

**Levy Nuclear Plant Units 1 and 2
COL Application
Part 6, Limited Work Authorization and Site Redress Plan
Applicant's Environmental Report - Limited Work Authorization Stage**

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ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
COL	Combined License
COLA	Combined License Application
ER	Environmental Report
FPSC	Florida Public Service Commission
LNP	proposed Levy Nuclear Plant Units 1 and 2
LNP ER	Levy Nuclear Plant Environmental Report (Part 3 of COLA)
LWA	Limited Work Authorization
LWA ER	Limited Work Authorization Environmental Report (Part 6 of COLA)
PEF	Florida Power Corporation doing business as Progress Energy Florida, Inc.
SCC	Safety-Related Structures, Systems, or Components

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1.0 INTRODUCTION TO THE ENVIRONMENTAL REPORT

Florida Power Corporation, doing business as Progress Energy Florida, Inc. (PEF), has prepared this Environmental Report (ER) for the proposed Levy Nuclear Plant Units 1 and 2 (LNP) to address the requirements of 10 CFR 51.49 which specifies the requirement for an ER that describes the activities and the environmental impacts associated with Limited Work Authorization (LWA) activities. These requirements are described in subpart (a) of 10 CFR 51.49, which states that Combined License (COL) applicants seeking an LWA shall submit with its application a separate document entitled "Applicant's Environmental Report – Limited Work Authorization Stage," which is in addition to the ER required by 10 CFR 51.50. The regulation states that the ER for LWA activities (referred to herein as the LWA ER) must contain the following information:

- 1) A description of the activities proposed to be conducted under the Limited Work Authorization;
- 2) A statement of the need for the activities; and
- 3) A description of the environmental impacts expected to result from the activities, the mitigation measures proposed, and reasons for rejecting mitigation measures that could further reduce impacts.

It is noted that this LWA ER is in addition to the ER that has been prepared and submitted as Part 3 of the COL Application for LNP Units 1 and 2 (referred to herein as the LNP ER). The LNP ER contains substantial and comprehensive information that pertains to the development of the entire LNP project, including its cumulative and other environmental impacts as well as PEFs proposed mitigation of those impacts. The impacts attributable to LWA related activities (all of which will occur in the very early stages of project construction) are necessarily a subset of the cumulative and other impacts described in the LNP ER. This LWA ER has been prepared to incorporate the contents of the LNP ER by reference. Table 1.0-1 summarizes the chapters of the LNP ER and indicates which of those chapters contain information that pertain to or are relevant to the proposed LWA related activities.

2.0 DESCRIPTION OF PROPOSED LWA ACTIVITIES

A description of the proposed LWA activities is provided in Chapter 4, Section 4.8, "Activities Undertaken Under a Limited Work Authorization," of the LNP ER.

3.0 NEED FOR LWA ACTIVITIES

The need for the LWA activities is based on the need for power in Florida and the importance of commencing construction on the LNP so that the facility can begin producing power to meet projected demands. Information on the need for power and the development of the plant is provided in Chapter 8, "Need for Power" of the LNP ER. PEF is requesting the LWA to facilitate the commencement of certain construction related activities in advance of the issuance of the COL for the LNP facility. The ability to proceed with the LWA related construction activities that

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are identified in Section 4.8 of the LNP ER is expected to result in an earlier completion of the project than would occur otherwise.

As described in Chapter 8.0 of the LNP ER, "Need for Power," PEF submitted its Petition for Determination of Need for the LNP with the Florida Public Service Commission (FPSC) on March 11, 2008. In support of its petition, PEF submitted a detailed Need Study. The FPSC unanimously voted to approve PEF's need for the plant, including substantial associated transmission facilities, and the FPSC agreed that the plant was the most cost-effective generating alternative. The FPSC is expected to issue its final order in July 2008.

The alternative to not receiving NRC approval for the LWA for the project (i.e., the no action alternative) would be a corresponding delay in the completion of the plant and a subsequent and corresponding delay in the generation of nuclear based power. There are no other identified alternatives to the requested LWA.

The benefits associated with the issuance of the LWA for the proposed project include meeting the stated need for power in Florida with baseload generating capacity that does not rely on fossil fuel.

4.0 ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION

The environmental impacts associated with the construction of the LNP facility are described in Chapter 4, "Environmental Impacts of Construction" of the LNP ER. Chapter 4 provides detailed and comprehensive information on the cumulative impacts of the construction of the entire LNP project. Section 4.6.2, "Adverse Environmental Impacts," provides a detailed summary of the adverse impacts attributable to construction activities, and Table 4.6-1, "Summary of Measures and Controls to Limit Adverse Impacts during Construction," summarizes the proposed mitigation measures for those impacts. Table 4.6-2, "Summary of Construction and Preconstruction Related Impacts for Safety-Related Structures, Systems, or Components (SSCs)," provides estimates of the percentage of impacts attributable to construction and preconstruction, as well as a summary of the basis for the estimates. In general, construction impacts refer to activities associated with the construction of SSCs, and as such include LWA-related activities.

Two impacts are identified as being SMALL to MODERATE, namely the impacts to terrestrial ecosystems and impacts on transportation and traffic during construction of the facility. All other impacts attributable to the construction of the proposed facility are considered to be SMALL, which indicates that the environmental effects are either not detectable or they are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource in question.

The proposed mitigation measures and controls for these two potential SMALL to MODERATE impacts are provided in Table 4.6-1 in Section 4.6.2 of the LNP ER. It is noted that the impacts summarized in Table 4.6-1 are representative of the entire LNP project. Impacts attributable to

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LWA activities are therefore necessarily bounded by these activities and LWA impacts must therefore be no greater than those indicated. The information in Table 4.6-2 provides an additional breakdown of the construction activities, which includes LWA-related activities, and preconstruction activities.

Terrestrial ecosystem impacts due to construction are considered to be zero percent of the total impacts. Since all of these impacts are considered to be "preconstruction" impacts, there are no LWA-related impacts.

Transportation and traffic-related impacts due to construction are estimated to be only 35 percent of the total impacts. Since LWA activities are a subset of construction activities, the impacts attributable to LWA activities are SMALL.

The Site Redress Plan included in Part 6 of the LNP COLA describes the mitigation measures that will be taken in the event that site activities allowed under LWA are not completed.

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**Table 1.0-1
Summary of the LNP ER and its Relationship to Proposed LWA Related Activities**

LNP ER Chapter	LNP ER Title	Relationship to LWA Related Activities
1.0	Introduction to the Environmental Report	Not directly applicable to LWA related activities.
2.0	Environmental Description	This chapter describes the existing environment that will be affected by the construction (including LWA related construction activities) and the operation of the LNP.
3.0	Plant Description	Not applicable to LWA related activities. This chapter describes the proposed LNP Facility in its as-built configuration and does not address LWA related activities.
4.0	Environmental Impacts of Construction	<p>Impacts attributable to LWA related activities are included in the cumulative and other environmental impacts described in Sections 4.1, 4.2, 4.3, 4.4, and 4.6 of this chapter.</p> <p>Section 4.6 and Table 4.6-2 include a description and estimate of the Construction and Pre-Construction related impacts that will occur during construction of LNP. All LWA related activities will be associated with Construction related impacts.</p> <p>Section 4.8, "Activities Undertaken Under a Limited Work Authorization," defines those activities for which LWA is being requested by PEF.</p>
5.0	Environmental Impacts of Station Operation	Not applicable to LWA related activities.
6.0	Environmental Measurement and Monitoring Programs	Not specifically applicable to LWA related activities.
7.0	Environmental Impacts of Postulated Accidents Involving Radioactive Materials	Not applicable to LWA related activities.
8.0	Need For Power	Not specifically applicable to LWA related activities. However, the need for the LWA activities is based on the need for power in Florida and the importance of commencing construction on the LNP so that the facility can begin producing power to meet projected demands
9.0	Alternatives to the Proposed Action	Not applicable to LWA related activities. Alternatives that are discussed in this chapter are related to site locations and power generation technologies that were considered in the alternatives analysis for the project.
10.0	Environmental Consequences of the Proposed Action	Not directly applicable to LWA related activities. The environmental consequences discussed in this chapter are related to the cumulative consequences attributable to the as-built LNP facility.