

**Levy Nuclear Plant Units 1 and 2
COL Application
Part 3, Environmental Report**

CHAPTER 1
INTRODUCTION TO THE ENVIRONMENTAL REPORT

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ACRONYMS AND ABBREVIATIONS

ac.	acre
AEA	Atomic Energy Act of 1954
AP1000	Westinghouse Electric Company, LLC, AP1000 Reactor
CFBC	Cross Florida Barge Canal
CFG	Marjorie Harris Carr Cross Florida Greenway
CFR	Code of Federal Regulations
COL	Combined License
COLA	Combined License Application
CREC	Crystal River Energy Complex
CWA	Clean Water Act
CWIS	cooling water intake structure
DCD	Westinghouse Electric Company, LLC, AP1000 Design Control Document for the certified design as amended
EAB	exclusion area boundary
EIS	Environmental Impact Statement
EP	Emergency Plan
EPZ	emergency planning zone
ER	Environmental Report
ERP	Environmental Resource Permit
F.A.C.	Florida Administrative Code
F.S.	Florida Statute
FAA	Federal Aviation Administration
FDEP	Florida Department of Environmental Protection

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ACRONYMS AND ABBREVIATIONS (CONTINUED)

FDOT	Florida Department of Transportation
FSAR	Final Safety Analysis Report
ft.	foot
ha	hectare
HVAC	heating, ventilation, and air conditioning
in.	inch
km	kilometer
km ²	square kilometer
kV	kilovolt
LNP	proposed Levy Nuclear Plant Units 1 and 2
LNP 1	proposed Levy Nuclear Plant Unit 1
LNP 2	proposed Levy Nuclear Plant Unit 2
LWA	Limited Work Authorization
m	meter
mi.	mile
mi. ²	square mile
MW	megawatt
MWe	megawatt electric
MWt	megawatt thermal
NPDES	National Pollutant Discharge Elimination System
NRC	U.S. Nuclear Regulatory Commission
NSSS	nuclear steam supply system
OFW	Outstanding Florida Water

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ACRONYMS AND ABBREVIATIONS (CONTINUED)

PEF	Florida Power Corporation doing business as Progress Energy Florida, Inc.
PPSA	Power Plant Siting Act
PSD	Prevention of Significant Deterioration
RCS	reactor coolant system
ROW	right-of-way
SCA	Site Certification Application
SG	steam generator
SPCC	spill prevention, control, and countermeasures
SWP3	Stormwater Pollution Prevention Plan
TBD	to be determined
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOJ	U.S. Department of Interior
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
Westinghouse	Westinghouse Electric Company, LLC

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DEFINITIONS

Access roads. Roads that will be constructed specifically to connect the proposed Levy Nuclear Plant Units 1 and 2 (LNP) site and appurtenant facilities with area highways.

Appurtenant facilities. The appurtenant facilities include the following site components: the pipeline corridors, transmission line corridors, site access roads and heavy haul road, barge slip, LNP rail spur, and the intake structure and pumphouse.

Blowdown pipelines. The two pipes, one per unit, which will carry blowdown from the cooling towers to the proposed discharge location at the Crystal River Energy Complex (CREC). These two pipes will follow a pipeline corridor located in Levy and Citrus counties to reach the discharge location.

Cooling water intake structure (CWIS). The CWIS will consist of the intake structure, vertical bar screens, traveling screens, pumps, and pumphouse. The LNP CWIS will be located on the north bank of the Cross Florida Barge Canal (CFBC), just downstream of the Inglis Lock.

Cross Florida Barge Canal (CFBC). An incomplete cross-Florida waterway. The westernmost portion of this waterway is the dredged canal that extends from the Inglis Lock at Lake Rousseau into the Gulf of Mexico. Originally a federal project, most CFBC lands, including those in the LNP project vicinity, have been ceded to the State of Florida and incorporated into the Marjorie Harris Carr Cross Florida Greenway (CFG) and Conservation Area.

Emergency Planning Zone (EPZ). As defined in 10 Code of Federal Regulations (CFR) 50.33, the EPZ is an area that includes the plume exposure pathway EPZ for nuclear power reactors, consisting of an area with an approximate 16-kilometer (km) (10-mile [mi.]) radius, and the ingestion pathway EPZ, consisting of an area with an approximate 80-km (50-mi.) radius.

Exclusion Area Boundary (EAB). The area surrounding a reactor, in which the reactor licensee has the authority to determine all activities, including the exclusion or removal of personnel and property from the area. The area is represented by the union of two circles, each with a radius of 1340 meters (m) (4396 feet [ft.]), centered on the reactor building of the units.

Florida Power Corporation doing business as Progress Energy Florida, Inc. (PEF). The LNP Combined License (COL) applicant and owner.

Heavy haul road. Road that will be constructed specifically to transport equipment and materials north from the termination of the barge slip access road at County Road 40 to the LNP site.

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Inglis Lock Bypass Channel. A man-made bypass channel located just north of the CFBC. When the CFBC was constructed and the original Withlacoochee River channel was bisected, the bypass channel was constructed to carry downstream flows from Lake Rousseau to the natural Withlacoochee River channel.

Lake Rousseau. A man-made lake located on the border of Levy, Citrus, and Marion counties. The lake is fed by the Withlacoochee River and has a surface area of 1497 hectares (ha) (3700 acres [ac.]) (Figure 1.1-1).

LNP rail spur. The short rail line will be constructed east from the LNP site to an existing upgraded railroad line. The LNP rail spur will be used to transport heavy construction materials and equipment during construction activities and for certain future LNP operations requiring rail service.

Pipeline corridors. A makeup water pipeline and corridor will connect the CFBC and the LNP. A blowdown pipeline and corridor will connect the LNP to the CREC.

Plant site. The primary location of the two reactors and ancillary power production support facilities. The plant site will be comprised of approximately 121 ha (300 ac.) near the center of the LNP site.

Proposed Levy Nuclear Plant Unit 1 (LNP 1) and proposed Levy Nuclear Plant Unit 2 (LNP 2). LNP 1 is the southernmost reactor and LNP 2 is the northernmost reactor.

Proposed Levy Nuclear Plant Units 1 and 2 (LNP) site. An irregularly shaped area that is approximately 1257 ha (3105 ac.) in size. The LNP site is located within Levy County (Figure 1.1-1).

Region. The area between a 9.7-km (6-mi.) radius and an 80-km (50-mi.) radius from the centerpoint of the LNP power block footprint. The LNP site is located in a rural, sparsely populated area.

Through-screen intake velocity. The velocity of water passing through the center of the $\frac{3}{8}$ -inch (in.) mesh screen openings in the CWIS traveling screens during facility normal intake operations.

Transmission lines. High-voltage lines carrying electrical power generated at the LNP to high-voltage substations. Transmission lines will be located in proposed and existing transmission line corridors.

Vicinity. The area from the centerpoint of the LNP power block footprint to a 9.7-km (6-mi.) radius. The vicinity includes a much larger tract of land than the LNP site. The vicinity is located within Levy, Citrus, and Marion counties.

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Withlacoochee River. A 253-km (157-mi.) river draining a 5439 square-kilometer (km²) (2100 square-mile [mi.²]) watershed in west-central Florida. The Withlacoochee River originates in the Green Swamp in Polk County, discharges into the Gulf of Mexico just north of the CFBC, and has been designated as an Outstanding Florida Water (OFW).

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1.0 INTRODUCTION TO THE ENVIRONMENTAL REPORT

Florida Power Corporation doing business as Progress Energy Florida, Inc. (PEF) has developed this comprehensive Environmental Report (ER) to address environmental issues associated with its Combined License Application (COLA) for the proposed Levy Nuclear Plant Units 1 and 2 (LNP) in Levy County, Florida (Figure 1.1-1). PEF proposes to build and operate two units of the Westinghouse Electric Company, LLC (Westinghouse), AP1000 Reactor (AP1000), a nuclear plant design certified under 10 Code of Federal Regulations (CFR) 52, Subpart B. This chapter provides an introduction to the assessment of the environmental effects of construction and operation of this plant on the proposed site and surrounding areas.

This ER follows the content and organization of the U.S. Nuclear Regulatory Commission's (NRC) "Standard Review Plans for Environmental Reviews for Nuclear Power Plants," also known as NUREG-1555, Revision 0 (October 1999). Available draft revisions to this guidance have been looked at and considered, as practicable. As part of its agency obligation, the NRC is required to perform a review of the impact of the construction and operation of the LNP on the environment. This ER supports that review, which is performed by the NRC under 10 CFR 51. This regulation requires that environmental impacts from the proposed project be evaluated and described in a concise, clear, and analytical manner. This report describes the project and potential alternatives and the methods and sources used in the environmental impact analysis. The primary subsections of the Environmental Impact Statement (EIS), as described in 10 CFR 51, Subpart A, Appendix A, are as follows:

- Purpose of and need for action.
- Alternatives, including the proposed action.
- Affected environment.
- Environmental consequences and mitigating actions.
- List of preparers.
- List of agencies, organizations, and persons to whom copies of the statement are sent.
- Substantive comments received and NRC staff responses.

The NRC will use NUREG-1555 guidance, which is designed to meet the requirements of 10 CFR 51, to prepare the EIS for the COLA. Per Chapter 62-17 of the Florida Administrative Code (F.A.C.), the State of Florida has a similar certification process required by the Florida Power Plant Siting Act (PPSA). PEF is concurrently preparing a Site Certification Application (SCA) to satisfy Florida PPSA regulations.

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This ER discusses the existing environment at the LNP site and the vicinity, summarizes the environmental impacts of construction and operation, considers appropriate mitigation measures, and reviews alternative sites. This report also assesses the environmental impacts from the construction and operation of two AP1000 units at the LNP site.

The following categories of information regarding interfaces of the LNP site and facilities with the environment are reviewed in this report:

- Comparison of the functional and operational needs of the AP1000 units as they relate to the LNP site's natural and environmental resources.
- Direct impact of the AP1000 units on the LNP site's natural and environmental resources.

1.1 THE PROPOSED PROJECT

This chapter provides an outline of the PEF COLA project and is organized into the following subsections:

- ER **Subsection 1.1.1** — The Applicant and Owner
- ER **Subsection 1.1.2** — Site Location
- ER **Subsection 1.1.3** — Reactor Information
- ER **Subsection 1.1.4** — Cooling System Information
- ER **Subsection 1.1.5** — Transmission System Information
- ER **Subsection 1.1.6** — The Nature of the Proposed Action and Constraints
- ER **Subsection 1.1.7** — Construction Start, Finish, and Unit Start-Up Dates

1.1.1 THE APPLICANT AND OWNER

The applicant for this Combined License (COL) and owner of the LNP is PEF, a Florida corporation. Pursuant to the Atomic Energy Act of 1954 (AEA), as amended, and the NRC regulations in Title 10 of the CFR, PEF has filed a Final Safety Analysis Report (FSAR), which accompanies this ER.

As described in the Administrative Information included as a part of this COLA, PEF will have the necessary authority, control, and rights related to the construction and operation of the LNP once the COLA is approved.

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1.1.2 SITE LOCATION

The LNP site is located in Levy County, Florida, east of U.S. Highway 19 and approximately 6.4 kilometers (km) (4 miles [mi.]) north of the Levy-Citrus County border. The nearest incorporated municipality is the Town of Inglis located approximately 6.6 km (4.1 mi.) from the nearest boundary of the LNP site (Figure 1.1-1). This site is located in a primarily rural area located southwest of Gainesville and west of Ocala and approximately 15.5 km (9.6 mi.) northeast of the Crystal River Energy Complex (CREC), an energy facility also owned by PEF (Figure 1.1-1). While there are small communities and clusters of homes in the region, the area is sparsely populated. The Gulf of Mexico is located approximately 12.8 km (7.9 mi.) west of the LNP site and Lake Rousseau lies about 4.8 km (3.0 mi.) to the south (Figure 1.1-1).

The LNP site is approximately 1257 hectares (ha) (3105 acres [ac.]) in size, with the primary location for the two reactors and ancillary power production support facilities comprising approximately 121 ha (300 ac.) near the center of the site. Much of the LNP site, in particular the reactor locations, has been in intensive silviculture production for over a century. Tree production and harvesting operations have extensively altered the natural configuration of the vegetation and the land surface by creating a series of elevated hillocks, separated by shallow furrows. Young saplings are planted on the hillocks, and following periodic harvesting, the harvested areas are re-tooled and new trees are planted on the hillocks. Planted pine has replaced natural vegetative communities across much of the LNP site. Descriptions of current land use, demography, and the physical characteristics at and around the site are discussed in more detail in ER Chapter 2.

1.1.3 REACTOR INFORMATION

PEF proposes to build and operate two AP1000 units, a nuclear plant design certified under 10 CFR 52, Subpart B. The AP1000 design has a nuclear steam supply system (NSSS) power rating of 3415 megawatts thermal (MWt), with an electrical output of at least 1000 megawatts electric (MWe). The plant has a design objective of 60 years without a planned replacement of the reactor vessel. However, the design provides for the replacement of other major components, including the steam generator (SG).

This ER and the FSAR provide detailed descriptions of the individual systems that make up the AP1000. These descriptions are used to evaluate the impact of construction and operation of the plant at the LNP site.

1.1.4 COOLING SYSTEM INFORMATION

The AP1000 units will use a recirculating cooling water system, and waste heat will be dissipated by a series of mechanical draft cooling towers, which will draw makeup cooling water from the Cross Florida Barge Canal (CFBC). This canal extends west about 11.9 km (7.4 mi.) from the Inglis Lock at Lake Rousseau to the Gulf of Mexico (Figure 1.1-1).

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The intake structure will be located approximately 11.1 km (6.9 mi.) from the Gulf of Mexico on the berm that forms the north side of the canal and within 0.8 km (0.5 mi.) of the Inglis Lock. The waters in the CFBC downstream of the lock vary in salinity seasonally and with tidal influences; however, when the intake is operational, it is anticipated that the makeup water to the cooling towers will be seawater drawn from shallow, near-shore Gulf waters. Freshwater sources will not be used for cooling tower makeup at LNP. Cooling tower blowdown, including residual waste heat, will be transported in two pipelines (one for each unit) from the LNP. The blowdown lines will run south to the CFBC and then west along the northern edge of the bypass canal. They will then cross the bypass canal just north of CREC, run south, and discharge into the CREC discharge canal and ultimately into the Gulf of Mexico.

The AP1000 reactor coolant system (RCS) is designed to effectively remove or enable removal of heat from the reactor during all modes of operation, including normal shutdown and accident conditions, as described in the Westinghouse Electric Company, LLC, AP1000 Design Control Document for the certified design as amended (DCD). ER [Section 3.4](#) provides more information on the cooling system.

1.1.5 TRANSMISSION SYSTEM INFORMATION

The LNP will require a new transmission system in order to incorporate the additional power into the Florida electrical grid system. Four new 500-kilovolt (kV) transmission lines will connect the LNP to the Florida electrical grid system. Two of the four 500-kV transmission lines will connect to the proposed Citrus Substation, one will connect to the proposed Central Florida South Substation, and the last one will connect to the CREC 500-kV switchyard.

The proposed corridors will be approximately 304.8 to 804.7 meters (m) (1000 to 2640 feet [ft.]) wide to allow for maximum flexibility when determining the right-of-way (ROW). A total of approximately 146.5 km (91 mi.) of transmission lines will be needed to connect to the first substations in order to incorporate the power generated by the LNP into the electrical grid system.

Additional (and supplemental) transmission lines will be required beyond the first substations to connect the LNP to the Florida electrical grid system. The transmission line corridors will traverse a variety of land uses and land covers ([Figures 3.7-3, 3.7-4, and 3.7-5](#)). The transmission line corridors will use PEF's existing high-voltage transmission line ROWs and other existing linear corridors and major roads to the maximum extent practicable. A more detailed description is provided in ER [Subsection 2.2.2](#).

Detailed descriptions of the transmission line system and associated environmental impacts are described in ER [Section 3.7](#) and ER [Chapters 4 and 5](#).

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1.1.6 THE NATURE OF THE PROPOSED ACTION AND CONSTRAINTS

The proposed action is the NRC's issuance of a COL to allow PEF to build and operate two nuclear units at the LNP site. The COL is based on this ER and other parts of the application, including the FSAR, Site Redress Plan, and the Emergency Plan (EP).

The application incorporates by reference Appendix D to 10 CFR 52, as amended by the DCD, which was submitted to the NRC on May 26, 2007, and Westinghouse Technical Report APP-GW-GLR-134, "AP1000 DCD Impacts to Support COLA Standardization." The NRC has already concluded that the general design and safety features of the AP1000 meet the agency's strict requirements for design. As a result, PEF does not need to obtain approval to use the AP1000 technology (the design features of the LNP are described in ER [Chapter 3](#) and the FSAR). However, PEF must still consider whether the LNP site is within the operational parameters of the AP1000 design. This ER will provide baseline environmental information about the LNP site and surrounding area. It will also describe the potential environmental effects of construction and operation of the AP1000 at the LNP site.

Based on the design documentation available, as well as PEF's knowledge of the proposed site, PEF is evaluating the AP1000 design components and the interaction of the LNP with the environment. This information will assist the NRC in performing the requisite environmental analyses and issuing the COL. With the COL, PEF will be able to meet its goal of building a new nuclear facility at the LNP site to meet future power needs in Florida. The need for power is discussed in ER [Chapter 8](#).

1.1.7 CONSTRUCTION START, FINISH, AND UNIT START-UP DATES

LNP site preparation activities and plant pre-construction activities will take approximately 18 months to complete. On-site construction activities will take approximately 3 to 4 more years, followed by 6 months of startup testing. PEF proposes to start site preparation activities in 2009 or 2010, and to begin commercial operation in 2016 for proposed Levy Nuclear Plant Unit 1 (LNP 1) and 2017 for proposed Levy Nuclear Plant Unit 2 (LNP 2). The anticipated schedule is as follows:

- Site preparation will take approximately 18 months, commencing by 2010 or 2011.
- Construction will take approximately 3 to 4 years, with the construction schedule staggered 1 year between units.
- Construction will be complete in 2016 or 2017 for LNP 1 and in 2017 or 2018 for LNP 2.

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- Commercial operation is expected to begin 6 months following construction completion of each unit.

1.2 STATUS OF REVIEWS, APPROVALS, AND CONSULTATIONS

Environmental permitting for the LNP involves several basic steps: (1) application to the NRC for approval to conduct certain limited work authorization (LWA) construction activities; (2) application to the NRC for a COL; (3) application to the State of Florida for site certification; and (4) applications for certain additional federal environmental permits, including (a) a National Pollutant Discharge Elimination Permit (NPDES) for water discharge, (b) Prevention of Significant Deterioration (PSD) air permit, (c) a 316(b) demonstration for the proposed cooling water intake, (d) U.S. Army Corps of Engineers (USACE) Section 404 and Section 10 permits to construct structures in wetlands and regulated waterways, (e) hazardous waste management and disposal, and (f) a determination of consistency under the requirements of the Coastal Zone Management Act to ensure the LNP is consistent with existing federal and state coastal zone management plans.

The Florida PPSA mandates a site certification process for obtaining a single site-related license that will include state, regional, and local requirements for construction and operation of an energy facility of the type and magnitude being proposed by PEF.

Submittal of the State of Florida SCA will occur in early June 2008, and additional local zoning/building permits will be applied for prior to construction activities. In addition to the environmental permitting process, companion zoning change applications will be sought as required. Some of the information required by the environmental permits may also be required or requested by individual zoning agencies.

As part of PEF's preparation of the COLA for the LNP, a comprehensive assessment of the environmental impacts attributable to facility construction and operation has been developed and thoroughly documented. In general, the LNP ER prepared for submittal to the NRC is responsive to, and in many cases, exceeds the guidance requirements provided by the State of Florida for the site certification process. Given the comprehensive nature of the LNP ER, it is being incorporated as a primary reference document for the SCA to address the State's guidance requirements and is included as an appendix to the SCA.

The planning for the preparation of the permits may require prior consultations to determine key issues important to the reviewing agencies and specific permit content requirements. Any such consultations will be conducted early in the overall LNP permitting process and will be planned and implemented individually according to the requirements of each consulted agency.

Initial coordination has begun (agencies contacted regarding the project are listed below) and will continue through meetings and informal consultations as the EIS is developed. During the EIS development process, the regulatory

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agencies will be a part of the stakeholder group, and therefore, are likely to provide formal comments on the draft and final EIS. Several of the permit processes can be started prior to finalization of the EIS (for example, submitting applications); however, it is likely that coordination with the regulatory agencies (during the EIS process) will influence the exact timing and submission of the permits associated with this project.

PEF has contacted the following agencies: Florida Department of Environmental Protection (FDEP), U.S. Army Corps of Engineers (USACE), Florida Division of Historical Resources, Southwest Florida Water Management District, Florida Department of Transportation (FDOT), Levy County Emergency Management, Citrus County Emergency Management, Marion County Emergency Management, Florida Department of Community Affairs, Federal Emergency Management Agency & Homeland Security, Florida Division of Health, Bureau of Radiation Control, Florida Division of Health, Bureau of Radiation Control, Florida Utilities, Florida Fish and Wildlife Conservation Commission, and Florida State Historic Preservation Office.

Table 1.2-1 provides a list of the environmentally related authorizations, permits, and certifications required by federal, state, regional, local, and affected Native American tribal agencies. The list includes, but is not limited to, permits that are required before the construction and operation of the LNP.

- Issuing Agency
- Activity
- Permit/Authorization
- License Number
- Expiration Date
- Authority

The structure of **Table 1.2-1** is based on the format provided in NUREG-1555. Information identified in the table as “to be determined” (TBD) will not be available until the applications have been submitted and approved. The information and data needed to complete each application will be prepared and retained in accordance with the requirements of each application.

PEF anticipates that the necessary permits will be obtained prior to and during the pre-construction and construction phases of the project and that construction will begin once the required permits are in place.

In conjunction with the SCA and COLA submittals, PEF intends to also submit an application for an LWA. The LWA would allow PEF to undertake certain site

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construction activities in advance of the COLA approval. The LWA activities are described in ER [Section 4.8](#).

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**Table 1.2-1 (Sheet 1 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
Federal					
NRC	Construction and safety review of the site.	COLA	--(a)	--(a)	10 CFR 52.97
NRC	Approval for construction of nuclear power plant.	ER	--(a)	--(a)	10 CFR 50.10
NRC	Possession of source material.	Source Material License	--(a)	--(a)	10 CFR 40.3
NRC	Possession of Special Nuclear Material.	Special Nuclear Material License	--(a)	--(a)	10 CFR 70.3
NRC	Possession of fuel.	By-Product License	--(a)	--(a)	10 CFR 30.3
NRC	Operation of units.	License to Operate	--(a)	--(a)	10 CFR 52
USACE Water ^(c)	Work in wetlands/waters that involves construction of facilities requires USACE Permit.	Section 404 Permit ^(b)	--(a)	--(a)	CWA 33 CFR 320.1
USACE Jacksonville District	Construction of a pipeline across a navigable river or stream.	Section 10 - Rivers and Harbors Act Permit	--(a)	--(a)	33 USC 403
USDOT	Hazardous materials shipments.	USDOT Registration	--(a)	--(a)	49 USC 5108
USEPA	Requires SPCC Plan outlining containment and countermeasures for oil storage. May require Facility Response Plan.	Oil Terminal Facility Registration	--(a)	--(a)	40 CFR 112
USEPA	Aggregate oil storage in aboveground tanks >1320 gallons or any single tank >660 gallons.	SPCC Plan	--(a)	--(a)	40 CFR 112

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**Table 1.2-1 (Sheet 2 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
FAA ^(c)	Construction of structures affecting air navigation.	Construction Notice	--(a)	--(a)	49 USC 44718
FAA, Southeast Region, Atlanta, Georgia; other regions as appropriate. Coordinate with FDOT.	Stack construction within airspace for approach to airport.	FAA Stack Height Waiver	--(a)	--(a)	14 CFR 77.21 F.S. §333.025
USFWS	Construction in areas where threatened and endangered species or critical habitat could be impacted as a result of the construction and/or operation of the proposed facility.	Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act	--(a)	--(a)	16 USC 703-712, 16 USC 668a-d
USFWS	Incidental taking of a protected species.	Incidental Take Permit	--(a)	--(a)	50 CFR 17.21
National Marine Fisheries Service	Provides for the protection of fishery resources and essential fish habitat.	Magnuson-Stevens Act/Fisheries Management Plan	--(a)	--(a)	16 USC 1851

State

All state, regional, and local permits (except certain local zoning/building permits) are covered under the Power Plant Siting Act (PPSA) Certification. It is not necessary to apply for most of these permits individually, but they are listed below for informational purposes. Those federal permit program requirements that are delegated to the state and that will require individual permit applications to be submitted as part of the Site Certification Application (SCA) are shown in bold italics. The issuing agency remains the applicable state agency, although the delegating federal agency is noted in the Issuing Agency column of the table.

Levy County	Above-grade fills within the 100-year floodplain.	Floodplain Construction Compliance	--(a)	--(a)	Levy County Code of Ordinances -Chapter 50 Article VI Division 3 Section 50
Florida Historical Commission	Construction in an area where historic or archeological resources may be affected.	Compliance with the National Historic Preservation Act	--(a)	--(a)	Chapter 267, F.A.C.

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**Table 1.2-1 (Sheet 3 of 8)
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Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
FDEP	Construction of a power plant with more than 75 MW of steam generated power and associated facilities.	Power Plant Certification	--(a)	--(a)	F.S. § 403.519
FDEP	Required for projects on sovereign submerged lands.	Sovereign Submerged Lands Lease	--(a)	--(a)	Chapter 18-21, F.A.C.
FDEP	Required for projects that affect surface waters, wetlands, or sovereign submerged lands. FDEP coordinates review with other state agencies to address natural resource and cultural resource issues.	ERP; Joint application with USACE Section 404/10	--(a)	--(a)	Chapter 40B-400, F.A.C
FDEP, USEPA Region IV review	Required for all generators, transporters, as well as the disposal of hazardous waste.	Florida Notification of Regulated Waste Activity/Regulation Standards	--(a)	--(a)	Chapter 62-730, F.A.C.
FDEP	Construction and operation of facilities generating air emissions.	State Construction Permit for Air Emission Facilities	--(a)	--(a)	Chapter 62-4.210, F.A.C.
FDEP, USEPA Region IV review	Construction and operation of facilities generating air emissions.	Prevention of Significant Deterioration Construction Permit	--(a)	--(a)	Chapter 62-212, F.A.C.
FDEP, USEPA Region IV review	Operation of facilities generating air emissions.	Title V Operating Permit	--(a)	--(a)	Chapter 62-213, F.A.C.
FDEP, USEPA Region IV review	Not Applicable	Phase II Acid Rain Permit/Acid Rain Compliance Plan	--(a)	--(a)	Chapter 62-214, F.A.C.

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**Table 1.2-1 (Sheet 4 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
FDEP	Projects with potential to impact waters of the state.	Section 401 Water Quality Certification (CWA)	--(a)	--(a)	Chapter 62-4, F.A.C.
FDEP	Projects requiring Section 404/10 permitting. Conducted in conjunction with ERP process.	Compliance with Fish and Wildlife Coordination Act	--(a)	--(a)	F.S. § 373.4144;
FDEP, USEPA Region IV review	Discharge of wastewater, cooling water, etc. to surface waters.	NPDES Permit for wastewater discharge. Compliance with CWA Section 316a	--(a)	--(a)	F.S. § 403.0885
FDEP, USEPA Region IV review	Intake of makeup water, addresses the impingement and entrainment impacts of cooling water intakes on biological populations.	NPDES Permit, Compliance with 316b	--(a)	--(a)	40 CFR 125, Subpart I
FDEP	Construction of any facility that disturbs 1 acre or more.	NPDES Construction Stormwater Permit; requires Surface Water Management and Sediment Control Plans	--(a)	--(a)	Chapters 62-25, 62-40 F.A.C
FDEP, USEPA Region IV review	Operation of an industrial facility.	NPDES Operating Stormwater Permit for Industrial Activities	--(a)	--(a)	Chapter 62-621, F.A.C.
FDEP	Under the CWA, industrial facilities have to prepare an SWP3 as part of the stormwater NPDES permit.	SWP3	--(a)	--(a)	Chapter 62-330.200, F.A.C.
FDEP, Water Management District	Consumptive withdrawal of surface or groundwater.	Water Use Permit	--(a)	--(a)	40B-2, F.A.C
FDEP, Water Management District	Required if dewatering is required for construction.	Dewatering Permit	--(a)	--(a)	40B-2, F.A.C.
FDEP, Water Management District	Construction of water wells.	Well Construction Permit	--(a)	--(a)	40B-3, F.A.C.

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**Table 1.2-1 (Sheet 5 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
FDEP	Management of on-site stormwater.	Surface Water Management/Erosion and Sediment Control Plan required	--(a)	--(a)	Chapter 62.40, F.A.C.
FDEP- Local Branch	Construction of any facility that disturbs 5 acres or more.	Erosion & Sedimentation Control Plan	--(a)	--(a)	Chapter 62.40, F.A.C.
FDEP	Construction of transmission lines and substation.	Electric and Magnetic Fields Standards	--(a)	--(a)	F.S. § 403.521, et seq. Chapter 62-814, F.A.C.
FDEP	Approval for construction and operation in state parks and other lands owned and/or managed by the state.	State Lands Use	--(a)	--(a)	F.S. § 253.77, et seq.
FDEP	Aboveground oil storage tanks.	Aboveground Storage Tank Registration	--(a)	--(a)	F.S. § 376.323
Florida Game and Freshwater Fish Conservation Commission	Incidental taking of a protected species.	Incidental Take Permit	--(a)	--(a)	Chapter 68A-27, F.A.C.
Florida Public Service Commission	Reviews the appropriateness of the proposed project and issues a "determination of need".	Electrical Transmission Line (as Associated Facility under PPSA)	--(a)	--(a)	F.S. § 350.001 et seq.
Florida Department of Community Affairs	Determines project consistency with coastal zone management plan.	Coastal Zone Consistency Determination	--(a)	--(a)	F.S. § 380.23

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**Table 1.2-1 (Sheet 6 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
Local					
<i>All state, regional, and local permits (except certain local zoning/building permits) are covered under the PPSA Certification. It may be necessary to apply for these permits individually as required by the government agency.</i>					
City, County, or Municipal District	New water and sewer connections (if available).	Water and Sewer Connection	--(a) (d)	--(a) (d)	TBD ^(d)
City, County, or Municipal District	Required if land is not zoned appropriately for project or to address local zoning requirements that apply specifically to this type of facility.	Zoning/Land Use Compliance	--(a) (d)	--(a) (d)	TBD
County	Required for connection of driveway to public roads.	Driveway Permit	--(a) (d)	--(a) (d)	TBD
Local County Department of Community Development	Required for removal of on-site vegetation.	Vegetation Removal	--(a) (d)	--(a) (d)	TBD
Local County Health Department	Required for construction and operation of a new septic system, if sewage service not available in the area. One copy of the survey and one copy of construction plans must bear original Health Department approval.	Health Department Septic Permit and Operating Permit	--(a) (d)	--(a) (d)	TBD
City, County, or Municipal District	Construction of new buildings and facilities.	Building Permit; Plumbing Permit; HVAC Permit; Contractors License, etc.	--(a) (d)	--(a) (d)	TBD

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**Table 1.2-1 (Sheet 7 of 8)
Federal, State, and Local Environmental Permits and Authorizations**

Issuing Agency	Activity	Permit/ Authorization	License Number	Expiration Date	Authority
Other Permits/Approvals					
FDOT	Crossing of highways by railroad.	Railroad Grade Crossing Program	--(a)	--(a)	FDOT
USDOJ	Prevention of "taking" of Bald Eagle nests, eggs, or birds.	Migratory Bird Treaty Act of 1918; authorization for "taking" of Bald Eagle nest would be required per 50 CFR 21.	--(a)	--(a)	16 USC 703-712

Notes:

- a) Data not available.
- b) Applications for permits will be made during the pre-construction phase.
- c) Initial consultation with Agency occurs prior to COLA submittal.
- d) Issuing authority. License numbers and expiration dates will be included in the table when known.

CFR = Code of Federal Regulations
 COLA = Combined License Application
 CWA = Clean Water Act
 ER = Environmental Report
 ERP = Environmental Resource Permit
 F.A.C. = Florida Administrative Code
 F.S. = Florida Statute
 FAA = Federal Aviation Administration
 FDEP = Florida Department of Environmental Protection
 FDOT = Florida Department of Transportation

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Federal, State, and Local Environmental Permits and Authorizations**

Notes (continued):

HVAC = heating, ventilation, and air conditioning
MW = megawatt
NPDES = National Pollutant Discharge Elimination System
NRC = U.S. Nuclear Regulatory Commission
PPSA = Power Plant Siting Act
SCA = Site Certification Application
SPCC = spill prevention, control, and countermeasures
SWP3 = Stormwater Pollution Prevention Plan
TBD = to be determined
USACE = U.S. Army Corps of Engineers
USC = United States Code
USDOI = U.S. Department of Interior
USDOT = U.S. Department of Transportation
USEPA = U.S. Environmental Protection Agency
USFWS = U.S. Fish and Wildlife Service