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June 10, 2010

Mr. Mike Halpin, Administrator
Siting Coordination Office, Mail Station 48
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, FL 32399

Re: Gainesville Renewable Energy Center; Alachua County,
Conditions of Certification; Final Agency Report

Dear Mr. Halpin:

The Division of Habitat and Species Conservation, Habitat Conservation Scientific Services Section, of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated our agency's review of the referenced project in accordance with the Florida Electrical Power Plant Siting Act, Section 403.5252, Florida Statutes.

Project Description

The Gainesville Renewable Energy Center (GREC), LLC, has submitted a Site Certification Application (SCA) for the proposed construction and operation of an electrical power plant and associated facilities within the City of Gainesville, Alachua County, Florida. The proposed facility would use woody biomass material as fuel to generate electrical energy. The 131-acre development footprint is located within the existing Deerhaven Generating Station.

Potentially Occurring Fish and Wildlife Resources

Based on a Geographical Information System (GIS) analysis of the proposed project site, the following imperiled species and associated habitats were identified:

- 16 protected species potentially occur onsite or in the vicinity of the proposed site (see table below),
- Historical wading bird rookery,
- Florida Natural Areas Inventory-identified rare species habitat for the eastern indigo snake, and
- FWC-identified potential habitat and priorities wetlands for Florida black bear and wading birds.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status*</u>
Gopher frog	<i>Rana capito</i>	SSC
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	SSC
Eastern indigo snake	<i>Drymarchon corais couperi</i>	ST; FT

Tricolored heron	<i>Egretta tricolor</i>	SSC
Little blue heron	<i>Egretta caerulea</i>	SSC
Limpkin	<i>Aramus guarauna</i>	SSC
Snowy egret	<i>Egretta thula</i>	SSC
White ibis	<i>Eudocimus albus</i>	SSC
Bald eagle	<i>Haliaeetus leucocephalus</i>	P
Florida sandhill crane	<i>Grus canadensis pratensis</i>	ST
Southeastern American kestrel	<i>Falco sparverius paulus</i>	ST
Wood stork	<i>Mycteria americana</i>	SE; FE
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	SSC
Florida black bear	<i>Ursus americanus floridanus</i>	ST

* SSC - Species of Special Concern; ST - State Threatened; SE - State Endangered; FT - Federally Threatened; FE - Federally Endangered; P - Protected under federal law and state management plan

Recommended Conditions of Certification

The FWC recommends the following conditions be included in the special conditions as part of the certification process to address preservation of wildlife utilization areas, wetlands, and specific wildlife species.

Preserved Areas:

The applicant provided baseline wildlife survey results in the site certification application which were conducted in May of 2009. Provided in the application are figures illustrating the vegetation communities using the Florida Land Use Cover and Forms Classification System. These vegetation communities were cross-referenced with Florida Natural Areas Inventory, which is more suitable to assessing wildlife conditions than the FLUCFCS or the results from our GIS analysis. Further, we understand from the applicant's consultant, ECT, that the applicant is interested in placing easements over those proposed preserve areas that provide potential habitat for listed species. In line with that, we have some suggested language regarding delineation and management of these areas.

Recommended Condition: In the event that the proposed construction layout of the GREC site plan is modified and impacts to those areas that have been identified as being used by listed species are unavoidable, the Licensee will consult with the FWC and USFWS, as appropriate, to identify necessary conservation measures to offset those impacts on GREC lands adjacent to the project site, to specifically benefit the impacted listed species.

CITATIONS: Article IV, Sec. 9, Florida Constitution (Fla. Const.); Section 379.2291, Florida Statutes (F.S.); and Rule 68A-27, Florida Administrative Code (F.A.C.).

Wetlands:

Water resource permitting requirements for wetlands do not always meet all of the ecological needs for fish and wildlife resources in every case. During our pre-application

consultation, we provided the applicant a U.S. Fish and Wildlife Service's wetland buffers FAQ sheet (attached).

Recommended Condition: The applicant shall evaluate the wetlands to be preserved within the project site on a case-by-case basis and establish compatible-use buffer zones and wetland protection buffers around all wetland areas appropriate for the site's wildlife inventory in accordance with the U.S. Fish and Wildlife Service's wetland buffers guidelines.

CITATIONS: Article IV, Sec. 9, Fla. Const.; Section 379.2291, F.S.; and Rule 68A-27, F.A.C.

General Listed-Species Surveys

a. The Licensee shall conduct species-specific surveys for all listed species that may occur within the Certified Facilities, with appropriate buffer distances as defined by the survey protocols. Guidance related to species-specific survey protocols can be found in the FWC's Florida Wildlife Conservation Guide at <http://myfwc.com/conservation/fwcg.htm>.

b. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to the FWC and coordination shall occur with the FWC and the appropriate permitting agency on proposed impact mitigation methodologies.

CITATIONS: Article IV, Sec. 9, Fla. Const.; Section 379.2291, F.S.; Sections 403.507 and 403.5113(2), F.S.; Rule 62-17.191, F.A.C.; and Rule 68A-27, F.A.C.

Gopher Tortoise:

The applicant acknowledges the presence of gopher tortoise burrows within the proposed project site. It is anticipated that all gopher tortoises and their burrows shall be avoided during this project.

Recommended Condition: In order to address unanticipated and unavoidable impacts to gopher tortoises, the applicant shall investigate the need to obtain a permit and shall follow the guidelines listed below:

- Either a conservation permit or a temporary exclusion permit from the FWC shall be obtained if any project activities would impact gopher tortoises, their burrows, or their habitat.
- The applicant shall refer to the most current (revised April 2009) FWC gopher tortoise permitting guidelines (www.myfwc.com/gophertortoise) to determine which specific permit would be best suited to this project, if applicable.
- All gopher tortoise work shall be conducted by "Authorized Agents" pursuant to the gopher tortoise permitting guidelines.

CITATIONS: Article IV, Sec. 9, Fla. Const.; Section 379.2291, F.S.; and Rule 68A-27.004(2), F.A.C.

Bald Eagle:

Although the applicant did not identify a bald eagle nest on the project site during their 2009 wildlife surveys, suitable nesting habitat may still exist onsite or adjacent to the site. Given that the existing ponds on the Deerfield site contain fish, bald eagles may occur onsite prior to, during, or following construction of the site.

Recommended Condition:

In recognition that the applicant may need to apply for modifications to the site's certification in the future, the applicant shall include as precautionary measures the following guidelines:

In the event that eagle nest sites are identified onsite or within the recommended buffer distance established by FWS and FWC, and prior to any future modifications to the site's certification, the Licensee shall avoid impacts to bald eagle (*Haliaeetus leucocephalus*) nests where possible. In areas where adverse impacts to nests cannot be avoided, resulting in nest disturbance, the information required for an FWC Eagle Permit shall be obtained from the FWC, as authorized by Section 379.2291 F.S., and Rule 68A-16.002, F.A.C., and minimization and conservation measures outlined in the FWC Bald Eagle Management Plan shall be followed, as applicable. In areas where bald eagle nests occur prior to or during construction activities, efforts shall be made to avoid construction activities during the nesting season (October 1 – May 15) or when eagles are present before October 1 or after May 15.

CITATIONS: Article IV, Sec. 9, Fla. Const.; Section 403.5113(2), F.S.; Rule 62-17.191, F.A.C.; Section 379.2291, F.S.; Rule 68A-27, F.A.C.; and Rule 68A-16.002, F.A.C.

Wading Birds and gruliformes:

The applicant has reported that wading birds have been identified in the Deerhaven site foraging in the existing ponds. The current habitat may not be conducive for nesting, however, there may be potential for land management operations under this proposal to create more attractive conditions for nesting wading birds and gruliformes habitat such as sandhill crane or limpkin in the future.

Recommended Condition: Whenever practical, the applicant shall avoid the active breeding season for species protected by sections 68A-27.003, -.004, and -.005, Florida Administrative Code (<https://www.flrules.org/gateway/chapterhome.asp?chapter=68A-27>), when land clearing and construction activities are proposed. If nesting activities are identified, the applicant shall:

- Monitor nesting activity during all clearing and construction activities. The monitoring shall be conducted by a person with documented experience in identifying normal and abnormal nesting behaviors of protected ground-nesting species and who can detect disturbances or nesting attempts during all clearing and construction activities.
- Stop clearing and construction activities if sandhill crane species start to nest in a dredged, cleared, or graded area, mark the nest site, allow the species to nest, and shall not resume construction activities in that area until all birds have fledged.

CITATIONS: Article IV, Sec. 9, Fla. Const.; Section 379.2291, F.S.; Rule 68A-27, F.A.C.; and Rule 68A-16.001, F.A.C.

Conclusion

The FWC recommends approval of the Gainesville Renewable Energy Center subject to the Conditions of Certification outlined herein to ensure that the applicant is in compliance with State of Florida's listed species requirements found in Chapter 68-27,

F.A.C., during construction and operation of the Gainesville Renewable Energy Center and any associated facilities. This finding does not relieve the applicant from following requirements of all Florida Administrative Code rules relating to surveying for and obtaining necessary permits for impacts to fish and wildlife (especially those listed as endangered, threatened or of special concern) that might be a result of future construction. We will continue to work with the applicant and your office to further refine the conditions of certification as necessary.

If you or your staff would like to coordinate further on the issues and recommendations contained in this report, please contact Mary Ann Poole at 850-410-5272 or via email at maryann.poole@myfwc.com. If you or your staffs have any specific questions regarding our comments, I encourage them to contact Dr. Joe Walsh at 772-778-6354 or via email at Joe.Walsh@myfwc.com.

Sincerely,



Scott Sanders
Habitat & Species Conservation Section Leader

ss/jw/sr
ENV 2-11-3
Gainesville Renewable Energy Center_2532_061010

Enclosure

cc: Phil Simpson, ECT, psimpson@ectinc.com
Jessica Dalton, FDEP, Tallahassee, Jessica.Dalton@dep.state.fl.us

Buffers: An Efficient Tool for Watershed Protection

What Are Buffers?

A **buffer** is a strip of naturally vegetated land along a lake, stream, or wetland that provides numerous benefits. Preserving a buffer zone protects water resources from neighboring land uses. Nutrient inputs are of great concern because of their abundant sources (fertilizer, septic tank drain fields, leaking sewage lines, animal waste). Excess nutrients in lakes and estuaries cause toxic algal blooms and depleted oxygen. Natural chemical and biological processes within buffers alter or uptake nutrients and pollutants *before* they enter a water body, thus providing a cost-effective treatment system. Buffers preserve native habitat for wildlife and enhance aquatic habitat. The range of benefits provided by buffers includes:

- Water quality protection 
- Erosion control
- Storage of floodwaters and flood damage reduction
- Aquatic habitat enhancement 
- Habitat for terrestrial riparian wildlife 
- Maintenance of base flow in streams
- Improved aesthetic appearance of stream corridors
- Recreational and educational opportunities

Riparian refers to the land adjoining a body of water, usually a river or stream.

Buffer Width: Bigger is Better

Choosing a buffer width depends on your planning goals. As buffer width increases, the buffer provides greater benefits. As seen in the table below, a 30-foot buffer provides minimal service. At 50 feet, the buffer meets minimum water quality protection recommendations and gives some aquatic habitat benefits. For effective water quality and aquatic habitat protection, a buffer width of 100 feet is needed. Buffers to enhance riparian wildlife should be 300 feet or greater. Special buffer zones may be required to protect vulnerable species.  Width should be increased where slope, impervious surface, and soil type reduce buffer effectiveness. The consequences of an inadequate buffer may be an increased need for stormwater ponds, increased flooding, decreased abundance of sportfish, and/or loss of certain species such as some salamanders or crayfish.

Benefit Provided:	Buffer Width:					
	30 ft	50 ft	100 ft	300 ft	1,000 ft	1,500 ft
Sediment Removal - Minimum						
Maintain Stream Temperature						
Nitrogen Removal - Minimum						
Contaminant Removal						
Large Woody Debris for Stream Habitat						
Effective Sediment Removal						
Short-Term Phosphorus Control						
Effective Nitrogen Removal						
Maintain Diverse Stream Invertebrates						
Bird Corridors						
Reptile and Amphibian Habitat						
Habitat for Interior Forest Species						
Flatwoods Salamander Habitat – Protected Species						

Sources

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Semlitsch, R.D., 1998, Biological Delineation of Terrestrial Buffer Zones for Pond-Breeding Salamanders, *Conservation Biology* 12 (5), pp. 1113-1119.

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Wenger, S. and L. Fowler, 2000, *Protecting Stream and River Corridors: Creating Effective Local Riparian Buffer Ordinances*, Carl Vinson Institute of Government, University of Georgia, Athens, Georgia.

For Further Information Contact:

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