

J. Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 94, are hereby incorporated into this license. FPL Energy Seabrook, LLC, shall operate the facility in accordance with the Additional Conditions. I

3. This License is effective as of the date of issuance and shall expire at midnight on October 17, 2026.

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

## REFUELING OPERATIONS

### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

#### LIMITING CONDITION FOR OPERATION

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- 3.9.4 The containment building penetrations shall be in the following status:
- a. The equipment door closed and held in place by a minimum of four bolts,
  - b. A minimum of one door in each airlock is closed, however both doors of one personnel airlock may be open if:
    - 1) One personnel airlock door is capable of being closed, and
    - 2) A designated individual is available outside the personnel airlock to close the door.
  - c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
    - 1) Closed by a manual or automatic isolation valve, blind flange, or equivalent; or
    - 2) Be capable of being closed by an OPERABLE automatic Containment Purge and Exhaust Isolation System; or
    - 3) Be capable of being closed by a designated individual available at the penetration.\*

APPLICABILITY: During movement of recently irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving movement of recently irradiated fuel in the containment building.

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\* A designated individual shall not be used for manual isolation of valves CAP-V1, CAP-V2, CAP-V3, and/or CAP-V4.

## **3/4.9 REFUELING OPERATIONS**

### **BASES**

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#### **3/4.9.2 INSTRUMENTATION**

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

#### **3/4.9.3 DECAY TIME**

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short-lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

#### **3/4.9.4 CONTAINMENT BUILDING PENETRATIONS**

The Limiting Condition for Operation (LCO) limits the consequences of a fuel handling accident in containment by limiting the potential escape paths for fission product radioactivity released within containment. The LCO requires any penetration providing direct access from the containment atmosphere to the outside atmosphere to be closed except for the OPERABLE containment purge and exhaust penetrations, the approved alternate closure methods and the containment personnel airlock.

For the approved alternate closure methods, the LCO requires that a designated individual must be available to close or direct the remote closure of the penetration in the event of a fuel handling accident. "Available" means stationed at the penetration or performing activities controlled by a procedure on equipment associated with the penetration. The inside containment fuel handling accident analysis provides assurance that manual isolation of penetration valves up to a 12-inch diameter size, within the assumed time, can be attained with the use of a designated individual. With respect to the 36-inch diameter CAP valves, a designated individual is not allowed since manual closure would most likely exceed the assumed closure time.

For the personnel airlocks (containment or equipment hatch), the LCO ensures that the airlock can be closed after containment evacuation in the event of a fuel handling accident. The requirement that the airlock door is capable of being closed requires that the door can be closed and is not blocked by objects that cannot be easily and quickly removed. As an example, the use of removable protective covers for the door seals and sealing surfaces is permitted. The requirement for a designated individual located outside of the airlock area available to close the door following evacuation of the containment will minimize the release of radioactive material.

The fuel handling accident analysis inside containment assumes all of the available activity is assumed to be released instantaneously from the containment to the atmosphere.

The OPERABILITY of the Containment Purge and Exhaust Isolation System ensures that the containment vent and purge penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

**BASES**

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**"As described in the fuel handling analysis, there will be no pressurization of containment. Therefore, the requirements to isolate the containment from the outside atmosphere can be less stringent. The LCO requirements during movement of recently irradiated fuel assemblies within the containment are referred to as "containment closure" rather than containment OPERABILITY. The term "recently irradiated" fuel assemblies is defined as fuel that has occupied part of a critical reactor core within the previous 80 hours. For the containment to be OPERABLE, CONTAINMENT INTEGRITY must be maintained. Containment closure means that all potential release paths are closed or capable of being closed. Closure restrictions must be sufficient to provide a barrier to restrict radioactive material released from a fuel element rupture during refueling operations.**

**During the movement of non-recently irradiated fuel assemblies within the containment, there are no specific requirements for containment building penetration closure and OPERABILITY to ensure that a release of fission product radioactivity within containment will be restricted from leaking to the environment. However, it is necessary to maintain the ability to isolate containment penetrations to meet the applicable action statement requirements of TS 3.9.8.1 and 3.9.8.2 in the event that no OPERABLE RHR loops are in operation. During the movement of non-recently irradiated fuel assemblies, the containment outage door may be installed as an alternative to installing the containment equipment hatch with a minimum of four bolts provided:**

- 1. the reactor vessel upper internals have been removed; and**
- 2. the water level above the top of the reactor vessel flange is greater than or equal to 23 feet.**

**The containment outage door will be designed to ensure a release of fission product radioactivity within containment will be restricted from leaking to the environment due to a fuel handling accident during refueling operations. When the containment outage door is installed and being used for containment closure in lieu of the equipment hatch, the following additional administrative requirements must be met:**

- 1. The containment outage door will be installed and capable of being closed within 1 hour.**
- 2. Hoses and cables being run through the containment outage door will employ a means to allow safe, quick disconnection or severance.**
- 3. A designated individual is available and in direct communication with the control room with the responsibility for the expeditious closure (within 1 hour) of the containment outage door in the event of a fuel handling accident."**