. INSTALL. DET. M-272 SHTS. 12 & 13. (M-272, SHT. 12 SHOWS CONTROL INSTRUMENTATION FOR CONT. RAPID CONTROLLED PRESSURE LETDOWN)
7. THIS SIGNAL IS GENERATED WHEN EITHER VALVE 1CV-3213 OR 1CV-3212 IS CLOSED.
8. W-47 DOOR IS USED AS A RECIRCULATION PATH IN THE WINTER.

UPDATE PRI: 1
SUB TYPE: PID
CBD: NO

NOTE:

THIS DRAWING REDRAWN FROM BECHTEL CORP. DRAWING M-215 SHT.1 REV.29

BECH 6118 M-215 SH.3

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION		DRAWN	CHK'D	APPR'D	
10	05-03-06	REVISED PER EC #12047		KJB	MRV	MRV	
09	10-22-07	REVISED PER EC #7578		JLF	KJB1	JST	
08	07-01-05	REVISED PER DCN #2005-110		JLF	BER	BER	
07	04-26-03	REVISED PER DCN #2003-0399	2065	CEA	BER	BER	
06	12-02-00	REVISED PER DCNS #2000-1627,-1997	1162,2065	BER	MRV	MRV	
05	02-13-98	REVISED PER DCN #98-0217	6472	AAG	JRB	JRB	
04	03-21-97	REVISED PER DCN #96-2199	7241	RLB	DCS	DCS	
03	11-10-95	REVISED PER DCN #95-1268	6145	JRB	DCS	DCS	
02	06-29-94	REVISED PER DCN #94-0833	4521	RLB		CPW	
01	05-23-94	REVISED PER DCN #93-822	3409	RLB		CPW	
00	03-04-93	INC INTO PDS PER MEMO #PB-DWG-93-033		FPL	RAS	JLV	

MICROFILM NO. 277912

C.G.S. FILE NO. 17565

FPL

P&ID
HEATING & VENTILATION
POINT BEACH N.P. UNIT 1

E PB 01 MVRK000410

ENCLOSURE 3

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

CREFS AND VNPAB AUGMENTED QUALITY EQUIPMENT LIST
SUPPORTING THE NEXTERA RESPONSE TO QUESTION SCVB#1

CREFS Augmented Quality Equipment List:

- Control room recirculation fans (W-13B1/B2), motors and associated instrumentation and controls
- Control room emergency fans (W-14A/B), motors and associated instrumentation and controls
- Control room washroom exhaust fan (W-15)
- CREFS filters (F-16 and F-43) and associated housings and instrumentation
- CREFS dampers and associated operators, instrumentation and controls
    - VNCR-4840A/B, control room recirculation fan backdraft dampers
    - VNCOMP-4849A, supply air to computer room damper
    - VNCOMP-4849B, computer room return air damper
    - VNCR-4849C, control room recirculation fan outside air suction damper
    - VNCOMP-4849D, smoke/heat exhaust fan return air control damper
    - VNCR-4849E, smoke/heat exhaust fan return air control damper
    - VNCR-4849F, control room return air damper
    - VNCOMP-4849G, makeup air to offices damper
    - VNCSR-4850, control room recirculation fan suction damper

- VNCR-4851A/B, control room emergency fan suction dampers
- VNCR-4851C/D, control room emergency fan discharge control dampers
- VNCR-4856A/B, control room emergency fan backdraft dampers
- VNCR-6748, control room washroom exhaust fan damper

- Housings (CREFS pressure boundary) for HX-91A/B, HX-92, HX-100A/B, and Z-77 and Z-78
- Ductwork and plenums highlighted on the CREFS boundary drawing in Enclosure 2
- Instrumentation tubing
- Power and control cable for the above
- Duct and equipment supports

<u>VNPAB Augmented Quality Equipment List:</u>

- PAB exhaust stack fans (W-21A/B), motors and associated instrumentation and controls
- PAB exhaust filter fans (W-30A/B), motors and associated instrumentation and controls
- VNPAB filters (F-23 and F-29), associated housings and instrumentation
- VNPAB dampers and associated operators, instrumentation and controls
  - VNSSB-3246, service building exhaust fan discharge damper
  - VNSSB-3247, service building exhaust fan discharge damper
  - VNPAB-3248, PAB exhaust stack fan discharge control damper
  - VNPAB-3249, PAB exhaust stack fan discharge control damper
  - VNPAB-3256, PAB exhaust fan discharge control damper
  - VNPAB-3258A1/A6, PAB exhaust filter inlet dampers
  - VNPAB-3258A2/A3/A4/A5, PAB exhaust charcoal filter inlet dampers
  - VNPAB-3258B1/B7/B8, PAB exhaust charcoal filter inlet dampers
  - VNPAB-3258B2/B3/B4/B5/B6, PAB exhaust charcoal filter outlet dampers
  - VNPAB-3265, PAB exhaust filter fan discharge control damper

- VNPAB-3266, PAB exhaust filter fan discharge control damper

- Ductwork and plenums highlighted on the VNPAB boundary drawing in Enclosure 2
- Instrumentation tubing
- Power and Control cable for the above
- Duct and Equipment supports