PART 10

Florida Power & Light Company
Turkey Point Plant, Units 6 & 7
COL Application

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Turkey Point Units 6 & 7

COL Application

Revision 8

Part 10

Proposed License Conditions
(Including ITAAC)

PTN Proposed License Conditions

1. ITAAC (INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA):

There are several ITAAC identified in the COL application. Once incorporated into the COL, the regulations identify the requirements that must be met. The incorporation below includes references to the sensitive unclassified non-safeguards information (including proprietary information) and safeguards information, contained in the AP1000 DCD. Such DCD information is included in this combined license application in the same manner as it is included in the AP1000 DCD, i.e., references in the DCD are included as references in the FSAR, and material incorporated by reference into the DCD is incorporated by reference into the FSAR. Appropriate agreements are in place to provide for the licensee's rights to possession (including constructive possession) and use of the withheld sensitive unclassified non-safeguards information (including proprietary information) and safeguards information referenced in the AP1000 DCD for the life of the project.

PROPOSED LICENSE CONDITION:

The ITAAC identified in the tables in Appendix B are hereby incorporated into this Combined License. After the Commission has made the finding required by 10 CFR 52.103(g), the ITAAC do not constitute regulatory requirements; except for specific ITAAC, which are the subject of a Section 103(a) hearing, their expiration will occur upon final NRC action in such proceeding.

2. COL HOLDER ITEMS:

There are several COL information items that cannot be resolved prior to issuance of the Combined License. The referenced AP1000 design certification has already justified why each COL holder item (as identified in the AP1000 DCD Tier 2 Table 1.8-2) cannot be resolved before the COL is issued, provides sufficient information on these items to support the NRC licensing decision, and identifies an appropriate implementation milestone. Each COL information item that cannot be resolved completely before the COL is issued is also identified as a COL holder item in the FSAR Table 1.8-202. Therefore, in accordance with the guidance in RG 1.206, Section C.III.4.3, the following License Condition is proposed to address these COL holder items. Holder items (per DCD Table 1.8-2) that are addressed by the COL application are not included in the proposed condition. These include COL information item numbers 3.11-1, 9.5-6, 10.1-1, and 13.6-5.

PROPOSED LICENSE CONDITION:

Each COL holder item identified below shall be completed by the identified implementation milestone through completion of the action therein identified.

SUMMARY OF COMBINED LICENSE INFORMATION HOLDER ITEMS			
COL Item No.	**Subject**	**From DCD Tier 2 Subsection**	**Implementation Milestone**
3.6-1	**As-Designed Pipe Rupture Hazards Analysis**	**3.6.4.1**	**Prior to installation of the piping and connected components in their final location**
After a Combined License is issued, the following activity will be completed by the COL holder. An as-designed pipe rupture hazard evaluation will be available for NRC review. The completed as-designed pipe rupture hazards evaluation will be in accordance with the criteria outlined in DCD Subsections 3.6.1.3.2 and 3.6.2.5. Systems, structures, and components identified to be essential targets and appropriate mitigation features (Reference is DCD Table 3.6-3) will be confirmed as part of the evaluation, and updated information will be provided as appropriate. A pipe rupture hazards analysis is part of the piping design. The evaluation will be performed for high and moderate energy piping to confirm the protection of systems, structures, and components (SSCs), which are required to be functional during and following a design basis event. The locations of the postulated ruptures and essential targets will be established and required pipe whip restraints and jet shield designs will be included. The evaluation will address environmental and flooding effects of cracks in high and moderate energy piping. The as-designed pipe rupture hazards evaluation is prepared on a generic basis to address COL applications referencing the AP1000 design.			
3.7-3	**Seismic Interaction Review**	**3.7.5.3**	**Prior to initial fuel load**
The seismic interaction review will be updated by the Combined License holder for as-built information. This review is performed in parallel with the seismic margin evaluation. The review is based on as-procured data, as well as the as-constructed condition. The as-built seismic interaction review is not provided with the COL application, but is completed prior to fuel load.			
3.7-4	**Reconciliation of Seismic Analyses of Nuclear Island Structures**	**3.7.5.4**	**Prior to initial fuel load**
The Combined License holder will reconcile the seismic analyses described in Subsection 3.7.2 for detail design changes, such as those due to as-procured or as-built changes in component mass, center of gravity, and support configuration based on as-procured equipment information. Deviations are acceptable based on an evaluation consistent with the methods and procedure of Section 3.7 provided the amplitude of the seismic floor response spectra, including the effect due to these deviations, does not exceed the design basis floor response spectra by more than 10 percent. The Combined License holder will complete this reconciliation prior to fuel load.			
3.9-7	**As-Designed Piping Analysis**	**3.9.8.7**	**Prior to installation of the piping and connected components in their final location**
After a Combined License is issued, the following activity will be completed by the COL holder: The as-designed piping analysis is provided for the piping lines chosen to demonstrate all aspects of the piping design. A design report referencing the as-designed piping calculation packages, including ASME Section III piping analysis, support evaluations and piping component fatigue analysis for Class 1 piping using the methods and criteria outlined in DCD Table 3.9-19 is made available for NRC review. The availability of the piping design information and design reports for the piping packages is identified to the NRC.			

SUMMARY OF COMBINED LICENSE INFORMATION HOLDER ITEMS			
COL Item No.	**Subject**	**From DCD Tier 2 Subsection**	**Implementation Milestone**
4.4-2	**Confirm Assumptions for Safety Analyses DNBR Limits**	**4.4.7**	**Prior to initial fuel load**
Combined License applicants referencing the AP1000 certified design will address changes to the reference design of the fuel, burnable absorber rods, rod cluster control assemblies, or initial core design from that presented in the DCD. Following selection of the actual plant operating instrumentation and calculation of the instrumentation uncertainties of the operating plant parameters as discussed in Subsection 7.1.6, Combined License applicants will calculate the design limit DNBR values using the RTDP with these instrumentation uncertainties and confirm that either the design limit DNBR values as described in Section 4.4 remain valid, or that the safety analysis minimum DNBR bounds the new design limit DNBR values plus DNBR penalties, such as rod bow penalty.			
5.3-1	**Reactor Vessel Pressure — Temperature Limit Curves**	**5.3.6.1**	**Prior to initial fuel load**
The COL Holder shall update the P/T limits using the PTLR methodologies approved in the AP1000 DCD using the plant-specific material properties or confirm that the reactor vessel material properties meet the specifications and use the Westinghouse generic PTLR curves.			
5.3-4	**Reactor Vessel Materials Properties Verification**	**5.3.6.4.1**	**Prior to initial fuel load**
The Combined License holder will complete prior to fuel load verification of plant-specific belt line material properties consistent with the requirements in Subsection 5.3.3.1 and Tables 5.3-1 and 5.3-3. The verification will include a pressurized thermal shock evaluation based on as-procured reactor vessel material data and the projected neutron fluence for the plant design objective of 60 years. This evaluation report will be submitted for NRC staff review.			
9.1-7	**Coupon Monitoring Program**	**9.1.6**	**Prior to commercial operation**
A spent fuel rack Metamic coupon monitoring program will be implemented when the plant is placed into commercial operation. This program will include tests to monitor bubbling, blistering, cracking, or flaking; and a test to monitor for corrosion, such as weight loss measurements and/or visual examination. The program will also include testing to monitor changes in physical properties of the absorber material, including neutron attenuation and thickness measurements.			
10.2-1	**Turbine Maintenance and Inspection**	**10.2.6**	**Prior to initial fuel load**
The Combined License holder will submit to the NRC staff for review prior to fuel load, and then implement a turbine maintenance and inspection program. The program will be consistent with the maintenance and inspection program plan activities and inspection intervals identified in Subsection 10.2.3.6. The Combined License holder will have available plant-specific turbine rotor test data and calculated toughness curves that support the material property assumptions in the turbine rotor analysis after the fabrication of the turbine and prior to fuel load.			
13.6-5	**Cyber Security Program**	**13.6.1**	**Prior to initial fuel load**
The Combined License holder will develop and implement a cyber security program prior to initial fuel load.			
14.4-2	**Test Specifics and Procedures**	**14.4.2**	**Prior to initial fuel load**
NOTE — addressed by proposed License Condition #6.			
14.4-3	**Conduct of Test Program**	**14.4.3**	
NOTE — addressed by proposed License Conditions #3 and #6.			
14.4-4	**Review and Evaluation of Test Results**	**14.4.4**	
NOTE — addressed by proposed License Condition #9.			
14.4-6	**First-Plant-Only and Three-Plant-Only Tests**	**14.4.6**	
NOTE — addressed by proposed License Conditions #7 and #9.			

SUMMARY OF COMBINED LICENSE INFORMATION HOLDER ITEMS			
COL Item No.	**Subject**	**From DCD Tier 2 Subsection**	**Implementation Milestone**
15.0-1	**Documentation of Plant Calorimetric Uncertainty Methodology**	**15.0.15.1**	
NOTE — addressed by proposed ITAAC Table 2.5.4-2, item 4.			
19.59.10-1	**As-Built SSC HCLPF Comparison to Seismic Margin Evaluation**	**19.59.10.5**	**Prior to initial fuel load**
The Combined License holder referencing the AP1000 certified design will review differences between the as-built plant and the design used as the basis for the AP1000 seismic margins analysis prior to fuel load. A verification walkdown will be performed with the purpose of identifying differences between the as-built plant and the design. Any differences will be evaluated and the seismic margins analysis modified as necessary to account for the plant specific-design, and any design changes or departures from the certified design. Spacial interactions are addressed by COL information item 3.7-3. Details of the process will be developed by the Combined License holder. The Combined License holder referencing the AP1000 certified design should compare the as-built SSC HCLPFs to those assumed in the AP1000 seismic margin evaluation prior to fuel load. Deviations from the HCLPF values or assumptions in the seismic margin evaluation due to the as-built configuration and final analysis should be evaluated to determine if vulnerabilities have been introduced. The requirements to which the equipment is to be purchased are included in the equipment specifications. Specifically, the equipment specifications include: 1. Specific minimum seismic requirements consistent with those used to define the Table 19.55-1 HCLPF values. This includes the known frequency range used to define the HCLPF by comparing the required response spectrum (RRS) and test response spectrum (TRS). The test response spectra are chosen so as to demonstrate that no more than one percent rate of failure is expected when the equipment is subjected to the applicable seismic margin ground motion for the equipment identified to be applicable in the seismic margin insights of the site-specific PRA. The range of frequency response that is required for the equipment with its structural support is defined. 2. Hardware enhancements that were determined in previous test programs and/or analysis programs will be implemented.			
19.59.10-2	**Evaluation of As-Built Plant Versus Design in AP1000 PRA and Site-Specific PRA External Events**	**19.59.10.5**	**Prior to initial fuel load**
The Combined License holder referencing the AP1000 certified design will review differences between the as-built plant and the design used as the basis for the AP1000 PRA and Table 19.59-18 prior to fuel load. The plant specific PRA-based insight differences will be evaluated and the plant specific PRA model modified as necessary to account for the plant specific-design and, any design changes or departures from the design certification PRA.			
19.59.10-3	**Internal Fire and Internal Flood Analyses**	**19.59.10.5**	**Prior to initial fuel load**
The Combined License holder referencing the AP1000 certified design will review differences between the as-built plant and the design used as the basis for the AP1000 internal fire and internal flood analyses prior to fuel load. Plant specific internal fire and internal flood analyses will be evaluated and the analyses modified as necessary to account for the plant-specific design, and any design changes or departures from the certified design.			
19.59.10-4	**Implement Severe Accident Management Guidance**	**19.59.10.5**	**Prior to startup testing**
NOTE — addressed by proposed License Condition #6.			

SUMMARY OF COMBINED LICENSE INFORMATION HOLDER ITEMS			
COL Item No.	**Subject**	**From DCD Tier 2 Subsection**	**Implementation Milestone**
19.59.10-5	**Equipment Survivability**	**19.59.10.5**	**Prior to initial fuel load**
The Combined License holder referencing the AP1000 certified design will perform a thermal lag assessment of the as-built equipment listed in Tables 6b and 6c in Attachment A of APP-GW-GLR-069 to provide additional assurance that this equipment can perform its severe accident functions during environmental conditions resulting from hydrogen burns associated with severe accidents. This assessment is performed prior to fuel load and is required only for equipment used for severe accident mitigation that has not been tested at severe accident conditions. The Combined License holder will assess the ability of the as-built equipment to perform during severe accident hydrogen burns using the Environment Enveloping method or the Test Based Thermal Analysis method discussed in EPRI NP-4354.			

3. OPERATIONAL PROGRAM IMPLEMENTATION:

The provisions of the regulations address implementation milestones for some operational programs. The NRC will use license conditions to ensure implementation for those operational programs whose implementation is not addressed in the regulations. FSAR Subsection 13.4, Table 13.4-201, identifies several programs required by regulations that must be implemented by a milestone to be identified in a license condition.

PROPOSED LICENSE CONDITION:

The licensee shall implement the programs or portions of programs identified below on or before the associated milestones identified below.

A. Construction Initiation — The licensee shall implement each operational program identified below prior to initiating construction of nuclear safety- or security-related structures, systems, or components:
None identified.

B. 18 Months Before Fuel Load — The licensee shall implement each operational program identified below at least 18 months prior to scheduled date of initial fuel load:
B.1 – Reactor Operator Training

C. Receipt Of Materials — The licensee shall implement each operational program identified below prior to initial receipt of by-product, source, or special nuclear materials on site (excluding Exempt Quantities as described in 10 CFR 30.18):
C.1 – Radiation Protection (applicable portions)
C.2 – Fire Protection Program (applicable portions)
C.3 – Non Licensed Plant Staff Training Program (applicable portions)
C.4 – Deleted
C.5 – Deleted
C.6 – SNM Material Control and Accounting Program

D. Fuel Receipt — The licensee shall implement each operational program identified below prior to initial receipt of fuel onsite:
D.1 – Fire Protection (applicable portions)
D.2 – Radiation Protection (applicable portions)
D.3 – Special Nuclear Material Physical Protection Program
D.4 – Deleted

E. Construction Testing — The licensee shall implement each operational program identified below prior to initial construction testing:
E.1 – Initial Test Program — Construction Testing

F. Preoperational Testing — The licensee shall implement each operational program identified below prior to initial preoperational testing:
F.1 – Initial Test Program — Preoperational Testing

G. Fuel Loading — The licensee shall implement each operational program identified below prior to initial fuel load:
   G.1 – Environmental Qualification
   G.2 – Pre-Service Testing
   G.3 – Process and Effluent Monitoring and Sampling
   G.4 – Radiation Protection (applicable portions)
   G.5 – Motor-Operated Valve Testing
   G.6 – Fire Protection
   G.7 – Deleted
   G.8 – Containment Leakage Rate Testing Program
   G.9 – Physical Security
   G.10 – Cyber Security

H. Startup Testing — The licensee shall implement each operational program identified below prior to initial startup testing:
   H.1 – Initial Test Program — Startup Testing

I. MODE 4 – Not used

J. Initial Criticality — The licensee shall implement each operational program identified below prior to initial criticality:
   J.1 – Reactor Vessel Material Surveillance

K. Waste Shipment — The licensee shall implement each operational program identified below prior to initial radioactive waste shipment:
   K.1 – Radiation Protection

4. NOT USED

5. SECURITY PROGRAM:

A. SECURITY PROGRAM IMPLEMENTATION

An implementation license condition approved in the staff requirements memo regarding SECY-05-0197 applies to the security program.

PROPOSED LICENSE CONDITION:

The licensee shall maintain in effect the provisions of the physical security plan, security personnel training and qualification plan, and safeguards contingency plan and cyber security plan, and all amendments made pursuant to the authority of 10 CFR 50.90, 50.54(p), 52.97, and Section VIII of Appendix D to Part 52 when nuclear fuel is onsite (protected area), and continuing until all nuclear fuel is permanently removed from the site.

B. SPECIAL NUCLEAR MATERIAL PHYSICAL PROTECTION

A license condition is proposed to address when the boundary for physical protection of new fuel as SNM is required to be extended from the controlled access area (CAA) in accordance with the requirements of 10 CFR 73.67 to the operational protected area (PA) in accordance with 10 CFR 73.55.

PROPOSED LICENSE CONDITION:

The licensee shall receive and store new fuel as SNM in a controlled access area (CAA) in accordance with the requirements of 10 CFR 73.67, until such time as an operational protected area (PA) that satisfies the requirements of 10 CFR 73.55(e)(8) is established. If new fuel is already stored in a CAA that is within the boundary of the proposed PA, then upon declaration of an operational PA, the remaining requirements of 10 CFR 73.55 shall be implemented. The PA shall be established and declared operational prior to initial fuel load.

6. OPERATIONAL PROGRAM READINESS:

The NRC inspection of operational programs will be the subject of the following license condition in accordance with SECY-05-0197:

PROPOSED LICENSE CONDITION:

The licensee shall submit to the appropriate director of the NRC, a schedule, no later than 12 months after issuance of the COL, that supports planning for and conduct of NRC inspections of operational programs listed in the operational program FSAR Table 13.4-201. The schedule shall be updated every six months until 12 months before scheduled fuel loading, and every month thereafter until either the operational programs in the FSAR table have been fully implemented or the plant has been placed in commercial service, whichever comes first.

This schedule shall also address:

a. the emergency planning implementation procedures to the NRC consistent with 10 CFR Part 50, Appendix E, Section V.

b. the implementation of site specific Severe Accident Management Guidance.

c. a reactor vessel pressurized thermal shock evaluation at least 18 months prior to initial fuel load.

d. the approved preoperational and startup test procedures (including the site-specific startup administration manual (procedure) prior to initiating the plant initial test program) in accordance with FSAR Subsection 14.2.3.

e. an emergency response data system (ERDS) implementation program plan consistent with 10 CFR Part 50, Appendix E, Section V.

f. a flow accelerated corrosion (FAC) program implementation schedule, including the construction phase activities.

g. full implementation of the operational and programmatic elements of responding to an event associated with a loss of large areas of the plant due to explosions or fire, prior to initial fuel load.

h. the spent fuel rack Metamic coupon monitoring program implementation.

i. the implementation of construction and inspection procedures for steel concrete composite (SC) construction activities for seismic Category I nuclear island modules (including shield building SC modules) before and after concrete placement, and inspection of such construction before and after concrete placement.

j. the availability of documented instrumentation uncertainties to calculate a power calorimetric uncertainty, prior to initial fuel load.

k. the availability of administrative controls to implement maintenance and contingency activities related to the power calorimetric uncertainty instrumentation, prior to initial fuel load.

7. FIRST-PLANT-ONLY AND FIRST-THREE-PLANT-ONLY TESTING:

Certain design features of the AP1000 plant will be subjected to special tests to establish unique phenomenological performance parameters of the AP1000 design. Because of the standardization of the AP1000 design, these special tests (designated as first-plant-only tests and first-three-plant-only tests) are not required on subsequent plants. Once these tests are completed by the first plant (or first three plants) and appropriate documentation identified, the subsequent plants need only reference the applicable documentation to show that the first plant (or first three plants) completed the required testing. Accordingly, the following license condition is proposed:

<u>First-Plant-Only and First-Three-Plant-Only Testing</u>

A licensee shall provide written identification of the applicable references for documentation for the completion of the testing to the Director of the Office of New Reactors (or equivalent NRC management) within thirty (30) calendar days of the licensee confirmation of acceptable test results.

Subsequent plant licensees crediting completion of testing by the first-plant or by the first-three-plants shall provide a report referencing the applicable documentation identified by the first (or first three) plant(s) confirming the testing to the Director of the Office of New Reactors (or equivalent NRC management). This report shall be provided to NRC either prior to initiation of pre-operational testing, or within sixty (60) days of the identification of the documentation for the completion of the testing by the first plant (or third plant, as appropriate), whichever is later.

8. STARTUP TESTING:

FSAR Section 14.2 specifies certain startup tests that must be completed after fuel load. Operating licenses typically have included the following condition related to startup testing.

PROPOSED LICENSE CONDITION:

Any changes to the Initial Startup Test Program described in Chapter 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 or Section VIII of Appendix D to 10 CFR Part 52 shall be reported in accordance with 10 CFR 50.59(d) within one month of such change.

9. STARTUP PROGRAM TEST RESULTS:

Certain milestones within the startup testing phase of the initial test program (i.e., pre-critical testing, criticality testing, and low-power (<5% RTP) testing) are controlled through license conditions to ensure that relevant test results are reviewed, evaluated, and approved by the designated licensee management before proceeding with the power ascension test phase.

Accordingly, the following license conditions are proposed:

Pre-operational Testing
Following completion of pre-operational testing, the licensee shall review and evaluate individual test results. Test exceptions or results which do not meet acceptance criteria are identified to the affected and responsible organizations, and corrective actions and retests, as required, are performed.

Pre-critical and Criticality Testing

1. Following completion of pre-critical and criticality testing, the licensee shall review and evaluate individual test results. Test exceptions or results which do not meet acceptance criteria are identified to the affected and responsible organizations, and corrective actions and retests, as required, are performed.
2. The licensee shall provide written notification to the Director of the Office of New Reactors (or equivalent NRC management) within fourteen (14) calendar days of completion of the pre-critical and criticality testing.

Low-Power (<5% RTP) Testing

1. Following completion of low-power (<5% RTP) testing, the licensee shall review and evaluate individual test results. Test exceptions or results which do not meet acceptance criteria are identified to the affected and responsible organizations, and corrective actions and retests, as required, are performed.
2. The licensee shall provide written notification to the Director of the Office of New Reactors (or equivalent NRC management) within fourteen (14) calendar days of completion of the low power testing.

At-Power (5%–100% RTP) Testing

1. Following completion of at-power testing (at or above 5% RTP up to and including testing at 100% RTP), the licensee shall review and evaluate individual test results. Test exceptions or results which do not meet acceptance criteria are identified to the affected and responsible organizations, and corrective actions and retests, as required, are performed.
2. The licensee shall provide written notification to the Director of the Office of New Reactors (or equivalent NRC management) within fourteen (14) calendar days of completion of the at-power testing.

10. ENVIRONMENTAL PROTECTION PLAN:

Operating licenses typically have included the following condition related to environmental protection.

PROPOSED LICENSE CONDITION:

The issuance of this COL, subject to the Environmental Protection Plan (EPP) and the conditions for the protection of the environment set forth herein, is in accordance with the National Environmental Policy Act of 1969, as amended, and with applicable sections of 10 CFR Part 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions, as referenced by Subpart C of 10 CFR Part 52, Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants, and all applicable requirements therein have been satisfied.

11. EMERGENCY PLANNING ACTIONS:

PROPOSED LICENSE CONDITION:

A. The licensee shall submit a fully developed set of site-specific Emergency Action levels (EALs) to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The EALs shall have been discussed and agreed upon with state

and local officials. These fully developed EALs shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.

B. At least two (2) years before scheduled initial fuel load, the licensee shall have performed an assessment of emergency response staffing in accordance with NEI 10-05, Assessment of On-Shift Emergency Response Organization Staffing and Capabilities, or other NRC-endorsed guidance in effect six (6) months prior to commencement of the assessment.

12. FUKUSHIMA ACTIONS:

PROPOSED LICENSE CONDITION:

A. MITIGATION STRATEGIES

Prior to initial fuel load, the licensee shall fully implement the following actions associated with mitigation strategies including procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies:

1. Develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment and spent fuel pool (SFP) cooling capabilities following a beyond-design basis external event. These strategies must:

   - Be capable of mitigating a simultaneous loss of all ac power and loss of normal access to the normal heat sink, and
   - Have adequate capacity to address challenges to core cooling, containment, and SFP cooling capabilities at all units on the Turkey Point Units 6 & 7 site, and
   - Have the capability to be implemented in all modes.

2. Provide reasonable protection for the associated equipment from external events. Such protection must demonstrate that there is adequate capacity to address challenges to core cooling, containment, and SFP cooling capabilities at all units on the Turkey Point Units 6 & 7 site.

3. The licensee shall within one (1) year after issuance of the COL, submit to the NRC for review an overall integrated plan, including a description of how compliance with the requirements described in this license condition will be achieved.

4. The licensee shall provide to the NRC an initial status report sixty (60) days following issuance of the COL and at six (6) month intervals following submittal of the overall

integrated plan described above which delineates progress made in implementing the requirements of this license condition.

B. RELIABLE SPENT FUEL POOL LEVEL INSTRUMENTATION

Prior to initial fuel load, the licensee shall fully implement the following requirements for spent fuel pool (SFP) level indication:

- The spent fuel pool instrumentation shall be maintained available and reliable through the development and implementation of a training program. The training program shall include provisions to ensure trained personnel can route the temporary power lines from the alternate power source to the appropriate connection points and connect the alternate power source to the safety-related level instrument channels.

C. EMERGENCY PLANNING ACTIONS

Staffing

At least two (2) years prior to scheduled initial fuel load, the licensee shall have performed an assessment of the onsite and augmented staffing capability to satisfy the regulatory requirements for response to a multi-unit event. The staffing assessment will be performed in accordance with NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, or other NRC-endorsed guidance in effect six (6) months prior to commencement of the assessment.

At least two (2) years prior to scheduled initial fuel load, the licensee will revise the Emergency Plan to include the following:

- Incorporation of corrective actions identified in the staffing assessment described above.
- Identification of how the augmented staff will be notified given degraded communications capabilities.

Communications

At least two (2) years prior to scheduled fuel load, the licensee shall have performed an assessment of on-site and off-site communications systems and equipment required during an emergency event to ensure communications capabilities can be maintained during prolonged station blackout conditions. The communications capability assessment will be performed in accordance with NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, or other NRC-endorsed guidance in effect six (6) months prior to commencement of the assessment.

At least one hundred eighty (180) days prior to scheduled initial fuel load, the licensee shall complete implementation of corrective actions identified in the communications capability assessment described above, including any related emergency plan and implementing procedure changes and associated training.

13. RADWASTE BUILDING RADIOACTIVITY LIMITS:

PROPOSED LICENSE CONDITION:

Prior to initial fuel load, the licensee shall develop, implement, and maintain procedural controls limiting radionuclide inventory in each of the Radwaste Building Monitor Tanks, and separately in each of up to three (3) Radwaste Building mobile radwaste processing systems to below A_2 quantities for radionuclides specified in Appendix A to 10 CFR Part 71 (Tables A-1 and A-3), as described in FSAR Section 13.5.2.2.5. The procedures shall also ensure that any additional equipment located in the Radwaste Building is limited to the A_2 quantities and that the total cumulative radioactive inventory contained in unpackaged wastes (including liquid waste, wet waste, solid waste, gaseous waste, activated or contaminated metals and components, and contaminated waste present at any time in the Radwaste Building) is limited so that an unmitigated release, occurring over a two hour time period, would not result in a dose of greater than 100 millirem at the protected area boundary or an unmitigated exposure, occurring over a two hour time period, would not result in a dose of greater than 5 rem to site personnel located 10 feet from the total cumulative radioactive inventory.

APPENDIX A

TO FACILITY OPERATING LICENSE NO. [XXX-XX]
TURKEY POINT — UNITS NO. 6 & 7

FPL DOCKET NOS. 52-040 AND 52-041

ENVIRONMENTAL PROTECTION PLAN

(NONRADIOLOGICAL)

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Appendix A: Environmental Protection Plan (Nonradiological)

1.0 OBJECTIVE OF THE ENVIRONMENTAL PROTECTION PLAN

The Environmental Protection Plan (EPP) objective is to ensure compliance with Biological Opinions issued pursuant to the Endangered Species Act of 1973, as amended (ESA), and to ensure that the Commission is kept informed of other environmental matters within NRC's jurisdiction that require affirmative NRC licensee notifications to other Federal agencies.

2.0 ENVIRONMENTAL PROTECTION ISSUES

In the Final Environmental Impact Statement (FEIS) dated [xxxxx] the staff considered the environmental impacts associated with the construction and operation of Turkey Point Units 6 & 7. This EPP applies to the licensee's actions affecting the environmental resources evaluated in the FEIS.

2.1 Aquatic Resources Issues

Federal agencies other than the U.S. Nuclear Regulatory Commission (NRC), such as the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (ACE), have jurisdiction to regulate aquatic resources under the Federal Water Pollution Control Act (Clean Water Act or CWA) and the Rivers and Harbors Appropriation Act of 1899 (RHA). Water quality environmental concerns identified in the FEIS including effluent limitations, monitoring requirements, and mitigation measures are regulated under the licensee's CWA permits, such as National Pollutant Discharge Elimination System (NPDES) and Section 404 permits, and RHA Section 10 permit. Nothing within this EPP shall be construed to place additional requirements on the regulation of aquatic resources except the imposition of the requirements in a Biological Opinion under the ESA (see section 2.3) upon COL holders. To the extent an event or situation concerning aquatic resources occurs for which a news release is planned or notification to other government agencies has been or will be made, the licensee shall so inform the NRC consistent with NRC regulations in 10 CFR 50.72(b)(2)(xi). If an event or situation concerning aquatic resources occurs that is not required to be reported under that provision, the licensee is expected to inform the NRC only to the same extent, and on the same schedule, that it is required to report such events or situations to the federal agency with jurisdiction or permitting authority over those events or conditions. In the latter case, submitting to the NRC an electronic copy of the licensee's notification to the jurisdictional agency is sufficient to meet this obligation.

2.2 Terrestrial Resources Issues

Several statutes govern the regulation of terrestrial resources. For example, the U.S. Fish and Wildlife Service (FWS) regulates matters involving migratory birds and their nests in accordance with the Migratory Bird Treaty Act. Activities affecting migratory birds or their nests may require

permits under the Migratory Bird Treaty Act. The FWS also regulates matters involving the protection and taking of bald and golden eagles in accordance with the Bald and Golden Eagle Protection Acts. To the extent an event or situation concerning terrestrial resources occurs for which a news release is planned or notification to other government agencies has been or will be made, the licensee shall so inform the NRC consistent with NRC regulations in 10 CFR 50.72(b)(2)(xi). If an event or situation concerning terrestrial resources occurs that is not required to be reported under that provision, the licensee is expected to inform the NRC only to the same extent, and on the same schedule, that it is required to report such events or situations to the federal agency with jurisdiction or permitting authority over those events or conditions. In the latter case, submitting to the NRC an electronic copy of the licensee's notification to the jurisdictional agency is sufficient to meet this obligation.

2.3 Endangered Species Act of 1973

If any Federally listed species or critical habitat occurs in an area affected by construction or operation of the plant that was not previously identified as occurring in such areas, including species and critical habitat that were not previously Federally listed, the licensee shall copy the NRC on any notifications required to the appropriate jurisdictional agencies. Similarly, the licensee shall copy the NRC on any notifications required to the appropriate jurisdictional agencies of discovery of any take, as defined in the ESA, of a Federally listed species or destruction or adverse modification of critical habitat. These notifications shall be made by including the NRC on electronic distribution of the notifications that the licensee provides to the jurisdictional federal agency. The licensee shall provide any necessary information to the NRC if the NRC initiates consultation under the ESA.

Unusual ESA-related Event — The licensee shall include the NRC on distribution for any notifications required to be made to the appropriate jurisdictional agencies in connection with any onsite mortality, injury, or unusual occurrence of any species protected by the ESA, to the extent such events trigger the reporting obligation set forth in 10 CFR 50.72(b)(2)(xi).

3.0 CONSISTENCY REQUIREMENTS

The licensee shall notify the NRC of proposed changes to its Class I well operation permit(s) by providing the NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC with a copy of the application for renewal of this permit(s) at the same time the application is submitted to the permitting agency.

Changes to or renewals of this permit(s) shall be reported to the NRC within 30 days following the later of the date the change or renewal is approved or the date the change becomes effective. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

4.0 ADMINISTRATIVE PROCEDURES

4.1 Plant Reporting Requirements: Non-routine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of any unusual event described in Section 2.3 of this EPP, if such event is causally related to facility construction or operation. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics at the time of the event, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

4.2 Review and Audit

The licensee shall provide for review and audit of compliance with Section 2.3 of the EPP. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organizational structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

4.3 Records Retention

Records shall be made available to the NRC on request. The records, data, and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

4.4 Changes in Environmental Protection Plan

A request for a change in the EPP shall be processed in accordance with 10 CFR 50.59, and shall also include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes, if required.

The licensee shall notify the NRC of any changed Terms and Conditions set forth in the Incidental Take Statement of Biological Opinions issued subsequent to the effective date of this EPP.

Appendix B: Inspections, Tests, Analyses and Acceptance Criteria

AP1000 DCD TIER 1 ITAAC

The Tier 1 information (including the ITAAC) of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following information to the information provided in the referenced DCD Tier 1 at the end of Section 2.2.5:

Main Control Room Emergency Habitability System (VES) ITAAC

VES components are identified as the preferred, safety-related connection point for post-72 hour supplemental air. Component numbers for temporary instrument isolation valves are included in Table 2.2.5-1. The heat load values for the Main Control Room Envelope (MCRE) shown in Table 2.2.5-4 are revised to correct for the most limiting design basis event and to account for actual equipment in the AP1000 design.

Add item 7.e) to the Design Description information in DCD Tier 1 Section 2.2.5 to read as follows:

2.2.5 Main Control Room Emergency Habitability System

7. The VES provides the following safety-related functions:

   e) The system provides shielding below the VES filter that is sufficient to ensure main control room doses are below an acceptable level during VES operation.

MCR filter shielding component is added to DCD Tier 1 Table 2.2.5-1, as shown on Table 2.2.5-1, with left margin annotation PTN DEP 6.4-1.

MCR filter shielding component is added to DCD Tier 1 Table 2.2.5-5, as shown on Table 2.2.5-5, with left margin annotation PTN DEP 6.4-1.

Passive Containment Cooling System ITAAC

Passive Containment Cooling system components are added to support the capability of the Passive Residual Heat Removal Heat Exchanger (PRHR HX) to enable the reactor to achieve a safe shutdown condition of 420°F within 36 hours. Component numbers for downspout screens are added to DCD Tier 1 Table 2.2.3-1 and component numbers for downspout piping are added to DCD Tier 1 Table 2.2.3-2 to provide assurance that ITAAC design commitments will be met. These tables, with the subject component numbers added, are provided in the attached Tables 2.2.3-1 and 2.2.3-2, with an LMA of PTN DEP 3.2-1.

Containment Hydrogen Control System ITAAC

The ITAAC Acceptance Criteria for the in-containment PXS compartment vents are revised to reflect the current plant configuration. The ITAAC acceptance criteria for Table 2.3.9-3, Item 3, are clarified to read as shown on Table 2.3.9-3, with a left margin annotation PTN DEP 6.2-1.

Add the following information to the information provided in the referenced DCD Tier 1 at the end of Section 2.5.2:

Protection and Safety Monitoring System (PMS) ITAAC

New load shed panels are added to automatically de-energize non-essential equipment in the Main Control Room Envelope (MCRE) to ensure the MCRE is maintained within human performance limits. The electrical load de-energization feature is added on Tables 2.5.2-3 and 2.5.2-4.

Nuclear Island Nonradioactive Ventilation System ITAAC

Revise the sixth and seventh sentences of the Design Description information in DCD Tier 1 Section 2.7.1 to read as follows:

In addition, the VBS isolates the HVAC penetrations in the main control room boundary on “High-2” particulate or iodine radioactivity in the main control room supply air duct or on a loss of ac power for more than 10 minutes. The Sanitary Drainage System (SDS) also isolates a penetration in the main control room boundary on “High-2” particulate or iodine radioactivity in the main control room supply air duct or on a loss of ac power for more than 10 minutes.

PHYSICAL SECURITY ITAAC

The physical security ITAAC that are in the scope of the Westinghouse AP1000 standard design are included in the referenced DCD Tier 1 Subsection 2.6.9 as incorporated by reference above. Site specific physical security ITAAC that are outside the scope of the Westinghouse AP1000 standard design in DCD Tier 1 Subsection 2.6.9 are provided in the attached Table 2.6.9-2. Include these ITAAC after the DCD Tier 1 Table 2.6.9-1 ITAAC.

PLANT SPECIFIC ITAAC

Add the following information to the information provided in the referenced DCD Tier 1 following Section 2.3.29:

2.3.30 Storm Drain System

No entry for this system.

2.3.31 Raw Water System
No entry for this system.

2.3.32 Yard Fire Water System
No entry for this system.

Add the following information to the information provided in the referenced DCD Tier 1 Section 2.5.4, as a new item 4 under the Design Description section:

4. The plant operating instrumentation installed for feedwater flow measurement is one that has been specifically approved by the NRC; the power calorimetric uncertainty calculation includes uncertainties for the associated instrumentation based on an NRC approved methodology; and the calculated calorimetric values are bounded by the uncertainty value assumed for the initial reactor power in the safety analysis.

Add the following information to the information provided in the referenced DCD Tier 1 Section 2.5.4, as a new, final line item in Table 2.5.4-2:

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
4. The plant calorimetric uncertainty and plant instrumentation performance is bounded by the 1% calorimetric uncertainty value assumed for the initial reactor power in the safety analysis.	Inspection will be performed of the plant operating instrumentation installed for feedwater flow measurement, its associated power calorimetric uncertainty calculation, and the calculated calorimetric values.	a) The as-built system takes input for feedwater flow measurement from a Caldon [Cameron] LEFM CheckPlus™ System; b) the power calorimetric uncertainty calculation documented for that instrumentation is based on an accepted Westinghouse methodology and the uncertainty values for that instrumentation are not lower than those for the actual installed instrumentation; and c) the calculated calorimetric power uncertainty measurement values are bounded by the 1% uncertainty value assumed for the initial reactor power in the safety analysis.

Add the following information to the information provided in the referenced DCD Tier 1 following Section 2.5.10:

2.5.11 Meteorological and Environmental Monitoring System
No entry for this system

2.5.12 Closed Circuit TV System
No Entry for this system

Add the following information to the information provided in the referenced DCD Tier 1 Section 2.6.1, as new item 4.g under the Design Description section:

4.g) The ECS provides an alarm in the MCR and automatic protection actuation if an undervoltage condition is detected on any one or more AC phases of either switchgear ECS-ES-1 or ECS-ES-2.

Add the following information to the information provided in the referenced DCD Tier 1 Section 2.6.1, as new item 4.g) in Table 2.6.1-4:

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
4.g) The ECS provides an alarm in the MCR and automatic protection actuation if an undervoltage condition is detected on any one or more AC phases of either switchgear ECS-ES-1 or ECS-ES-2.	i) Testing of the as-built ECS will be conducted by simulating an undervoltage condition on ECS-ES-1 and ECS-ES-2 to confirm that an MCR alarm is generated when one or more ECS bus phase voltages is below setpoint on either switchgear ECS-ES-1 or ECS-ES-2.	i) Undervoltage relays on ECS-ES-1 and ECS-ES-2 provide alarm when one or more AC phases on the 6.9 kV buses are below setpoint.
	ii) Testing of the as-built ECS will be conducted by simulating an undervoltage condition on ECS-ES-1 and ECS-ES-2 to confirm that loss of one or more ECS bus phases automatically actuates the electrical protection function logic.	ii) Undervoltage relays on ECS-ES-1 and ECS-ES-2 initiate protective action when one or more AC phases on the 6.9 kV buses are below setpoint.

Add the following information to the information provided in the referenced DCD Tier 1 following Section 2.6.11:

2.6.12 Transmission Switchyard and Offsite Power System

Table 2.6.12-1 provides a definition of the inspections, tests, and/or analyses, together with associated acceptance criteria for the offsite power system.

2.6.13 Offsite Retail Power System

No entry for this system.

The following non-system based site specific ITAAC are provided:

Pipe Rupture Hazard Analysis ITAAC

The ITAAC for Pipe Rupture Hazard Analysis are included in attached Table 3.8-2.

Piping Design ITAAC

The ITAAC for Piping Design are included in attached Table 3.8-3.

Waterproof Membrane ITAAC
The ITAAC for Waterproof Membrane are included in attached Table 3.8-4.

Concrete Fill ITAAC
The ITAAC for Concrete Fill are included in attached Table 3.8-5.

Seismic Category I Structure Foundation Grouting
The ITAAC for Seismic Category I Structure Foundation Grouting are included in attached Table 3.8-6.

EMERGENCY PLANNING ITAAC

The emergency planning ITAAC that are in the scope of the Westinghouse AP1000 standard design are included in the referenced DCD Tier 1 Subsection 3.1 as incorporated by reference above. Site-specific emergency planning ITAAC that supplement or are outside the scope of the Westinghouse AP1000 standard design in DCD Tier 1 Subsection 3.1 are provided in the attached Table 3.8-1. Include these ITAAC after DCD Tier 1 Section 3.7.

Table 2.2.3-1

Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/ Qual. Harsh Envir.	Safety-Related Display	Control PMS/ DAS	Active Function	Loss of Motive Power Position
Passive Residual Heat Removal Heat Exchanger (PRHR HX)	PXS-ME-01	Yes	Yes	-	- / -	-	- / -	-	-
Accumulator Tank A	PXS-MT-01A	Yes	Yes	-	- / -	-	- / -	-	-
Accumulator Tank B	PXS-MT-01B	Yes	Yes	-	- / -	-	- / -	-	-
Core Makeup Tank (CMT) A	PXS-MT-02A	Yes	Yes	-	- / -	-	- / -	-	-
CMT B	PXS-MT-02B	Yes	Yes	-	- / -	-	- / -	-	-
IRWST	PXS-MT-03	No	Yes	-	- / -	-	- / -	-	-
IRWST Screen A	PXS-MY-Y01A	No	Yes	-	- / -	-	- / -	-	-
IRWST Screen B	PXS-MY-Y01B	No	Yes	-	- / -	-	- / -	-	-
IRWST Screen C	PXS-MY-Y01C	No	Yes	-	- / -	-	- / -	-	-
Containment Recirculation Screen A	PXS-MY-Y02A	No	Yes	-	- / -	-	- / -	-	-
Containment Recirculation Screen B	PXS-MY-Y02B	No	Yes	-	- / -	-	- / -	-	-
pH Adjustment Basket 3A	PXS-MY-Y03A	No	Yes	-	- / -	-	- / -	-	-
pH Adjustment Basket 3B	PXS-MY-Y03B	No	Yes	-	- / -	-	- / -	-	-
pH Adjustment Basket 4A	PXS-MY-Y04A	No	Yes		- / -		- / -		
pH Adjustment Basket 4B	PXS-MY-Y04B	No	Yes		- / -		- / -		
Downspout Screen 1A	PXS-MY-Y81	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 1B	PXS-MY-Y82	No	Yes	-	- / -	-	- / -	-	-

PTN DEP 3.2-1

Note: Dash (-) indicates not applicable.

Table 2.2.3-1 (cont.)

PTN DEP 3.2-1

Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/ Qual. Harsh Envir.	Safety-Related Display	Control PMS/ DAS	Active Function	Loss of Motive Power Position
Downspout Screen 1C	PXS-MY-Y83	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 1D	PXS-MY-Y84	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 2A	PXS-MY-Y85	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 2B	PXS-MY-Y86	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 2C	PXS-MY-Y87	No	Yes	-	- / -	-	- / -	-	-
Downspout Screen 2D	PXS-MY-Y88	No	Yes	-	- / -	-	- / -	-	-
CMT A Inlet Isolation Motor-operated Valve	PXS-PL-V002A	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/No	None	As Is
CMT B Inlet Isolation Motor-operated Valve	PXS-PL-V002B	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/No	None	As Is
CMT A Discharge Isolation Valve	PXS-PL-V014A	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/Yes	Transfer Open	Open
CMT B Discharge Isolation Valve	PXS-PL-V014B	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/Yes	Transfer Open	Open
CMT A Discharge Isolation Valve	PXS-PL-V015A	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/Yes	Transfer Open	Open
CMT B Discharge Isolation Valve	PXS-PL-V015B	Yes	Yes	Yes	Yes/Yes	Yes (Position)	Yes/Yes	Transfer Open	Open
CMT A Discharge Check Valve	PXS-PL-V016A	Yes	Yes	No	- / -	No	- / -	Transfer Open/ Transfer Closed	-

Note: Dash (-) indicates not applicable.

Table 2.2.3-2 (cont.)

Line Name	Line Number	ASME Code Section III	Leak Before Break	Functional Capability Required
IRWST screen cross-connect line	PXS-L180A, PXS-L180B	Yes	No	Yes
Containment recirculation line A	PXS-L113A, PXS-L131A, PXS-L132A	Yes	No	Yes
Containment recirculation line B	PXS-L113B, PXS-L131B, PXS-L132B	Yes	No	Yes
IRWST gutter drain line	PXS-L142A, PXS-L142B	Yes	No	Yes
	PXS-L141A, PXS-L141B	Yes	No	No
Downspout drain lines from polar crane girder and internal stiffener to collection box A	PXS-L301A, PXS-L302A, PXS-L303A, PXS-L304A, PXS-L305A, PXS-L306A, PXS-L307A, PXS-L308A, PXS-L309A, PXS-L310A	Yes	No	Yes
Downspout drain lines from polar crane girder and internal stiffener to collection box B	PXS-L301B, PXS-L302B, PXS-L303B, PXS-L304B, PXS-L305B, PXS-L306B, PXS-L307B, PXS-L308B, PXS-L309B, PXS-L310B	Yes	No	Yes

PTN DEP 3.2-1

Table 2.2.5-1 (cont.)

Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/ Qual. for Harsh Envir.	Safety-Related Display	Control PMS	Active Function	Loss of Motive Power Position
Emergency Air Storage Tank 31	VES-MT-31	No	Yes	-	-/-	-	-	-	-
Emergency Air Storage Tank 32	VES-MT-32	No	Yes	-	-/-	-	-	-	-
Air Delivery Alternate Isolation Valve	VES-PL-V001	Yes	Yes	No	-/-	No	-	Transfer Open	-
Eductor Flow Path Isolation Valve	VES-PL-V045	Yes	Yes	No	-/-	No	-	Transfer Close	-
Eductor Bypass Isolation Valve	VES-PL-V046	Yes	Yes	No	-/-	No	-	Transfer Open	-
Pressure Regulating Valve A	VES-PL-V002A	Yes	Yes	No	-/-	No	-	Throttle Flow	-
Pressure Regulating Valve B	VES-PL-V002B	Yes	Yes	No	-/-	No	-	Throttle Flow	-
MCR Air Delivery Isolation Valve A	VES-PL-V005A	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
MCR Air Delivery Isolation Valve B	VES-PL-V005B	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
PTN DEP 6.4-2 Temporary Instrument Isolation Valve A	VES-PL-V018	Yes	Yes	No	-/-	No	No	Transfer Open	-
PTN DEP 6.4-2 Temporary Instrument Isolation Valve B	VES-PL-V019	Yes	Yes	No	-/-	No	No	Transfer Open	-
MCR Pressure Relief Isolation Valve A	VES-PL-V022A	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open
MCR Pressure Relief Isolation Valve B	VES-PL-V022B	Yes	Yes	Yes	Yes/No	No	Yes	Transfer Open	Open

Note: Dash (-) indicates not applicable.

Table 2.2.5-1 (cont.)

Equipment Name	Tag No.	ASME Code Section III	Seismic Cat. I	Remotely Operated Valve	Class 1E/ Qual. for Harsh Envir.	Safety-Related Display	Control PMS	Active Function	Loss of Motive Power Position
Air Tank Safety Relief Valve A	VES-PL-V040A	Yes	Yes	No	-/-	No	-	Transfer Open	-
Air Tank Safety Relief Valve B	VES-PL-V040B	Yes	Yes	No	-/-	No	-	Transfer Open	-
Air Tank Safety Relief Valve C	VES-PL-V040C	Yes	Yes	No	-/-	No	-	Transfer Open	-
Air Tank Safety Relief Valve D	VES-PL-V040D	Yes	Yes	No	-/-	No	-	Transfer Open	-
Main Air Flow Path Isolation Valve	VES-PL-V044	Yes	Yes	No	-/-	No	-	Transfer Close	-
MCR Air Filtration Line Eductor	VES-PY-N01	Yes	Yes	-	-	-	-	-	-
MCR Air Filtration Line Charcoal Filter	VES-MY-F01	No	Yes	-	-	-	-	-	-
MCR Air Filtration Line HEPA Filter	VES-MY-F02	No	Yes	-	-	-	-	-	-
MCR Air Filtration Line Postfilter	VES-MY-F03	No	Yes	-	-	-	-	-	-
PTN DEP 6.4-1 MCR Filter Shielding	12401-NS-01	No	Yes	-	-	-	-	-	-
MCR Gravity Relief Dampers	VES-MD-D001A	No	Yes	-	-	-	-	-	-

Note: Dash (-) indicates not applicable.

Table 2.2.5-4

PTN DEP 6.4-2

Room Name	Room Numbers	Heat Load 0 to 24 Hours (Btu/s)	Heat Load 24 to 72 Hours (Btu/s)
MCR Envelope	12401	26.1 (hour 0 through 0.5) 15.6 (hour 0.5 through 3.5) 5.8 (hour 3.5 through 24)	2.9
I&C Rooms	12301, 12305	8.8	0
I&C Rooms	12302, 12304	13.0	4.2
dc Equipment Rooms	12201, 12205	3.7 (hour 0 through 1) 2.4 (hour 2 through 24)	0
dc Equipment Rooms	12203, 12207	5.8 (hour 0 through 1) 4.5 (hour 2 through 24)	2.0

Table 2.2.5-5 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7d) The system provides a passive recirculation flow of MCR air to maintain main control room dose rates below an acceptable level during VES operation.	Testing will be performed to confirm that the required amount of air flow circulates through the MCR passive filtration system,	The air flow rate at the outlet of the MCR passive filtration system is at least 600 cfm greater than the flow measured by VES-003A/B.
PTN DEP 6.4-1 7e) Shielding below the VES Filter is capable of providing attenuation that is sufficient to ensure main control room doses are below an acceptable level during VES operation.	Inspection will be performed for the existence of a report verifying that the as-built shielding meets the requirements for functional capability.	A report exists and concludes that the as-built shielding identified in Table 2.2.5-1 meets the functional requirements and exists below the filtration unit, and within its vertical projection.
8. Safety-related displays identified in Table 2.2.5-1 can be retrieved in the MCR.	Inspection will be performed for retrievability of the safety-related displays in the MCR.	Safety-related displays identified in Table 2.2.5-1 can be retrieved in the MCR.
9.a) Controls exist in the MCR to cause remotely operated valves identified in Table 2.2.5-1 to perform their active functions.	Stroke testing will be performed on remotely operated valves identified in Table 2.2.5-1 using the controls in the MCR.	Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.5-1 to perform their active safety functions.
9.b) The valves identified in Table 2.2.5-1 as having PMS control perform their active safety function after receiving a signal from the PMS.	Testing will be performed on remotely operated valves listed in Table 2.2.5-1 using real or simulated signals into the PMS.	The remotely operated valves identified in Table 2.2.5-1 as having PMS control perform the active safety function identified in the table after receiving a signal from the PMS.
10. After loss of motive power, the remotely operated valves identified in Table 2.2.5-1 assume the indicated loss of motive power position.	Testing of the remotely operated valves will be performed under the conditions of loss of motive power.	After loss of motive power, each remotely operated valve identified in Table 2.2.5-1 assumes the indicated loss of motive power position.
11. Displays of the parameters identified in Table 2.2.5-3 can be retrieved in the MCR.	Inspection will be performed for retrievability of the parameters in the MCR.	The displays identified in Table 2.2.5-3 can be retrieved in the MCR.
12. The background noise level in the MCR does not exceed 65 dB(A) at the operator workstations when VES is operating.	The as-built VES will be operated, and background noise levels in the MCR will be measured at the operator work stations with the plant not operating.	The background noise level in the MCR does not exceed 65 dB(A) at the operator workstations when the VES is operating.

Table 2.3.9-3
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The functional arrangement of the VLS is as described in the Design Description of this Section 2.3.9.	Inspection of the as-built system will be performed.	The as-built VLS conforms with the functional arrangement as described in the Design Description of this Section 2.3.9.
2.a) The hydrogen monitors identified in Table 2.3.9-1 are powered by the non-Class 1E dc and UPS system.	Testing will be performed by providing a simulated test signal in each power group of the non-Class 1E dc and UPS system.	A simulated test signal exists at the hydrogen monitors identified in Table 2.3.9-1 when the non-Class 1E dc and UPS system is provided the test signal.
2.b) The components identified in Table 2.3.9-2 are powered from their respective non-Class 1E power group.	Testing will be performed by providing a simulated test signal in each non-Class 1E power group.	A simulated test signal exists at the equipment identified in Table 2.3.9-2 when the assigned non-Class 1E power group is provided the test signal.
3. The VLS provides the nonsafety-related function to control the containment hydrogen concentration for beyond design basis accidents.	i) Inspection for the number of igniters will be performed.	i) At least 64 hydrogen igniters are provided inside containment at the locations specified in Table 2.3.9-2.
	ii) Operability testing will be performed on the igniters.	ii) The surface temperature of the igniter exceeds 1700°F.
	iii) An inspection of the as-built containment internal structures will be performed.	iii) The equipment access opening and CMT-A opening constitute at least 98% of vent paths within Room 11206 that vent to Room 11300. The minimum distance between the equipment access opening and containment shell is at least 24.3 feet. The minimum distance between the CMT-A opening and the containment shell is at least 9.4 feet. The CMT-B opening constitutes at least 98% of vent paths within Room 11207 that vent to Room 11300 and is a minimum distance of 24.6 feet away from the containment shell. Other openings through the ceilings of these rooms must be at least 3 feet from the containment shell.
	iv) An inspection will be performed of the as-built IRWST vents that are located in the roof of the IRWST along the side of the IRWST next to the containment shell.	iv) The discharge from each of these IRWST vents is oriented generally away from the containment shell.

PTN DEP 6.2-1

Table 2.5.2-3
PMS Automatically Actuated Engineered Safety Features

Safeguards Actuation
Containment Isolation
Automatic Depressurization System (ADS) Actuation
Main Feedwater Isolation
Reactor Coolant Pump Trip
CMT Injection
Turbine Trip (Isolated signal to nonsafety equipment)
Steam Line Isolation
Steam Generator Relief Isolation
Steam Generator Blowdown Isolation
Passive Containment Cooling Actuation
Startup Feedwater Isolation
Passive Residual Heat Removal (PRHR) Heat Exchanger Alignment
Block of Boron Dilution
Chemical and Volume Control System (CVS) Makeup Line Isolation
Steam Dump Block (Isolated signal to nonsafety equipment)
Main Control Room Isolation, Air Supply Initiation and Electrical Load De-energization
Auxiliary Spray and Letdown Purification Line Isolation
Containment Air Filtration System Isolation
Normal Residual Heat Removal Isolation
Refueling Cavity Isolation
In-Containment Refueling Water Storage Tank (IRWST) Injection
IRWST Containment Recirculation
CVS Letdown Isolation
Pressurizer Heater Block (Isolated signal to nonsafety equipment)
Containment Vacuum Relief

PTN DEP 6.4-2

Table 2.5.2-4
PMS Manually Actuated Functions

Reactor Trip
Safeguards Actuation
Containment Isolation
Depressurization System Stages 1, 2, and 3 Actuation
Depressurization System Stage 4 Actuation
Feedwater Isolation
Core Makeup Tank Injection Actuation
Steam Line Isolation
Passive Containment Cooling Actuation
Passive Residual Heat Removal Heat Exchanger Alignment
IRWST Injection
Containment Recirculation Actuation
Main Control Room Isolation, Air Supply Initiation and Electrical Load De-energization
Steam Generator Relief Isolation
Chemical and Volume Control System Isolation
Normal Residual Heat Removal System Isolation
Containment Vacuum Relief

PTN DEP 6.4-2

Table 2.6.9-2 (Sheet 1 of 2)
Site-Specific Physical Security Inspections, Tests, Analyses and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The external walls, doors, ceiling, and floors in the location within which the last access control function for access to the protected area is performed are bullet-resistant to at least Underwriters Laboratory Ballistic Standard 752, level 4.	Type test, analysis, or a combination of type test and analysis will be performed for the external walls, doors, ceilings, and floors in the location within which the last access control function for access to the protected area is performed.	The external walls, doors, ceilings, and floors in the location within which the last access control function for access to the protected area is performed are bullet-resistant to at least Underwriters Laboratory Ballistic Standard 752, level 4.
2. Physical barriers for the protected area perimeter are not part of vital area barriers.	An inspection of the protected area perimeter barrier will be performed.	Physical barriers at the perimeter of the protected area are separated from any other barrier designated as a vital area barrier.
3.a) Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area that allow 20 feet of observation on either side of the barrier. Where permanent buildings do not allow a 20-foot observation distance on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier.	Inspections will be performed of the isolation zones in outdoor areas adjacent to the physical barrier at the perimeter of the protected area.	Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and allow 20 feet of observation and assessment of the activities of people on either side of the barrier. Where permanent buildings do not allow a 20-foot observation and assessment distance on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier and the 20-foot observation and assessment distance does not apply.
b) The isolation zones are monitored with intrusion detection equipment that provides the capability to detect and assess unauthorized persons.	Inspections will be performed of the intrusion detection equipment within the isolation zones.	The isolation zones are equipped with intrusion detection equipment that provides the capability to detect and assess unauthorized persons.
4. The intrusion detection and assessment equipment at the protected area perimeter: a) detects penetration or attempted penetration of the protected area barrier and concurrently alarms in both the Central Alarm Station and Secondary Alarm Station, and b) remains operable from an uninterruptible power supply in the event of the loss of normal power.	Tests, inspections or a combination of tests and inspections of the intrusion detection and assessment equipment at the protected area perimeter and its uninterruptible power supply will be performed.	The intrusion detection and assessment equipment at the protected area perimeter: a) detects penetration or attempted penetration of the protected area barrier and concurrently alarms in both the Central Alarm Station and Secondary Alarm Station, and b) remains operable from an uninterruptible power supply in the event of the loss of normal power.

Table 2.6.9-2 (Sheet 2 of 2)
Site-Specific Physical Security Inspections, Tests, Analyses and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
5. Access control points are established to: a) control personnel and vehicle access into the protected area. b) detect firearms, explosives, and incendiary devices at the protected area personnel access points.	Tests, inspections, or combination of tests and inspections of installed systems and equipment at the access control points to the protected area will be performed.	The access control points for the protected area: a) are configured to control personnel and vehicle access b) include detection equipment that is capable of detecting firearms, incendiary devices, and explosives at the protected area personnel access points.
6. An access control system with numbered picture badges is installed for use by individuals who are authorized access to protected areas and vital areas without escort.	A test of the access control system with numbered picture badges will be performed.	The access authorization system with numbered picture badges can identify and authorize protected area and vital area access only to those personnel with unescorted access authorization.
7. Access to vital equipment physical barriers requires passage through the protected area perimeter barrier.	Inspection will be performed to confirm that access to vital equipment physical barriers requires passage through the protected area perimeter barrier.	Vital equipment is located within a protected area such that access to vital equipment physical barriers requires passage through the protected area perimeter barrier.
8.a) Penetrations through the protected area barrier are secured and monitored. b) Unattended openings (such as underground pathways) that intersect the protected area boundary or vital area boundary will be protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.	Inspections will be performed of penetrations through the protected area barrier. Inspections will be performed of unattended openings that intersect the protected area boundary or vital area boundary.	Penetrations and openings through the protected area barrier are secured and monitored. Unattended openings (such as underground pathways) that intersect the protected area boundary or vital area boundary are protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.
9. Emergency exits through the protected area perimeter are alarmed and secured with locking devices to allow for emergency egress.	Tests, inspections, or a combination of tests and inspections of emergency exits through the protected area perimeter will be performed.	Emergency exits through the protected area perimeter are alarmed and secured by locking devices that allow prompt egress during an emergency.

Table 2.6.12-1 (Sheet 1 of 2)
Offsite Power System

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. A minimum of one offsite circuit supplies electric power from the transmission switchyard to the interface with the onsite ac power system.	Inspections of the as-built offsite circuit will be performed.	At least one offsite circuit is provided from the transmission switchyard interface to the interface with the onsite ac power system.
2. Each offsite circuit interfacing with the onsite ac power system is adequately rated to supply assumed loads during normal, abnormal and accident conditions.	Analyses of the offsite power system will be performed to evaluate the as-built ratings of each offsite circuit interfacing with the onsite ac power system against the load assumptions.	A report exists and concludes that each as-built offsite circuit is rated to supply the load assumptions, during normal, abnormal and accident conditions.
3. During steady state operation, each offsite circuit is capable of supplying required voltage to the interface with the onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.	Analyses of the as-built offsite circuit will be performed to evaluate the capability of each offsite circuit to supply the voltage requirements at the interface with the onsite ac power system.	A report exists and concludes that during steady state operation each as-built offsite circuit is capable of supplying the voltage at the interface with the onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.
4. During steady state operation, each offsite circuit is capable of supplying required frequency to the interface with the onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.	Analyses of the as-built offsite circuit will be performed to evaluate the capability of each offsite circuit to supply the frequency requirements at the interface with the onsite ac power system.	A report exists and concludes that during steady state operation each as-built offsite circuit is capable of supplying the frequency at the interface with onsite ac power system that will support operation of assumed loads during normal, abnormal and accident conditions.
5. The fault current contribution of each offsite circuit is compatible with the interrupting capability of the onsite ac power system short circuit interrupting devices.	Analyses of the as-built offsite circuit will be performed to evaluate the fault current contribution of each offsite circuit at the interface with the onsite ac power system.	A report exists and concludes the short circuit contribution of each as-built offsite circuit at the interface with the onsite ac power system is compatible with the interrupting capability of the onsite fault current interrupting devices
6. The reactor coolant pumps continue to receive power from either the main generator or the grid for a minimum of 3 seconds following a turbine trip.	Analyses of the as-built offsite power system will be performed to confirm that power will be available to the reactor coolant pumps for a minimum of 3 seconds following a turbine trip when the buses powering the reactor coolant pumps are aligned to either the UATs or the RATs.	A report exists and concludes that voltage at the high-side of the GSU, and the RATs, does not drop more than 0.15 pu from the pre-trip steady-state voltage for a minimum of 3 seconds following a turbine trip when the buses powering the reactor coolant pumps are aligned to either the UATs or the RATs.

Table 2.6.12-1 (Sheet 2 of 2)
Offsite Power System

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7. The credited GDC 17 offsite power source is monitored by an open phase condition monitoring system that can detect the following at the high voltage terminals of the transformer connecting to the offsite source, over the full range of transformer loading from no load to full load: (1) loss of one of the three phases of the offsite power source a. with a high impedance ground fault condition, or b. without a high impedance ground fault condition; or (2) loss of two of the three phases of the offsite power source a. with a high impedance ground fault condition, or b. without a high impedance ground fault condition. Upon detection of any condition described above, the system will actuate an alarm in the main control room.	i) Analysis shall be used to determine the required alarm set points for the open phase condition monitoring system to indicate the presence of open phase conditions described in the design commitment.	i) Alarm set points for the open phase condition monitoring system to indicate the presence of open phase conditions as described in the design commitment have been determined by analysis.
	ii) Testing of the credited GDC-17 offsite power source open phase condition monitoring system will be performed using simulated signals to verify that the as-built open phase condition monitoring system detects open phase conditions described in the design commitment and at the established set points actuates an alarm in the main control room.	ii) Testing demonstrates the credited GDC 17 offsite power source open phase condition monitoring system detects open phase conditions described in the design commitment and at the established set points actuates an alarm in the main control room.

Table 3.8-1 (Sheet 1 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
1.0 Emergency Classification System			
10 CFR 50.47(b)(4) — A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and state and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	1.1 A standard emergency classification and emergency action level scheme exists, and identifies facility system and effluent parameters constituting the bases for the classification scheme. [D.1**] [**D.1 corresponds to NUREG-0654/ FEMA-REP-1 evaluation criteria.]	1.1.1 An inspection of the main control room, Technical Support Center (TSC), and Emergency Operations Facility (EOF) will be performed to verify that they have displays for retrieving facility system and effluent parameters as specified in the Emergency Classification and EAL technical basis document for the unit, and the displays are functional.	1.1.1 The specified parameters are retrievable in the main control room, TSC and EOF, and the ranges of the displays encompass the values specified in the Emergency Classification and EAL technical basis document for the unit.
		1.1.2 An analysis of the EAL technical bases will be performed to verify as-built, site-specific implementation of the EAL scheme.	1.1.2 The ranges available in the main control room, TSC, and EOF envelop the values for the specific parameters identified in the EALs in Emergency Plan, Annex 2 & 3, Attachment 1.
2.0 Notification Methods and Procedures			
10 CFR 50.47(b)(5) — Procedures have been established for notification, by the licensee, of state and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.	2.1 The means exists to notify responsible state and local organizations within 15 minutes after the licensee declares an emergency. [E.1]	2.1. A test will be performed to demonstrate the capabilities for providing initial notification to the offsite authorities after a simulated emergency classification.	2.1 The state of Florida and the counties of Miami-Dade, and Monroe received notification within 15 minutes after the declaration of an emergency in the main control room and the EOF.

Table 3.8-1 (Sheet 2 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
2.0 Notification Methods and Procedures (cont.)			
	2.2 The means exists to notify emergency response personnel. [E.2]	2.2 A test of the primary and backup emergency response organization (ERO) notification systems will be performed.	2.2 A test of the primary and back-up ERO notification systems results in: ERO personnel received the notification message; Mobilization communication was validated by personnel response to the notification system or by telephone; Response to electronic notification and plant page system was demonstrated during normal working hours, and off hours.
	2.3 The means exists to notify and provide instructions to the populace within the plume exposure emergency planning zone (EPZ). [E.6]	2.3 A full test of the alert and notification system and emergency alert system capabilities will be conducted.	2.3 Notification and clear instructions to the public are accomplished in accordance with the emergency plan requirements.
3.0 Emergency Communications			
10 CFR 50.47(b)(6) — Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	3.1 The means exists for communications between the main control room, TSC, EOF, principal state and local emergency operations centers (EOCs), and field monitoring teams. [F.1.d]	3.1 A test will be performed of the capabilities. The test for the contact with the principal EOCs and the field monitoring teams will be from the main control room and the EOF. The TSC communication with the main control room and the EOF will be performed.	3.1 Communications (both primary and secondary methods/systems) are established among the main control room and the EOF with the state of Florida Division of Emergency Management warning point and EOC, Miami-Dade County warning point and EOC, and Monroe County warning point and EOC. Communications are established between the main control room and the EOF with the PTN field monitoring teams.

Table 3.8-1 (Sheet 3 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
3.0 Emergency Communications (cont.)			
	3.2 The means exists for communications from the main control room, TSC and EOF to the NRC headquarters and regional office EOCs (including establishment of the emergency response data system or its successor system between the onsite computer system and the NRC operations center.) [F.1.f]	3.2 A test is performed of the capabilities to communicate using the emergency notification system from the main control room, TSC and EOF to the NRC headquarters and regional office EOCs. The health physics network is tested to ensure communications between the TSC and EOF with the NRC operations center. The emergency response data system is established, or its successor system, between the onsite computer systems and the NRC operations center.	3.2 Communications are established from the main control room, TSC and EOF to the NRC headquarters and regional office EOCs using the emergency notification system. The TSC and EOF demonstrated communications with the NRC operations center using the health physics network. The access port for emergency response data system, or its successor system, is provided and successfully completes a transfer of data from the unit to the NRC operations center.
4.0 Public Education and Information			
10 CFR 50.47(b)(7) — Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.	4.1 The licensee has provided space that may be used for a limited number of the news media. [G.3.b]	4.1 An inspection of the facility/area provided for the news media will be performed in the emergency news center. The space provides adequate equipment to support the emergency news center operation, including communications with the site and with the EOCs in the state and counties as well as a limited number of news media.	4.1 The emergency news center includes equipment to support the emergency news center operations, including communications with the EOF and state and county EOCs. Designated space is available for news media briefings.
5.0 Emergency Facilities and Equipment			
10 CFR 50.47(b)(8) — Adequate emergency facilities and equipment to support the emergency response are provided and maintained.	5.1 The licensee has established a TSC and onsite operations support center (OSC).	5.1 An inspection of the TSC and OSC will be performed, including a test of their capabilities.	5.1.1 The TSC has at least 3000 square feet of floor space consistent with NUREG-0696 (75 square feet/ person) and is large enough for required systems, equipment, records and storage.

Table 3.8-1 (Sheet 4 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
5.0 Emergency Facilities and Equipment (cont.)			
			5.1.2 The TSC is located outside the Protected Area, and procedures are in place to enhance passage through security checkpoints expeditiously.
			5.1.3 Communications equipment is installed and voice transmission and reception are accomplished between the main control room, the OSC, and EOF.
			5.1.4 The TSC ventilation system includes a high-efficiency particulate air (HEPA), and charcoal filter and radiation monitors are installed. Controls and displays exist in the TSC to control and monitor the status of the TSC ventilation system including heating and cooling, and the activation of the HEPA and charcoal filter system upon detection of high radiation in the TSC.
			5.1.5 The TSC has the means to receive, store, process, and display plant and environmental information, as listed in DCD Table 7.5-1 and FSAR Table 7.5-201, and to initiate emergency measures and conduct emergency assessment.
			5.1.6 A reliable and back-up electrical power supply is available for the TSC.
			5.1.7 There is an OSC located inside the Protected Area. It is separate from the main control room.
			5.1.8 Communications equipment is installed, and voice transmission and reception are accomplished between the OSC and OSC teams, the TSC and the main control room.

Table 3.8-1 (Sheet 5 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
5.0 Emergency Facilities and Equipment (cont.)			
	5.2 The licensee has established an EOF. [H.2]	5.2 An inspection of the EOF will be performed, including a test of the capabilities.	5.2.1 The EOF working space size is a minimum of 5625 square feet consistent with NUREG-0696 (75 square feet/person) and is large enough for required systems, equipment, records, and storage.
			5.2.2 Communications equipment is installed, and voice transmission and reception are accomplished between the main control room, TSC, EOF, field monitoring teams, NRC, state and county agencies, and emergency news center.
			5.2.3 Radiological data identified in each Plan Annex, meteorological data, and plant system data pertinent to determining offsite protective measures as listed in DCD Table 7.5-1 and FSAR Table 7.5-201 are available and displayed in the EOF, when activated.
6.0 Accident Assessment			
10 CFR 50.47(b)(9) — Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.	6.1 The means exist to provide initial and continuing radiological assessment throughout the course of an accident. [I.2]	6.1 A test will be performed to demonstrate that the means exist to provide initial and continuing radiological assessment throughout the course of an accident through the plant computer or communications with the main control room, TSC, and EOF during the course of drills and/or exercises.	6.1 The means are available to provide initial and continuing radiological assessment through displays of instrumentation indicators in the main control room, TSC and EOF during the course of drills and/or exercises.

Table 3.8-1 (Sheet 6 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
6.0 Accident Assessment (cont.)			
	6.2 The means exist to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors. [I.3]	6.2 A test will be performed to demonstrate that the means exist to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors.	6.2 Emergency Plan implementing procedures, through use in training and drills, provide direction to accurately calculate the source terms and the magnitude of the release of postulated accident scenario releases.
	6.3 The means exist to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions. [I.4]	6.3 A test will be performed to provide evidence that the impact of a radiological release to the environment is able to be assessed by using the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions.	6.3 Demonstrate that the means exist to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions under drill conditions.
	6.4 The means exist to acquire and evaluate meteorological information. [I.5]	6.4 A test will be performed to acquire and evaluate meteorological data/ information.	6.4 Meteorological data exists at the EOF, TSC, main control room, offsite NRC operations center, and the state of Florida, and that this data is in the format needed for the appropriate emergency plan implementing procedures.
	6.5 The means exist to determine the release rate and projected doses if the instrumentation used for assessment is off-scale or inoperable. [I.6]	6.5 A test will be performed of the capabilities to determine the release rate and projected doses if the instrumentation used for assessment is off-scale or inoperable.	6.5 The release rate and projected doses can be determined with off-scale or inoperable instrumentation during training or a drill.
	6.6 The means exist for field monitoring within the plume exposure EPZ. [I.7]	6.6 A test will be performed of the capabilities for field monitoring within the plume exposure EPZ.	6.6 The field monitoring teams were dispatched and demonstrated ability to locate and monitor a radiological release within the plume exposure EPZ.

Table 3.8-1 (Sheet 7 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
6.0 Accident Assessment (cont.)			
	6.7 The means exist to make rapid assessments of actual or potential magnitude and locations of radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times. [I.8]	6.7 A test will be performed of the capabilities to make rapid assessments of actual or potential magnitude and locations of radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times.	6.7 The field monitoring teams were activated. They demonstrated an ability to make rapid assessment of actual or potential magnitude and locations of any radiological hazards through simulated liquid or gaseous release pathways. A qualified field monitoring team was notified, activated, briefed, and dispatched from the EOF during a radiological release scenario. The team demonstrated the procedural guidance in team composition, use of monitoring equipment, communication from the field, and locating specific sampling locations.
	6.8 The capability exists to detect and measure radioiodine concentrations in air in the plume exposure EPZ, as low as 10^{-7} µCi/cc (microcuries per cubic centimeter) under field conditions. [I.9]	6.8 A test will be performed of the capabilities to detect and measure radioiodine concentrations in air in the plume exposure EPZ, as low as 10^{-7} µCi/cc under field conditions.	6.8 A field monitoring team was dispatched during a radiological release scenario and demonstrated the use of sampling and detection equipment for air concentrations in the plume exposure EPZ, as low as 10^{-7} µCi/cc.
	6.9 The means exist to estimate integrated dose from the projected and actual dose rates, and for comparing these estimates with the EPA protective action guides. [I.10]	6.9 A test will be performed of the capabilities to estimate integrated dose from the projected and actual dose rates, and for comparing these estimates with the EPA protective action guides.	6.9 The means are available to estimate integrated dose from the dose assessment program and the field monitoring team reading during a radioactive release scenario. The results were compared with the EPA protective action guides.

Table 3.8-1 (Sheet 8 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
7.0 Protective Response			
10 CFR 50.47(b)(10) – A range of protective actions has been developed for the plume exposure EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions during an emergency, consistent with federal guidance, are developed and in place, and protective actions for the ingestion exposure EPZ appropriate to the locale have been developed.	7.1 The means exist to warn and advise onsite individuals of an emergency, including those in areas controlled by the operator, including: [J.1] 1. Employees not having emergency assignments 2. Visitors 3. Contractor and construction personnel 4. Other people who may be in the public access areas, on or passing through the site, or within the owner-controlled area.	7.1 A test will be performed of the capabilities to warn and advise onsite individuals of an emergency, including those in the owner-controlled area, and the immediate vicinity.	7.1 Means exist to successfully warn and advise onsite individuals including: 1. Non-essential employees 2. Visitors 3. Contractor and construction personnel 4. Other personnel within the owner-controlled area, and the immediate vicinity.
8.0 Exercises and Drills			
10 CFR 50.47(b)(14) – Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.	8.1 Licensee conducts a full participation exercise to evaluate major portions of emergency response capabilities, which includes participation by the state and local agency within the plume exposure EPZ, and the state within the ingestion control EPZ. [N.1]	8.1 A full participation exercise (test) will be conducted within the specified time periods of Appendix E to 10 CFR Part 50.	8.1.1 The exercise is completed within the specified time periods of 10 CFR Part 50, Appendix E; onsite exercise objectives listed below have been met, and there are no uncorrected onsite exercise deficiencies.

Table 3.8-1 (Sheet 9 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			A. Accident Assessment and Classification 1. Demonstrate the ability to identify initiating conditions, determine emergency action level (EAL) parameters, and correctly classify the emergency throughout the exercise. Standard Criteria: a. Determine the correct highest emergency classification level based on events which were in progress, considering past events and their impact on the current conditions, within 15 minutes from the time the initiating condition(s) or EAL is identified
			B. Notifications 1. Demonstrate the ability to alert, notify and mobilize site emergency response personnel. Standard Criteria: a. Complete the designated checklist and perform the announcement concerning the initial event classification of Alert or higher. b. Activate the emergency recall system within 5 minutes of the initial event classification for an Alert or higher.

Table 3.8-1 (Sheet 10 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			B. Notifications (cont.) 2. Demonstrate the ability to notify responsible state, and local government agencies within 15 minutes and the NRC within 60 minutes after declaring an emergency. Standard Criteria: a. Transmit information using the designated checklist in accordance with approved Emergency Plan Implementing Procedures (EPIPs) within 15 minutes of event classification. b. Transmit information using the designated checklist in accordance with approved EPIPs within 60 minutes of last transmittal for a follow-up notification to state and local authorities. c. Transmit information using designated checklist within 60 minutes of event classification for an initial notification of the NRC. 3. Demonstrate the ability to warn or advise onsite individuals of emergency conditions. Standard Criteria:

Table 3.8-1 (Sheet 11 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			B. Notifications (cont.) a. Initiate notification of onsite individuals (via plant page or telephone) using designated checklist. 4. Demonstrate the capability of the Alert and Notification System (ANS) for the public, to operate properly when required. Standard Criteria: a. ≥94% of the sirens operate properly as indicated by the siren feedback system.
			C. Emergency Response 1. Demonstrate the capability to direct and control emergency operations. Standard Criteria: a. Command and control is demonstrated in the main control room in the early phase of the emergency and by the TSC within 60 minutes from notification of an Alert or higher event classification with at least minimum staffing. 2. Demonstrate the ability to transfer emergency direction from the main control room (simulator) to the TSC.

Table 3.8-1 (Sheet 12 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			C. Emergency Response (cont.) Standard Criteria: a. Evaluation of briefings that were conducted prior to turnover responsibility. Personnel document transfer of duties. 3. Demonstrate the ability to prepare for 24-hour staffing requirements. Standard Criteria: a. Complete 24-hour staff assignments. 4. Demonstrate the ability to perform assembly and accountability for all personnel in the Protected Area (PA) within 30 minutes of an emergency requiring Protected Area assembly and accountability. Standard Criteria: a. Protected Area (PA) personnel assembly and accountability completed within 30 minutes of an emergency requiring PA assembly and accountability.

Table 3.8-1 (Sheet 13 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			D. Emergency Response Facilities 1. Demonstrate activation of the Operations Support Center (OSC) and the TSC and EOF within 60 minutes of event classification with at least minimum staffing. Standard Criteria: a. The TSC and OSC are activated within 60 minutes from notification of an Alert or higher event classification with at least minimum staffing. b. The EOF is activated within 60 minutes from notification of a Site Area Emergency or higher event classification with at least minimum staffing. 2. Demonstrate the adequacy of equipment, security provisions, and habitability precautions for the TSC, OSC, EOF and Emergency News Center (ENC), as appropriate. Standard Criteria: a. Evaluation of the adequacy of the emergency equipment in the emergency response facilities including availability and general consistency with the Emergency Plan Implementing Procedures (EPIPs). b. The Security Manager implements and follows applicable EPIPs.

Table 3.8-1 (Sheet 14 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			D. Emergency Response Facilities (cont.) c. The Radiation Protection Manager (TSC) implements the designated checklist if an onsite/offsite release has occurred. d. Demonstrate the capability of TSC and EOF equipment and data displays to clearly identify and reflect the affected unit. 3. Demonstrate the adequacy of communications for all emergency support resources. Standard Criteria: a. Emergency response communications listed in the EPIPs are available and operational. b. Communications systems are tested in accordance with the TSC, OSC, EOF and ENC activation checklists. c. Emergency response facility personnel are able to operate all specified communications systems. d. Clear primary and backup communications links are established and maintained for the duration of the exercise.

Table 3.8-1 (Sheet 15 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			E. Radiological Assessment and Control 1. Demonstrate the ability to obtain onsite radiological surveys and samples. Standard Criteria: a. RP Technicians demonstrate the ability to obtain appropriate instruments (range and type) and perform surveys. b. Airborne samples are taken when the conditions indicate the need for the information. 2. Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers. Standard Criteria: a. Emergency workers are issued self-reading dosimeters when radiation levels require, and exposures are controlled to 10 CFR Part 20 limits (unless the Emergency Coordinator authorizes emergency limits for onsite ERO personnel and the Emergency Offsite Manager authorizes emergency exposures for offsite ERO personnel). b. Exposure records are available either from the Site database or a hard copy dose report.

Table 3.8-1 (Sheet 16 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			E. Radiological Assessment and Control (cont.) c. Emergency workers include Security and personnel within all emergency facilities. 3. Demonstrate the ability to assemble and dispatch Field Monitoring Teams within 60 minutes from the decision to do so. Standard Criteria: a. One Field Monitoring Team is ready to be deployed within 60 minutes of being requested and no later than 90 minutes from the declaration of an Alert or higher. 4. Demonstrate the ability to satisfactorily collect and disseminate field team data. Standard Criteria: a. Field team data to be collected is dose rate or counts per minute (cpm) from the plume, both open and closed window, and air sample (gross/net cpm) for particulate and iodine, if applicable.

Table 3.8-1 (Sheet 17 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			E. Radiological Assessment and Control (cont.) b. Radiological data is satisfactorily disseminated from the Field Team to the Dose Assessment Coordinator. 5. Demonstrate the ability to develop dose projections. Standard Criteria: a. The on-shift Chemistry Technician performs timely and accurate dose projections, in accordance with the EPIPs. 6. Demonstrate the ability to develop appropriate Protective Action Recommendations (PARs), and notify appropriate authorities within 15 minutes of a General Emergency declaration or changes in parameters that affect the previously issued PARs. Standard Criteria: a. Total Effective Dose Equivalent (TEDE) and Committed Dose Equivalent (CDE) dose projections from the dose assessment computer code or a backup method are established in accordance with the EPIPs.

Table 3.8-1 (Sheet 18 of 18)
Emergency Plan Inspections, Tests, Analyses, and Acceptance Criteria

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills (cont.)			
			E. Radiological Assessment and Control (cont.) b. PARs are developed within 15 minutes of data availability. c. PARs are transmitted via voice, fax, or electronically within 15 minutes as required by the EPIPs.
			8.1.2 Onsite emergency response personnel were mobilized in sufficient numbers to fill emergency response positions identified in the Radiological Emergency Plan, Part 2, Section B, Emergency Response Organization, and they successfully performed their assigned responsibilities.
			8.1.3 The exercise was completed within the specified time periods of Appendix E to 10 CFR Part 50, offsite exercise objectives were met, and there were no uncorrected offsite exercise deficiencies, or a license condition requires offsite deficiencies to be corrected prior to operation above 5% of rated power.
9.0 Implementing Procedures			
10 CFR Part 50, App. E.V — No less than 180 days prior to the scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material, the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Commission.	9.1 The licensee has submitted detailed implementing procedures for its emergency plan no less than 180 days before fuel load.	9.1 Confirm that the submittal letter was submitted on time.	9.1 The date of the submittal letter from the licensee demonstrates that the detailed Emergency Plan Implementing Procedures (EPIPs) for the onsite emergency plan were submitted no less than 180 days prior to fuel load.

Table 3.8-2 (Sheet 1 of 1)
Pipe Rupture Hazards Analysis

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Systems, structures, and components (SSCs), that are required to be functional during and following a design basis event shall be protected against or qualified to withstand the dynamic and environmental effects associated with analyses of postulated failures in high and moderate energy piping.	Inspection of the as-designed pipe rupture hazard analysis report will be conducted. The report documents the analyses to determine where protection features are necessary to mitigate the consequence of a pipe break. Pipe break events involving high-energy fluid systems are analyzed for the effects of pipe whip, jet impingement, flooding, room pressurization, and temperature effects. Pipe break events involving moderate-energy fluid systems are analyzed for wetting from spray, flooding, and other environmental effects, as appropriate.	An as-designed pipe rupture hazard analysis report exists and concludes that the analysis performed for high and moderate energy piping confirms the protection of systems, structures, and components required to be functional during and following a design basis event.

Table 3.8-3 (Sheet 1 of 1)
Piping Design

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The ASME Code Section III piping is designed in accordance with ASME Code Section III requirements.	Inspection of ASME Code Design Reports (NCA-3550) and required documents will be conducted for the set of lines chosen to demonstrate compliance.	ASME Code Design Report(s) (NCA-3550) (certified, when required by ASME Code) exist and conclude that the design of the piping for lines chosen to demonstrate all aspects of the piping design complies with the requirements of ASME Code Section III.

Table 3.8-4 (Sheet 1 of 1)
Waterproof Membrane

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
The friction coefficient to resist sliding is $\geq$ 0.55.	Testing will be performed to confirm that the mudmat-waterproofing-mudmat interface beneath the Nuclear Island basemat has a coefficient of friction to resist sliding of $\geq$ 0.55.	A report exists and documents that the as-built waterproof system (mudmat-waterproofing-mudmat interface) has a coefficient of friction of $\geq$ 0.55 as demonstrated through material qualification testing.

Table 3.8-5 (Sheet 1 of 1)
Concrete Fill

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. First lift of concrete fill placed under the nuclear island basemat, containment building, shield building, and auxiliary building meets durability requirements of ACI 201.2R-08, Table 6.3 for Class 2 sulfate exposure.	Delivery tickets will be prepared according to ACI 311.5 and inspected to ensure that the first lift of concrete fill (minimum thickness of 2.5 feet) meets durability requirements of ACI 201.2R-08, Table 6.3 for Class 2 sulfate exposure.	The first lift of concrete fill (minimum thickness of 2.5 feet) meets durability requirements of ACI 201.2R-08, Table 6.3 for Class 2 sulfate exposure.
2. Concrete fill placed under the nuclear island basemat, containment building, shield building, and auxiliary building is designed, constructed, and tested as specified in ACI 207.1R-05.	(a) Testing will be performed in accordance with ACI 311.5 to determine the mean compressive strength of the concrete fill. (b) Inspection will be performed to ensure that methods used to control thermal cracking are in accordance with ACI 207.1R-05.	(a) The mean 28-day compressive strength of the concrete fill is equal to or greater than 1500 psi. (b) Methods used to control thermal cracking are in accordance with ACI 207.1R-05.

Table 3.8-6 (Sheet 1 of 2)
Seismic Category I Structure Foundation Grouting (1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
Inside the region defined by the diaphragm walls, drilling and pressure grouting is performed. The grout closure criteria, when used in conjunction with the specified grout borehole spacing: • Will result in any remaining voids between El. –35 ± 2 feet and El. –60 ± 2 feet (the Grouted Zone) being structurally insignificant, which is accomplished through drilling and pressure grouting of primary and secondary grout boreholes, and, if necessary, as indicated by site data, tertiary and quaternary grout boreholes; and • Will result in any remaining voids between El. –60 ± 2 feet and El. –110 ± 2 feet (the Extended Grouted Zone) having a maximum equivalent spherical diameter of equal to or less than 20 feet, which is accomplished through drilling and pressure grouting of primary grout boreholes and, if necessary, as indicated by site data, secondary grout boreholes.	i) Testing and analysis will be performed through a grout test program to define grout closure criteria for both the Grouted Zone and Extended Grouted Zone, as follows: • For both the Grouted Zone and Extended Grouted Zone, the grout test program will identify and define grout closure criteria for grout consistency to ensure the grout flows into and fills potential voids in the vicinity of each grout borehole, and • For the Grouted Zone, the grout test program will identify and define grout closure criteria for identifying when each grout borehole has been filled and pressurized with grout and filling may cease or tertiary or quaternary grout boreholes are necessary, and • For the Extended Grouted Zone, the grout test program will identify and define grout closure criteria for identifying when each grout borehole has been filled and pressurized with grout and filling may cease or secondary grout boreholes are necessary.	i) The grout closure criteria, when used in conjunction with the specified borehole spacing, will ensure that any voids remaining in the Grouted Zone are structurally insignificant and ensure that any voids remaining in the Extended Grouted Zone are equal to or less than 20 feet.

Table 3.8-6 (Sheet 2 of 2)
Seismic Category I Structure Foundation Grouting (1)

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
	ii) Inspections and analysis will be performed of the as-built locations, depth and spacing of all grout boreholes, both with respect to the Grouted Zone and the Extended Grouted Zone, and the grout data associated with each grout borehole and zone.	ii) Grout closure criteria as established in the grout test program are met inside the region defined by the diaphragm walls and the grout boreholes meet the following requirements: • For the Grouted and Extended Grouted Zones, primary grout boreholes are drilled throughout the entire interior region defined by the diaphragm walls and with spacing of less than or equal to 20 feet on center at the ground surface, • For the Grouted Zone, secondary grout boreholes are drilled throughout the entire interior region defined by the diaphragm walls and are offset from primary grout boreholes such that a secondary grout borehole is at the center of the square formed by four adjacent primary grout boreholes at the ground surface, and • Each additional grout borehole (tertiary or quaternary) drilled to meet grout closure criteria for the Grouted Zone is located based on a documented engineering evaluation consistent with the grout closure criteria • Each additional grout borehole (secondary) drilled to meet grout closure criteria for the Extended Grouted Zone is located based on a documented engineering evaluation consistent with the grout closure criteria.

Note:
(1) All elevations are presented in the North American Vertical Datum of 1988 (NAVD88).