



IC&R

Intergovernmental Coordination and Review

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TAMPA ELECTRIC COMPANY'S SITE CERTIFICATION APPLICATION/POLK 2-5 COMBINED CYCLE CONVERSION PROJECT, #92-32, POLK & HILLSBOROUGH COUNTIES, IC&R #080-12.

This project has been reviewed for consistency with the *Future of the Region, A Strategic Regional Policy Plan for the Tampa Bay Region (2005)*. This review constitutes our Agency's Final Report.

Introduction/Project Description

Tampa Electric Company is seeking certification of several changes associated with its Polk Power Station (PPS) in western Polk County, including: conversion of existing combustion turbine generator Units 2 - 5 to a 1,160 MW combined-cycle electric generating unit and associated facilities with state-of-the-art emission and environmental cooling systems; an increase in ultimate generating capacity of 1,420 MW; the removal of the portion of the site located west of SR 37; and the addition of two associated linear (transmission) facilities. The targeted operation date of the increased generating capacity is January 2017.

The conversion project will address long-term strategic issues, including fuel diversity, fuel flexibility, cost stability, and enhanced environmental performance.

- With the addition of the combined cycle configuration, the hot combustion gases that are produced by the (primarily natural gas-fired) combustion turbine generators can be used to generate more electricity without additional fuel, rather than being released to the atmosphere.
- Proposed state-of-the-art technology and additional air quality control systems will allow the facility to meet or exceed the best available control technology, so that the project's impact on air quality in Polk County and the region will be minimal and significantly less than all ambient air quality standards established by state and federal regulators.
- A new six-cell mechanical cooling tower will be added and the auxiliary cooling systems for Unit 1 will be modified to use the new cooling tower rather than the existing 755-acre cooling reservoir. Blowdown from the cooling tower will be recycled to the cooling reservoir.
- In order to reduce groundwater use and support future expansion, a project to treat and use reclaimed water from the City of Lakeland for PPS operations is being implemented.

The removal of the 1,511-acre portion of the project site, located west of State Road 37, reflects its donation to the State of Florida. After the removal the certified site will total 2,837 acres.

The portion of the proposed project within the Tampa Bay Regional Planning Council's planning boundaries is a 230 kV electric transmission line to connect Polk Power Station to the existing Fishhawk Substation in central Hillsborough County. The total length of the preferred corridor within the county is approximately 23 miles, and the width of the preferred corridor, for study purposes, varies from approximately 300 feet to one mile. The actual width of the right-of-way (ROW) for the new lines will be 35 to 160 feet. The portion between the Polk county line

and the future Aspen switching station (about 16 miles in length) will hold one 230 kV line; and the portion between the future Aspen switching station and the existing Fishhawk substation (6.6 miles) will hold two 230 kV lines. Most of the preferred corridor is within or adjacent to existing Tampa Electric ownership or easements and/or existing roads.

Regional Significance

1. Consistency with the *Future of the Region: A Strategic Regional Policy Plan for the Tampa Bay Region* (2005).

The preferred corridor crosses a number of vegetative communities, both wetland and upland types, identified as Natural Resources of Regional Significance in the *Future of the Region, A Strategic Regional Policy Plan for the Tampa Bay Region* (2005) (See the attached maps). If the transmission line is constructed within or immediately adjacent to existing roads and other linear facilities, across farm fields or other agricultural lands, impact to regionally-significant natural resources will be minimized. Additionally, a number of state- and federally-listed plant and animal species potentially occur (breed, roost or grow) in these habitats. Transmission line and access road construction and maintenance within natural habitats and wetlands would adversely affect habitat values and hydroperiods; result in invasion by nuisance or exotic species; and create "edge," changing the species composition to those adapted to the cleared condition and further reducing natural community values.

The preferred corridor is mainly adjacent to various agricultural uses, phosphate-mined lands, undeveloped lands and low-density residential areas. About 1.1 miles of the preferred corridor is immediately adjacent to existing suburban residential developments. Short-term impacts will primarily be intermittent noise resulting from site clearing, access road construction, support construction, stringing of the lines, and cleanup operations; and traffic disruption from the movement of heavy equipment on roadways. Electric and magnetic field level standards are established in Florida Administrative Code (Section 62-814). The electric field limits specified are 2.0 kiloVolts/meter (kV/m) at the edge of the transmission line ROW and 8.0 kV/m within the ROW. The magnetic field limits are 150 milliGauss (mG) at the edge of the ROW or less than the existing configuration. Tampa Electric states that the maximum electric field capable of being produced by the transmission lines planned for this project are 1.5 kV/m at the edge of the ROW and 3.1 kV/m within the ROW, and the magnetic field maximum is 141.1 mG.

2. It is recommended that the application for certification be approved, subject to the recommended conditions set forth below.
3. Recommended Conditions of Certification, with accompanying relevant policies from *Future of the Region, A Strategic Regional Policy Plan for the Tampa Bay Region* (2005):
 - A. The certified transmission line corridor should only cross Natural Resources of Regional Significance, whether upland or wetland habitat, where immediately adjacent to existing infrastructure.

4.43: *Protect, preserve, and restore all regionally-significant natural resources shown on the Map of Regionally-Significant Natural Resources.*

B. Unavoidable impacts to Natural Resources of Regional Significance should be mitigated pursuant to adopted Council policies.

4.44: *Allow impacts to regionally-significant natural resources only in cases of overriding public interest and when it is demonstrated and/or documented that mitigation will successfully recreate the specific resource. Mitigation should meet the following ratios, at minimum:*

-	Seagrass	4:1
-	FNAI Habitat 04	3:1
-	FNAI Coastal 04	3:1
-	FNAI Natural Communities	3:1
-	LULC Habitat Dry	2:1
-	LULC Habitat Wet	3:1

4.45: *Ensure that mitigation by habitat re-creation employs native plant material which provides the same natural value and function. Monitor mitigation areas for a sufficient time to ensure success: a minimum 85 percent final coverage of desired species. Yearly maintenance and replanting should be undertaken to ensure final cover as necessary.*

4.47: *Recognize that mitigation efforts shall be:*

- *Performed within the same drainage basin where the unavoidable impacts to regionally significant wetlands occurs; and*
- *Allowed only after avoiding impact to the greatest extent possible; and that habitat creation, restoration, and enhancement, with long-term management, be considered as viable methods of impact mitigation.*

4.48: *Mitigation by restoring disturbed habitat of a similar nature, including the removal of exotic plant species, may be acceptable. The minimum acceptable ratio should be twice the habitat re-creation ratio set forth in policy 4.44.*

4.136: *Hold recreation and park sites inviolate against diversion to other uses, except in cases of overriding public interest.*

4.138: *Protect the natural resources of regionally-significant parks, greenways, preserves, and conservation lands from incompatible land uses adjacent to these areas. Include pedestrian trails, where appropriate.*

- C. Should any state- or federally-listed species be found in the transmission line ROW, measures shall be taken to avoid its native habitat or to relocate the species to protected sites of the same habitat.

4.57: Ensure that land use decisions are consistent with federal- and state-listed species protection and recovery plans, and adopted habitat management guidelines.

- D. Tampa Electric should ensure that the certified corridor and operation and maintenance of the transmission facilities will have minimal impact on the quality of life of adjacent residential neighborhoods.

2.19: Consider existing and future land use plans when siting public and semi-public facilities of affected jurisdictions and appropriate agencies, and the impact on the quality of life of any adjacent residential neighborhood(s).

Tampa Bay Regional Planning Council adopted November 12, 2012.



Larry Bustle, Chair
Tampa Bay Regional Planning Council

PLEASE NOTE: This report constitutes completion of the Tampa Bay Regional Planning Council's review.





