

Turkey Point Units 6 & 7
COL Application
Part 3 — Environmental Report

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2.8 RELATED FEDERAL PROJECT ACTIVITIES

The purpose of this section is to identify any federal activities that are related to the construction and operation of Units 6 & 7 in Miami-Dade County, Florida. This section describes the cumulative impacts due to other related federal activities and determines the possible need for another federal agency to participate in the preparation of the environmental impact statement as a cooperating agency. In accordance with 10 CFR Part 51 Subpart A, related activities that may result in cumulative impacts that are under state or local agency jurisdiction are described. However, actions related only to the granting of licenses, permits, or approvals by other federal agencies for Units 6 & 7 are not considered in this review because such activities typically have an independent environmental review, in accordance with NUREG-1555.

In accordance with NUREG-1555, the following impact categories (federal/state/local) were identified:

- Actions associated with acquisition and/or use of the proposed site and transmission corridors or of any offsite property needed for the project
- Projects that will be required either to provide an adequate source of plant cooling water or to ensure an adequate supply of cooling water over the lifetime of the new units
- Projects or activities that must be completed as a condition of plant construction or operation
- Projects that are contingent on construction and operation of the new units
- Agency plans or commitments that will result in significant new power purchases that would be applicable to the analysis used to justify the need for power associated with Units 6 & 7

2.8.1 Land Acquisition and Use

The Florida Electrical Power Plant Siting Act, Sections 403.501-403.518, Florida Statutes, 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 a power plant and associated facilities of the type and magnitude being proposed. Pursuant to these statutes, the environmental impacts of the construction of Units 6 & 7 and associated linear and non-linear facilities will be reviewed by the state of Florida and other local and regional bodies. Although these are state-led processes, the potential cumulative impacts of these offsite actions, with regard to both construction and operation, need to be considered as part of related activities.

Transmission corridor alternatives considered for Units 6 & 7 will involve the Department of the Interior and the U.S. Army Corps of Engineers, depending on the corridor selected.

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There will also be coordination with Everglades National Park and Biscayne National Park, as necessary, regarding possible impacts to the current Everglades restoration project being performed adjacent to the Turkey Point plant property.

2.8.2 Cooling Water Source and Supply

Currently, there are two natural gas/oil conventional boiler units (Units 1 & 2), two pressurized water nuclear reactors (Units 3 & 4), and one combined-cycle natural gas unit (Unit 5) located on the Turkey Point plant property.

Units 1 through 4 use the cooling canals of the industrial wastewater facility for cooling. Unit 5 uses mechanical draft cooling towers for heat dissipation. These towers receive water from the Upper Floridan aquifer for use as makeup water and route their blowdown to the industrial wastewater facility. Potable water from the Miami-Dade County water supply system, a municipal water source, is provided for potable and service water use for Units 1 through 5 and would also be used for Units 6 & 7.

Two sources of makeup water are planned to replace cooling tower blowdown for Units 6 & 7. One source would be water reclaimed for reuse after processing by the Miami-Dade Water and Sewer Department, conveyed via pipelines to the Turkey Point plant property. An onsite FPL reclaimed water treatment facility would further treat the reclaimed water for use in the cooling system. When reclaimed water cannot supply the quantity and/or quality of water needed for the circulating water system, a second source for makeup water would consist of radial collector wells that would withdraw saltwater from under Biscayne Bay. The wells would be located on the Turkey Point peninsula, east of the existing units. Blowdown from the circulating water system would be transferred to a common blowdown sump before being discharged to deep injection wells.

In summary, there are no known planned federal projects or activities that Units 6 & 7 require to meet cooling water requirements, and no federal projects or activities are required to ensure continuous water supply over the plant lifetime.

2.8.3 Projects Affecting Construction or Operation

There are no federal projects or activities that must be completed as a condition of, or are contingent on, Units 6 & 7 construction or operation.

State and/or local projects or activities that must be completed as a condition of, or are contingent on, Units 6 & 7 construction or operation include road improvements and installation of the reclaimed water and potable water pipelines.

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2.8.4 Plans or Commitments Resulting in Significant Power Purchases

As described in Chapter 8, there is a demonstrated need for power generated by the proposed project. FPL's reliability analysis did not identify plans or commitments for significant new power purchases from any federal, state, or local agency.

2.8.5 Other Federal Activities

Two related federal activities associated with Units 3 & 4 are potential federal-related activities that may need to be considered for cumulative impacts. A power uprate for Units 3 & 4 is scheduled for 2012, and the construction of an independent spent fuel storage installation is scheduled for 2009.