

**Levy Nuclear Plant Units 1 and 2  
COL Application  
Part 10, License Conditions and ITAAC**

Facility by the LNP and Crystal River Unit 3 Emergency Response Organizations for a simulated emergency condition. Integrated communication and data capability and functionality will include the LNP and Crystal River Technical Support Center, NRC site-teams, NRC Incident Response Centers, and other Federal, State, and local coordination centers as appropriate.

- E. PEF will distribute initial LNP public information publications, developed in coordination with CR3 and consistent with the LNP Emergency Plan, to the public within 180 days prior to fuel load at LNP.

**12. FUKUSHIMA RESPONSE ACTIONS:**

The implementation of applicable Fukushima response actions not completed prior to license issuance will be the subject of the following license condition:

**PROPOSED LICENSE CONDITION:**

**A. MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS**

Prior to initial fuel load, PEF shall address the following requirements:

- a. PEF shall develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment and spent fuel pool cooling capabilities following a beyond-design-basis external event.
- b. 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 spent fuel pool cooling capabilities at all units on the LNP site.
- c. PEF must 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 spent fuel pool cooling capabilities at all units on the LNP site.
- d. PEF must be capable of implementing the strategies in all modes.
- e. Full compliance shall include procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies.

PEF shall within one (1) year after issuance of the LNP 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.

PEF shall provide to the NRC an initial status report sixty (60) days following issuance of the LNP 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**

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Prior to initial fuel load, PEF will fully implement the following requirements for spent fuel pool level indication.

a. The spent fuel pool level instrumentation shall include the following design features:

1. Arrangement: The spent fuel pool level instrument channels shall be arranged in a manner that provides reasonable protection of the level indication function against missiles that may result from damage to the structure over the spent fuel pool. This protection may be provided by locating the safety-related instruments to maintain instrument channel separation within the spent fuel pool area, and to utilize inherent shielding from missiles provided by existing recesses and corners in the spent fuel pool structure.

2. Qualification: The level instrument channels shall be reliable at temperature, humidity, and radiation levels consistent with the spent fuel pool water at saturation conditions for an extended period.

3. Power supplies: Instrumentation channels shall provide for power connections from sources independent of the plant alternating current (ac) and direct current (dc) power distribution systems, such as portable generators or replaceable batteries. Power supply designs should provide for quick and accessible connection of sources independent of the plant ac and dc power distribution systems. Onsite generators used as an alternate power source and replaceable batteries used for instrument channel power shall have sufficient capacity to maintain the level indication function until offsite resource availability is reasonably assured.

4. Accuracy: The instrument shall maintain its designed accuracy following a power interruption or change in power source without recalibration.

5. Display: The display shall provide on-demand or continuous indication of spent fuel pool water level.

b. The spent fuel pool instrumentation shall be maintained available and reliable through appropriate development and implementation of a training program. Personnel shall be trained in the use and the provision of alternate power to the safety-related level instrument channels.

PEF shall within one (1) year after issuance of the LNP 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.

PEF shall provide to the NRC an initial status report sixty (60) days following issuance of the LNP 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.

**C. EMERGENCY PLANNING ACTIONS**

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Communications:

At least two (2) years prior to scheduled initial fuel load, PEF 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", Revision 0.

At least one hundred eighty (180) days prior to scheduled initial fuel load, PEF 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.

Staffing:

At least two (2) years prior to scheduled initial fuel load, PEF shall have performed assessments of the on-site and augmented staffing capability to satisfy the regulatory requirements for response to a multi-unit event. The staffing assessments will be performed in accordance with NEI 12-01, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities", Revision 0.

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

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