

- (4) FPL Energy Seabrook, LLC, pursuant to the Act and 10 CFR 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) FPL Energy Seabrook, LLC, pursuant to the Act and 10 CFR 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) FPL Energy Seabrook, LLC, pursuant to the Act and 10 CFR 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein; and
- (7) DELETED

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

FPL Energy Seabrook, LLC, is authorized to operate the facility at reactor core power levels not in excess of 3648 megawatts thermal (100% of rated power).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 119*, and the Environmental Protection Plan contained in Appendix B are incorporated into the Facility License No. NPF-86. FPL Energy Seabrook, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) License Transfer to FPL Energy Seabrook, LLC

- a. On the closing date(s) of the transfer of any ownership interests in Seabrook Station covered by the Order approving the transfer, FPL Energy Seabrook, LLC, shall obtain from each respective transferring owner all of the accumulated decommissioning trust funds for the facility, and ensure the deposit of such funds and additional funds, if necessary, into a decommissioning trust or trusts for Seabrook Station established by FPL Energy Seabrook, LLC, such that the amount of such funds deposited meets or exceeds the amount required under 10 CFR 50.75 with respect to the interest in Seabrook Station FPL Energy Seabrook, LLC, acquires on such dates(s).

J. Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 119, are hereby incorporated into this license. FPL Energy Seabrook, LLC, shall operate the facility in accordance with the Additional Conditions.

K. Inadvertent Actuation of the Emergency Core Cooling System (ECCS)

Prior to startup from refueling outage 11, FPL Energy Seabrook commits to either upgrade the controls for the pressurizer power operated relief valves (PORV) to safety-grade status and confirm the safety-grade status and water-qualified capability of the PORVs, PORV block valves and associated piping or to provide a reanalysis of the inadvertent safety injection event, using NRC approved methodologies, that concludes that the pressurizer does not become water solid within the minimum allowable time for operators to terminate the event.

3. This license is effective as of the date of issuance and shall expire at midnight on March 15, 2030.

FOR THE NUCLEAR REGULATORY COMMISSION

(Original signed by:
Thomas E. Murley)

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Attachments/Appendices:

1. Appendix A - Technical Specifications (NUREG-1386)
2. Appendix B - Environmental Protection Plan
3. Appendix C - Additional Conditions

Date of Issuance: March 15, 1990

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM SUBSYSTEM

EMERGENCY MAKEUP AIR AND FILTRATION

LIMITING CONDITION FOR OPERATION

3.7.6.1 Two independent Control Room Emergency Makeup Air and Filtration System (CREMAFS) trains shall be OPERABLE.

-----NOTE-----

The control room envelope (CRE) boundary may be opened intermittently under administrative control.

APPLICABILITY: All MODES

During movement of irradiated fuel assemblies

ACTION:

In MODE 1, 2, 3 or 4:

- a. With one CREMAFS train inoperable for reasons other than an inoperable CRE boundary, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one or both CREMAFS trains inoperable due to an inoperable CRE boundary:
 1. Immediately initiate action to implement mitigating actions or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and
 2. Within 24 hours, verify mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and
 3. Within 90 days, restore CRE boundary to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With two CREMAFS trains inoperable for reasons other than an inoperable CRE boundary, immediately enter Technical Specification 3.0.3.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM SUBSYSTEMS

EMERGENCY MAKEUP AIR AND FILTRATION

LIMITING CONDITION FOR OPERATION (Continued)

In MODE 5 or 6, or during movement of irradiated fuel assemblies:

- d. With one CREMAFS train inoperable for reasons other than an inoperable CRE boundary, restore the inoperable system to OPERABLE status within 7 days or either immediately initiate and maintain operation of the remaining OPERABLE CREMAFS train in the filtration/recirculation mode or immediately suspend movement of irradiated fuel assemblies.
- e. With both CREMAFS trains inoperable, or with the OPERABLE CREMAFS train, required to be in the filtration/recirculation mode by ACTION d., not capable of being powered by an OPERABLE emergency power source, immediately suspend all movement of irradiated fuel assemblies.
- f. With one or both CREMAFS trains inoperable due to an inoperable CRE boundary, immediately suspend movement of irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.6.1 Each CREMAFS train shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters operating;

PLANT SYSTEMS

CONTROL ROOM SUBSYSTEMS

EMERGENCY MAKEUP AIR AND FILTRATION

SURVEILLANCE REQUIREMENTS (Continued)

- 2) Verifying that upon generation of an 'S' test signal, the following automatic system functions occur:
 - a. The normal makeup air fan(s) trip off and the normal makeup air isolation damper(s) close;
 - b. The control room exhaust subsystem isolation damper(s) close, and the exhaust fan trips off;
 - c. The control room emergency makeup air and filtration subsystem actuates with flows through the HEPA filters and charcoal adsorber banks;

 - 3) Verifying that upon generation of Remote Intake High Radiation test signal, the following automatic system functions occur:
 - a. The normal makeup air fan(s) trip off and the normal makeup air isolation damper(s) close;
 - b. The control room exhaust subsystem isolation damper(s) close, and the exhaust fan trips off;
 - c. The control room emergency makeup air and filtration subsystem actuates with flows through the HEPA filters and charcoal adsorber banks;

 - 4) Verifying that the heaters dissipate at least 3.24 kW (based on design rated voltage of 460V) when tested in accordance with ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank, by verifying that the filtration system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than .05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 1100 cfm \pm 10%; and
 - f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the filtration system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than .05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1100 cfm \pm 10%.
 - g. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS

6.7.6 (Continued)

3. If crack indications are found in any SG tube, then the next inspection for each SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever is less). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.

- e. Provisions for monitoring operational primary to secondary leakage.

I. Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Makeup Air and Filtration System (CREMAFS), CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent (TEDE) for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air in-leakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS

6.7.6 (Continued)

- d. Measurement, at designated locations, of the CRE pressure relative to all external areas adjacent to the CRE boundary during the pressurization mode of operation by one train of the CREMAFS, operating at a flow rate of less than or equal to 600 CFM at a Frequency of 18 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the 18 month assessment of the CRE boundary.
- e. The quantitative limits on unfiltered air in-leakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air in-leakage measured by the testing described in paragraph c. The unfiltered air in-leakage limit for radiological challenges is the in-leakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air inleakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.
- f. The provisions of SR 4.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered in-leakage, and measuring CRE pressure and assessing the CRE boundary as required by paragraphs c and d, respectively.

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS

6.8 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.8.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORT

6.8.1.1 A summary report of station startup and power escalation testing shall be submitted following: (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the station.

The Startup Report shall address each of the tests identified in the Final Safety Analysis Report and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup Reports shall be submitted within: (1) 90 days following completion of the Startup Test Program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

APPENDIX C

ADDITIONAL CONDITIONS
OPERATING LICENSE NO. NPF-86

FPL Energy Seabrook, LLC, shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
50	NAESCO is authorized to relocate certain technical specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated October 17, 1996, and evaluated in the staff's Safety Evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 12, 1997
112	FPLE Seabrook, LLC shall maintain the operational limit of primary-to-secondary leakage at 150 gallons per day per Steam Generator and if this limit is exceeded, FPLE Seabrook, LLC will take the appropriate actions in accordance with TS 3.4.6.2, "Reactor Coolant System Leakage."	This amendment shall be implemented within 90 days from September 29, 2006
119	<p>Upon implementation of Amendment No. 119 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by SR 4.7.6.1.g, in accordance with TS 6.7.6.l.c. (i), the assessment of CRE habitability as required by Specification 6.7.6.l.c. (ii), and the measurement of CRE pressure as required by Specification 6.7.6.l.d, shall be considered met. Following implementation:</p> <p>(a) The first performance of SR 4.7.6.1.g, in accordance with Specification 6.7.6.l.c. (i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 4.0.2, as measured from August 2003, the date of the most recent successful tracer gas test, as stated in the December 9, 2003 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.</p>	This amendment shall be implemented within 6 months from July 30, 2008

Amendment Number	Additional Condition	Implementation Date
	<p>(continued)</p> <p>(b) The first performance of the periodic assessment of CRE habitability, Specification 6.7.6.l.c. (ii), shall be within 3 years, plus the 9-month allowance of SR 4.0.2, as measured from August 2003, the date of the most recent successful tracer gas test, as stated in the December 9, 2003 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.</p> <p>(c) The first performance of the periodic measurement of CRE pressure, Specification 6.7.6.l.d, shall be within 18 months, plus the 138 days allowed by SR 4.0.2, as measured from August 2003, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.</p>	