Board of County Commissioners  
Agenda Request

Date of Meeting: March 14, 2017
Date Submitted: March 6, 2017
To: Honorable Chairman and Members of the Board
From: Margaret Emblidge, AICP, Planning and Community Development Director
Agenda Location: Public Hearing - Transmittal

Subject:
CPA16-0006
The applicant is requesting a Text Amendment to the Hendry County Comprehensive Plan Future Land Use Element to amend the Electrical Generating Facility access location standard found in Policy 1.1.14 and adding a specific subarea policy in accordance with same (proposed Policy 1.1.14.3) to allow a solar powered electrical generating facility.

CPA16-0007
The applicant is requesting to amend the Hendry County Comprehensive Plan Future Land Use Map by changing the future land use designation from Agriculture (AG) to Electrical Generating Facility (EGF) on the subject property.

Statement of Issue:
Florida Power & Light Company (FPL) is requesting to amend the Hendry County Comprehensive Plan to allow the “FPL Hammock Solar Energy Center” solar only facility to be located on up to 456 acres of the 957 ± acre site. The facility will be limited to the total generation of 74.5 MW of electricity. CPA16-0006 is a text amendment to Policy 1.1.14 regarding the access location standard and Policy 1.1.14.3 adding a subarea policy for the subject property in accordance with the requirements outlined in the EGF Future Land Use Category (FLUC) description and guidelines. CPA16-0007 is a Future Land Use Map amendment to change the designation of the subject property from Agriculture to Electrical Generating Facility (EGF). Both petitions are fully described in the petition binder Tabs 1 and 2.

This is a transmittal hearing for the Board of County Commissioners (BCC) to recommend to either transmit or not to the State agencies for their review and comment. This is not an adoption hearing.
**Background:**

On April 12, 2016 the BCC adopted a comprehensive plan amendment establishing a new FLUC Electrical Generating Facility (EGF). This FLUC created specific performance standards for an EGF that requires a comprehensive plan amendment for a “Subarea” and a map amendment that will create site specific standards. In addition a PUD rezoning is required that provides even more specificity and conditions of approval to ensure the project will be consistent with the comprehensive plan and all other local, state and federal regulations. The PUD petition will be presented to the BCC at the adoption hearing for the Comprehensive Plan amendments.

**Analysis:**

CPA16-0006 is a text amendment to Policy 1.1.14 regarding the access location standard and Policy 1.1.14.3 adding a subarea policy for the subject property in accordance with the requirements outlined in the EGF Future Land Use Category (FLUC) description and guidelines. The applicant is proposing alternative access for solar power only facilities. Policy 1.1.14 proposes to add the following text to the EGF access standards:

*The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no degradation to the level of service below the adopted standard; an EGF restricted to solar power generation only may or may not have direct access from a public road, but must have permanent legal access to the property.*

The Subarea policy defines the uses and intensity of the proposed Project, specify the dimensional standards, and limit the total area of the site approved for development.

**Policy 1.1.14.3: The development of an electrical generating facility (“Hammock Solar Energy Center”) and related uses will be allowed on approximately 957 ± acres (“Subject Site”), as defined by the legal description included in Comprehensive Plan Amendment No. 16-0006. The electrical generating facility on the Subject Site will be limited to a total of 74.5 Megawatts (MW) of electricity generated by solar photovoltaic facilities.**

Both petitions are fully described in the application binder Tabs 1 and 2. Data and analysis was provided through the various technical assessments found in the application. As assessed and described in the application material, there will be no impacts to the adopted levels of service for public facilities and infrastructure.

Based on the standards set forth in the EGF FLUC Policy 1.1.14, the Subarea Policy 1.1.14.2 and map amendment, Staff finds the proposed petitions to be consistent with the comprehensive plan. Once transmitted, these petitions will be fully vetted with the State Reviewing Agencies through the State Expedited Review process. Comments provided by the agencies will be considered and incorporated into the proposed comprehensive plan language, if appropriate and presented to the BCC for adoption.
**Economic Impact:**

In 2016 Constitutional Amendment 4 was approved resulting in the expansion of the Constitutional provisions regarding exemptions for renewable energy source devices to all real property, not just for real property used for residential purposes. Amendment 4 takes effect January 1, 2018, and expires on December 31, 2037. The language of Amendment 4 provides that the Legislature may enact limitations on the exemption, and thus it is unclear what impact Amendment 4 will have until the Legislature acts on its implementation.

The following assessment was provided by the applicant.

*This summer Florida voters approved a Constitutional amendment (“Amendment 4”) expanding the current Constitutional provisions regarding exemptions for renewable energy source devices to all real property, not just for real property used for residential purposes. As verified by the staff analysis prepared for the House of Representatives, the provisions of the amendment are permissive, and do not require the Legislature to enact implementing legislation. Amendment 4 takes effect January 1, 2018, and expires on December 31, 2037.*

*The language of Amendment 4 provides that the Legislature may enact limitations on the exemption, and thus it is unclear what impact Amendment 4 will have until the Legislature acts on its implementation. As a result, it is unclear what tax revenue will be generated by the construction of the facility.*

*Approximately 501 acres of the 957-acre parcel will continue in its present agriculture use and will be taxed accordingly. Therefore, only the 456-acre facility area is subject to change. Construction of the facility is anticipated to add approximately 200 construction jobs and take approximately 8-12 months. Use of local labor is encouraged, where possible.*

*An economic study was prepared by Fishkind & Associates, Inc. in September 2016 for a similar potential project in Hendry County. It reflects a ratio of approximately 3:1 between direct and indirect economic output to payroll during construction. Based on FPL’s experience, wages for constructing solar fields will range between $12 and $20 per hour. By utilizing a similar approach to the one used by the 2016 Fishkind study, then applying an average of $15 per hour to 200 wage earners working only 8 months, Hammock Solar site conservatively yields approximately $4 million in payroll and $12 million in direct and indirect benefits in Hendry County, including increased local expenditures, goods and services.*

**Local Planning Agency Meeting:**

The petitions will be heard by the Local Planning Agency (LPA) on March 8, 2017. Since this agenda item is due prior to the LPA meeting, Staff will provide a summary of the LPA meeting at the March 14, 2017 meeting. The LPA Staff Report is attached along with the petition binder.
Options:

Option 1: Transmit Petitions CPA16-0006 and CPA16-0007

Option 2: Recommend not to transmit

Option 3: Board direction

Recommendation:

Option 1

Attachment:

1. LPA Staff Report
2. Application Binder
STAFF REPORT
CPA16-0006 TEXT AMENDMENT and CPA16-0007 MAP AMENDMENT
COMPREHENSIVE PLAN AMENDMENT
Local Planning Agency
3/8/2017

Petition Information

Applicant: FLORIDA POWER & LIGHT COMPANY
Owner(s): FLORIDA POWER & LIGHT COMPANY
Agent: ROCK ABOUJAOUDE, P.E., ROCK ENTERPRISES, INC.

Request action: CPA16-0006
The applicant is requesting a Text Amendment to the Hendry County Comprehensive Plan Future Land Use Element to amend the Electrical Generating Facility access location standard found in Policy 1.1.14 and adding a specific subarea policy in accordance with same (proposed Policy 1.1.14.3) to allow a solar powered electrical generating facility.

CPA16-0007
The applicant is requesting to amend the Hendry County Comprehensive Plan Future Land Use Map by changing the future land use designation from Agriculture (AG) to Electrical Generating Facility (EGF) on the subject property.

Location: SEARS RD
1304403A000006.0000; 1304334A000001.0000
1304403A000003.0000; 1304403A000004.0000
1304404A000001.0000; 1304403A000001.0000
1304410A000001.0000; 1304410A000001.0000
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1304409A000002.0000; 1304404A000004.0000
1304404A000011.0000

Zoning: A-2
Future Land Use Map: AGRICULTURE
Size: +/- 957 acres
Existing use on the site: AGRICULTURE

All required petition material has been received. All required notices have been made.
Surrounding Area Information

<table>
<thead>
<tr>
<th></th>
<th>Adjacent existing uses</th>
<th>Adjacent zoning</th>
<th>Adjacent Future Land Use Map Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Agriculture</td>
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<td>Agriculture</td>
</tr>
<tr>
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</tr>
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</tr>
</tbody>
</table>

Summary of Request and Background Information

Florida Power & Light Company (FPL) is requesting to amend the Hendry County Comprehensive Plan to allow the “FPL Hammock Solar Energy Center” solar only facility. CPA16-0006 is a text amendment to Policy 1.1.14 regarding the access location standard and Policy 1.1.14.3 adding a subarea policy for the subject property in accordance with the requirements outlined in the EGF Future Land Use Category (FLUC) description and guidelines. CPA16-0007 is a Future Land Use Map amendment to change the designation of the subject property from Agriculture to Electrical Generating Facility (EGF).

These two comprehensive plan amendment petitions are required to provide data and analysis that includes demonstrating compliance with the proposed EGF FLUC and the Goals, Objectives and Policies of the comprehensive plan (See Tab 16). Data and analysis has been provided in the petition binder and will be referred to throughout the staff report.

This is a public hearing to recommend the Board of County Commissioners (BCC) transmit CPA16-0006 and CPA16-0007 to the state reviewing agencies. In addition to the comprehensive plan amendments a Planned Unit Development (PUD) petition RZ16-0005 is a companion petition to rezone the subject property that will be heard by the Local Planning Agency (LPA) at the same time as the Comprehensive Plan amendments but will not be adopted until the adoption hearing of the comprehensive plan amendments by the BCC.

Project Description

The following is an excerpt of the project description provided by the applicant.

The proposed development known as the FPL Hammock Solar Energy Center is a state of the art electrical generating facility powered by solar energy to be located on up to 456 acres of the 957 ± acre site. The facility will be limited to the total generation of 74.5 MW of electricity.

Solar panels will be installed within the Facility Area designated on the General Concept Plan (GCP) (Exhibit 20). The primary development within Facility Area include solar panels (not to exceed a height of 20') and ancillary equipment and improvements such as transformers, transmission facilities, switchyard and substation facilities, fencing, signage, equipment shed(s), temporary construction office/trailer(s), and water management facilities. The GCP depicts “Open Space” designated on approximately one-third of the Property. The Open Space area contains wetlands, which have not been impacted, and other natural and impacted areas. To facilitate the movement of wildlife, no fencing will be constructed in the Open Space area.

Crossing the Open Space area for connectivity will be authorized by regulatory permitting, if required. The remaining area of the Property – that portion outside of the Facility Area and Open Space area – will continue its existing agriculture use.
The facility will not be subject to the Florida Electrical Power Plant Siting Act (PPSA), ss. 403.501-518, Florida Statutes as it does not meet or exceed the 75 MW generation threshold for same. The facility will be reviewed and permitted in accordance with all applicable federal, state and local regulations.

Location

The subject property is located approximately 7.5 miles east of State Road 29 and approximately 7.5 miles east of State Road 29 and approximately 2 miles north of Sears Road. The applicant states in the application that legal access to the Property will be from the eastern terminus of Sears Road by way of a private road. However, proof of legal access has not been provided, but such documentation will be required prior to Site Development Approval.

Surrounding Land Uses

The Property is remotely located within a rural area of unincorporated Hendry County. Adjacent properties are primarily active agriculture or undeveloped. The existing agricultural uses include citrus and sugarcane production, and water management facilities. The nearest residence is located approximately one mile to the southwest of the subject property.

Proposed Text Amendment to Policy 1.1.14

The applicant is proposing alternative access for solar power only facilities. The petition describes the requested text amendment as follows.

Currently, Policy 1.1.14, Electrical Generating Facility Land Use Category, Location Standards provides, in part:

Lands classified as Electrical Generating Facility shall be located in rural areas of the County, where large amounts of undeveloped acreage exist. The adequacy/appropriateness of EGF project locations will be determined by the Hendry County Board of County Commissioners utilizing the following guidelines:

• The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no degradation to the level of service below the adopted standard.

Solar powered electrical generating facilities do not require public facilities and may be located in remote areas of the County which have access to electrical transmission lines. Solar facilities are monitored remotely and do not require onsite personnel for their day-to-day operation. Only periodic maintenance of grounds and equipment is required. Unlike other electrical generating facilities, a solar powered facility does not need direct access from arterial or collector roads. The subject property does not have direct access to an existing or planned arterial or collector road, but has legal access from a public road. Accordingly, the applicant proposes amending the EGF Location Standard by adding the following language to this subsection (bold, underlined):

• The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no degradation to the level of service below the adopted standard; an EGF restricted to solar power generation only may or may not have direct access from a public road, but must have permanent legal access to the property;

Based on the low impact operations of a solar field Staff is in agreement with the proposed language.
Proposed Subarea Policy 1.1.14.3

The EGF FLUC has been designed to require two comprehensive plan amendments in order to establish a site specific EGF. One of the amendments would be a text amendment to the Future Land Use Element to include a Subarea policy to the EGF Policy 1.1.14 and a second amendment to designate a specific property as an EGF on the future land use map. The Subarea policy must include a description of the facility, including but not limited to the fuel source and estimated power generating capacity.

This text amendment petition proposes the following specific subarea policy that complies with EGF Policy 1.1.14:

Policy 1.1.14.3: The development of an electrical generating facility (“Hammock Solar Energy Center”) and related uses will be allowed on approximately 957 ± acres (“Subject Site”), as defined by the legal description included in Comprehensive Plan Amendment No. 16-0006. The electrical generating facility on the Subject Site will be limited to a total of 74.5 Megawatts (MW) of electricity generated by solar photovoltaic facilities.

CPA16-0007 Proposed Future Land Use Map Amendment

When reviewing a future land use map amendment an assessment must be made as to the suitability of site and map amendment. The assessment includes comparing what could be developed under the current Agriculture (AG) FLUC as compared to developing under the EGF FLUC.

The potential development scenarios under the AG FLUC may include a mine, citrus processing plant, and a single family subdivision at a density of one residential unit per five acres, a citrus grove, animal husbandry, specialty farms, and a solid waste facility to list a few examples. The proposed EGF would not generate any more impacts than some of the uses allowed in the AG FLUC. In addition, the proposed EGF has greater standards it has to meet under the proposed EGF FLUC. Staff reviewed the analyses, reports and studies prepared by the applicant’s experts and have determined that the proposed text amendment and map amendment would be appropriate for the subject property. In Staff’s opinion, the size of the site, location and developable upland areas on the property will accommodate the proposed EFG while allowing for the proposed open space and ongoing agriculture uses.

Consistency with the Comprehensive Plan

The applicant provided an extensive assessment of the consistency with the comprehensive plan which is provided in Tab 16 in the petition binder. Staff is in agreement with the assessment and does not have any objection to the conclusions. Consistency with Policy 1.1.14 Electrical Generating Facility Land Use Category as provided by the applicant is detailed below.

The applicant proposes to develop the solar facility consistent with the standards and guidelines outlined in the EGF Land Use Category. A solar facility is an approved EGF use, the proposed facility demonstrates consistency with the EGF Land Use Category as follows:

Location Standards

- The property is located in a remote, rural area of the County where large amounts of undeveloped acreage exist.
- The facility Area is traversed by an existing, appropriately sized, electrical transmission line to support the facility, located within a 175-foot wide corridor near the Property’s northern boundary; no fuel transportation facilities are required by solar power.
• Only solar power electrical generation will be authorized. Site improvements will be low profile (20’ height limitation for solar panels).
• The facility will be unmanned (only occasionally visited for inspection and maintenance purposes), and will not produce emissions, odors, noise or light pollution, or waste products of any kind. The nearest residence is approximately 1.75 miles from the Facility Area.
• Setbacks will be provided along Property boundaries as depicted on the General Concept Plan (Exhibit 20). Therefore, no buffers are proposed to screen the abutting agricultural uses from proposed improvements.
• Consistent with the proposed Location Standards site access amendment proposed herein, the Property’s permanent legal access is from the eastern terminus of Sears Road by way of a private road. Given that the proposed EGF use is limited to the solar generation of electricity, there is no need for daily employees on site; only visits for facility maintenance. As such, impact on the roadway network for the proposed solar facility will be de minimis.
• The proposed facility is restricted to solar power electricity generation and will not be powered by nuclear, coal, gas or other fossil fuel sources; the proposed facility is not located within two (2) miles of the Big Cypress Seminole Indian Reservation.

Residential/Density

• There are no residences associated with the electrical generating facility proposed.

Non-Residential Intensity

• This standard requires that the proposed electrical generating facility and related structures occupy no more than 70% of the entire site and shall be subject to a maximum impervious surface ratio of 0.70. The General Concept Plan (Exhibit 20) demonstrates compliance with this standard by committing to a Facility Area totaling approximately 48 percent of the property.
• This standard requires that a minimum of thirty percent (30%) of the entire site shall be designated Open Space. The General Concept Plan designates approximately 311 ± acres of the site as Open Space, which equates to 32 percent of the Property. The proposed Open Space complies with the required minimum.

Form of Development Approval

• In accordance with this standard, companion petitions for this text amendment outlining a specific subarea policy and FLUM amendment designating the location of the EGF, together with an associated petition for PUD rezone of the Property, are being filed for the proposed facility.

Special Development Requirements for Electrical Generating Facilities

• The solar powered facility will generate no noise above background levels necessitating mitigation. There are no sensitive noise receptors in the surrounding area.
• Setbacks will be provided along Property boundaries of the Facility Area (Exhibit 20), and a maximum 20 foot height restriction will be provided to reduce potential visual impacts from the proposed electrical generating facility.
• The Property is surrounded by land designated Agriculture on the FLUM which is zoned Ag-2. Residential use is allowed on AG-2 land at a density of one unit per 5 acres. Currently, there is no residential development or designated residential future land use categories within one mile of the Property boundaries.
• There are no air quality impacts associated with the proposed solar power generation.
• Liners and leachate controls will not be required as there will be no fuel storage onsite; there will be no need for by-product storage facilities and/or waste disposal areas as no by-products or wastes will be produced.
• There will be minimal impacts, if any, to environmentally sensitive areas on the site which will be mitigated in accordance with review and regulations by the applicable local, state and federal agencies.
• There is no proposed development within the 100-year floodplain, therefore compensatory storage is not required.
• No industrial wastewater will be generated on site.
• No centralized potable water system is available to the site. Potable water, if required, will be by onsite well permitted in accordance with law.

Compliance

• The proposed facility will be limited to a total capacity of 74.5 MW and is therefore not subject to the Florida Electrical Power Plant Siting Act (PPSA).
• The proposed facility will comply with all applicable federal, state and local regulations including the Goals, Objectives and Policies of the Hendry County Comprehensive Plan, and will be subject to the conditions and requirements of its PUD rezone.
• The proposed facility will comply with the requirements of the EGF land use category and its guidelines.

Infrastructure/Public Facilities

The proposed text amendment and map amendment for a solar powered electrical generating facility does not significantly impact the County’s adopted levels of service for public facilities. The development standards and guidelines outlined in and mandated by the EGF future land use category provide assurances that proposed development of the subject property would not negatively impact public facilities. The applicant provided a detailed assessment of the potential for impacts found in the petition on pages 10-13. Staff is in agreement with the findings.

Environmental and Archaeological Assessments

Technical assessments were also required to address the potential impacts to archaeological sites, wetlands and wildlife in order for staff to make a recommendation and to determine appropriate conditions of approval.

The following summaries were provided by the applicant and the technical reports are found in the appendix of the companion comprehensive plan amendments petition binder.

Wetlands and Wildlife

The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. (Exhibit 13). Based upon sound environmental planning, the Facility Area was delineated on land that has historically been heavily impacted by citrus farming. Thirty-two percent (32%) of the site including wetlands and other communities is designated as “Open Space” on the General Concept Plan (Exhibit 20).

The Open Space area has been established with a clear understanding of the habitats onsite, the listed species documented as occurring onsite and areas of five (5) acres or more dominated by 50 percent or more of native vegetation (Policies 1.10.4 and 6.2.7, Hendry County Comprehensive Plan). The Open Space area incorporates habitat suitable for use by listed species; the remainder of the site is heavily impacted with citrus groves. No wetland impacts are proposed. Any unavoidable Wetland impacts will be subject to the review and approval of applicable local, state and federal agencies.
Archaeological and Historical

In October 2016 SEARCH, Inc. performed site reconnaissance for its November 2016 Cultural Resources Assessment Survey (Exhibit 14). The 457 acre area studied includes all of the Facility Area. Field investigations will be expanded to other areas of the Site and an amended Cultural Resources Assessment Survey shall be submitted in support of any future application for PUD amendment to change the existing use of said areas.

The Hammock Solar Energy Center Survey targeted the Facility Area as the “Area of Potential Effect (APE).” The purpose of the survey was to identify and document archaeological resources, historic structures, and other cultural resources within the APE and to assess their potential for listing in the National Register of Historic Places (NRHP). The analysis included review of the Florida Master Site File for recorded cultural sites and fieldwork consisting of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests throughout the APE. No archaeological sites, resource groups, or historic buildings were identified within the APE. The Survey concluded that no historic properties will be affected by development within the Facility Area.

Economic Impact

The following assessment was provided by the applicant.

This summer Florida voters approved a Constitutional amendment (“Amendment 4”) expanding the current Constitutional provisions regarding exemptions for renewable energy source devices to all real property, not just for real property used for residential purposes. As verified by the staff analysis prepared for the House of Representatives, the provisions of the amendment are permissive, and do not require the Legislature to enact implementing legislation. Amendment 4 takes effect January 1, 2018, and expires on December 31, 2037.

The language of Amendment 4 provides that the Legislature may enact limitations on the exemption, and thus it is unclear what impact Amendment 4 will have until the Legislature acts on its implementation. As a result, it is unclear what tax revenue will be generated by the construction of the facility.

Approximately 501 acres of the 957-acre parcel will continue in its present agriculture use and will be taxed accordingly. Therefore, only the 456-acre facility area is subject to change. Construction of the facility is anticipated to add approximately 200 construction jobs and take approximately 8-12 months. Use of local labor is encouraged, where possible.

An economic study was prepared by Fishkind & Associates, Inc. in September 2016 for a similar potential project in Hendry County. It reflects a ratio of approximately 3:1 between direct and indirect economic output to payroll during construction. Based on FPL’s experience, wages for constructing solar fields will range between $12 and $20 per hour. By utilizing a similar approach to the one used by the 2016 Fishkind study, then applying an average of $15 per hour to 200 wage earners working only 8 months, Hammock Solar site conservatively yields approximately $4 million in payroll and $12 million in direct and indirect benefits in Hendry County, including increased local expenditures, goods and services.

Based on the impending legislation it is unknown as to whether there will be any taxable benefits from this project. However, there are potential benefits from the construction phase that the County can rely on.
**Conclusion**

Staff finds the proposed Subarea policy text amendments and map amendment consistent with the comprehensive plan and the EGF FLUC. As important, the required standards in the EGF FLUC, Subarea policy and companion PUD rezoning will ensure the environmental, historical, floodplain, stormwater, water supply and all other public facilities will be addressed in accordance with all local, state and federal requirements.

**Recommendation**

Staff recommends the Local Planning Agency submit a recommendation to the Board of County Commissioners to transmit Petitions CPA16-0006 and CPA16-0007 to the Florida Department of Economic Opportunity for review in accordance with the State Expedited Review Process, Sections 163.3184(3) and (5), Florida Statutes.

**Attachments:**

Petition Binder dated February 2017
FPL HAMMOCK SOLAR ENERGY CENTER

Applications for Comprehensive Plan Text and Future Land Use Map Amendment

Prepared for:
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

Prepared by:
ROCK ENTERPRISES, INC.
ENGINEERING CONSULTANTS
870 W. Hickpochee Ave
Suite 100
LaBelle, FL 33935

February 2017
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>EXHIBIT LIST</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>iv</td>
</tr>
<tr>
<td><strong>APPLICATION 1 – COMPREHENSIVE PLAN TEXT AMENDMENT</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Applicant</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Authorized Agent and Legal Counsel</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Submittal Requirements</td>
<td>1</td>
</tr>
<tr>
<td>1.4 Proposed Future Land Use Element Text Amendment Request</td>
<td>2</td>
</tr>
<tr>
<td>1.4.1 EGF Location Standards – Alternative Access for Solar Power Facilities</td>
<td>2</td>
</tr>
<tr>
<td>1.4.2 EGF Form of Development Approval - Specific Subarea Policy</td>
<td>3</td>
</tr>
<tr>
<td>1.5 The Facility</td>
<td>3</td>
</tr>
<tr>
<td>1.5.1 Location of Property</td>
<td>3</td>
</tr>
<tr>
<td>1.5.2 Parcel Identification Numbers</td>
<td>4</td>
</tr>
<tr>
<td>1.5.3 Section, Township, Range</td>
<td>4</td>
</tr>
<tr>
<td>1.5.4 Property Size</td>
<td>5</td>
</tr>
<tr>
<td>1.5.5 Property Description – Existing Land Use</td>
<td>5</td>
</tr>
<tr>
<td>1.5.6 Surrounding Land Uses</td>
<td>5</td>
</tr>
<tr>
<td>1.5.7 Comprehensive Plan Future Land Use Designation – Existing</td>
<td>5</td>
</tr>
<tr>
<td>1.5.8 Comprehensive Plan Future Land Use Designation - Proposed</td>
<td>6</td>
</tr>
<tr>
<td>1.5.9 Proposed Development</td>
<td>6</td>
</tr>
<tr>
<td>1.6 Data and Analysis</td>
<td>7</td>
</tr>
<tr>
<td>1.6.1 Consistency with Policy 1.1.14 Electrical Generating Facility Land Use Category</td>
<td>7</td>
</tr>
<tr>
<td>1.6.2 Land Use Evaluation and Analysis</td>
<td>9</td>
</tr>
<tr>
<td>1.6.2.1 Suitability</td>
<td>10</td>
</tr>
<tr>
<td>1.6.2.2 Existing Maximum Development Potential</td>
<td>10</td>
</tr>
<tr>
<td>1.6.3 Analysis of Impacts on Public Facilities</td>
<td>10</td>
</tr>
<tr>
<td>1.6.3.1 Potable Water and Sanitary Sewer</td>
<td>10</td>
</tr>
<tr>
<td>1.6.3.2 Arterial and Collector Roads</td>
<td>11</td>
</tr>
<tr>
<td>1.6.3.3 Drainage</td>
<td>11</td>
</tr>
<tr>
<td>1.6.3.4 Solid Waste</td>
<td>12</td>
</tr>
<tr>
<td>1.6.3.5 Recreation and Open Space</td>
<td>12</td>
</tr>
<tr>
<td>1.6.3.6 Schools</td>
<td>12</td>
</tr>
<tr>
<td>1.6.3.7 Fire Protection</td>
<td>12</td>
</tr>
<tr>
<td>1.6.3.8 Law Enforcement</td>
<td>13</td>
</tr>
<tr>
<td>1.6.3.9 Emergency Medical Services</td>
<td>13</td>
</tr>
<tr>
<td>1.6.3.10 Well Fields and Cones of Influence</td>
<td>13</td>
</tr>
<tr>
<td>1.6.4 Site Assessments and Impact Analysis</td>
<td>13</td>
</tr>
<tr>
<td>1.6.4.1 Archaeological and Historical</td>
<td>13</td>
</tr>
<tr>
<td>1.6.4.2 Wetlands and Wildlife</td>
<td>14</td>
</tr>
<tr>
<td>1.6.4.3 Visual / Aesthetic</td>
<td>14</td>
</tr>
<tr>
<td>1.6.4.4 Economic Impact</td>
<td>14</td>
</tr>
<tr>
<td>1.6.5 Compatibility with Surrounding Land Uses</td>
<td>15</td>
</tr>
<tr>
<td>1.7 Consistency with the Hendry County Comprehensive Plan</td>
<td>16</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

## APPLICATION 2 – FUTURE LAND USE MAP AMENDMENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Applicant</td>
<td>1</td>
</tr>
<tr>
<td>2.2</td>
<td>Authorized Agent and Legal Counsel</td>
<td>1</td>
</tr>
<tr>
<td>2.3</td>
<td>Submittal Requirements</td>
<td>1</td>
</tr>
<tr>
<td>2.4</td>
<td>Proposed Future Land Use Map Amendment Request</td>
<td>2</td>
</tr>
<tr>
<td>2.5</td>
<td>The Facility</td>
<td>2</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Location of Property</td>
<td>2</td>
</tr>
<tr>
<td>2.5.2</td>
<td>Parcel Identification Numbers</td>
<td>3</td>
</tr>
<tr>
<td>2.5.3</td>
<td>Section, Township, Range</td>
<td>3</td>
</tr>
<tr>
<td>2.5.4</td>
<td>Property Size</td>
<td>3</td>
</tr>
<tr>
<td>2.5.5</td>
<td>Property Description – Existing Land Use</td>
<td>4</td>
</tr>
<tr>
<td>2.5.6</td>
<td>Surrounding Land Uses</td>
<td>4</td>
</tr>
<tr>
<td>2.5.7</td>
<td>Comprehensive Plan Future Land Use Designation – Existing</td>
<td>4</td>
</tr>
<tr>
<td>2.5.8</td>
<td>Comprehensive Plan Future Land Use Designation - Proposed</td>
<td>5</td>
</tr>
<tr>
<td>2.5.9</td>
<td>Proposed Development</td>
<td>5</td>
</tr>
<tr>
<td>2.6</td>
<td>Data and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>2.6.1</td>
<td>Consistency with Policy 1.1.14 Electrical Generating Facility</td>
<td>6</td>
</tr>
<tr>
<td>2.6.2</td>
<td>Land Use Evaluation and Analysis</td>
<td>8</td>
</tr>
<tr>
<td>2.6.2.1</td>
<td>Suitability</td>
<td>8</td>
</tr>
<tr>
<td>2.6.2.2</td>
<td>Existing Maximum Development Potential</td>
<td>9</td>
</tr>
<tr>
<td>2.6.3</td>
<td>Analysis of Impacts on Public Facilities</td>
<td>9</td>
</tr>
<tr>
<td>2.6.3.1</td>
<td>Potable Water and Sanitary Sewer</td>
<td>9</td>
</tr>
<tr>
<td>2.6.3.2</td>
<td>Arterial and Collector Roads</td>
<td>10</td>
</tr>
<tr>
<td>2.6.3.3</td>
<td>Drainage</td>
<td>10</td>
</tr>
<tr>
<td>2.6.3.4</td>
<td>Solid Waste</td>
<td>11</td>
</tr>
<tr>
<td>2.6.3.5</td>
<td>Recreation and Open Space</td>
<td>11</td>
</tr>
<tr>
<td>2.6.3.6</td>
<td>Schools</td>
<td>11</td>
</tr>
<tr>
<td>2.6.3.7</td>
<td>Fire Protection</td>
<td>11</td>
</tr>
<tr>
<td>2.6.3.8</td>
<td>Law Enforcement</td>
<td>12</td>
</tr>
<tr>
<td>2.6.3.9</td>
<td>Emergency Medical Services</td>
<td>12</td>
</tr>
<tr>
<td>2.6.3.10</td>
<td>Well Fields and Cones of Influence</td>
<td>12</td>
</tr>
<tr>
<td>2.6.4</td>
<td>Site Assessments and Impact Analysis</td>
<td>12</td>
</tr>
<tr>
<td>2.6.4.1</td>
<td>Archaeological and Historical</td>
<td>12</td>
</tr>
<tr>
<td>2.6.4.2</td>
<td>Wetlands and Wildlife</td>
<td>13</td>
</tr>
<tr>
<td>2.6.4.3</td>
<td>Visual / Aesthetic</td>
<td>13</td>
</tr>
<tr>
<td>2.6.4.4</td>
<td>Economic Impact</td>
<td>13</td>
</tr>
<tr>
<td>2.6.5</td>
<td>Compatibility with Surrounding Land Uses</td>
<td>14</td>
</tr>
<tr>
<td>2.7</td>
<td>Consistency with the Hendry County Comprehensive Plan</td>
<td>15</td>
</tr>
</tbody>
</table>
## COMPREHENSIVE PLAN AMENDMENT
### EXHIBIT LIST

<table>
<thead>
<tr>
<th>Description</th>
<th>Exhibit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Plan Amendment Application</td>
<td>1</td>
</tr>
<tr>
<td>Special Warranty Deed</td>
<td>2</td>
</tr>
<tr>
<td>Pre-Application Conference Notes</td>
<td>3</td>
</tr>
<tr>
<td>Boundary Survey</td>
<td>4</td>
</tr>
<tr>
<td>Property Legal Description</td>
<td>5</td>
</tr>
<tr>
<td>Area Location Map</td>
<td>6</td>
</tr>
<tr>
<td>Aerial Photograph of the Property</td>
<td>7</td>
</tr>
<tr>
<td>Notarized Letter of Owner’s Authorization</td>
<td>8</td>
</tr>
<tr>
<td>Existing Land Uses and Principal Roadways Within 750’</td>
<td>9</td>
</tr>
<tr>
<td>Traffic Impact Statement</td>
<td>10</td>
</tr>
<tr>
<td>Flood Insurance Rate Map</td>
<td>11</td>
</tr>
<tr>
<td>Oil Well Fields and Cones of Influence Map</td>
<td>12</td>
</tr>
<tr>
<td>Environmental Assessment Report</td>
<td>13</td>
</tr>
<tr>
<td>Cultural Resources Assessment Survey</td>
<td>14</td>
</tr>
<tr>
<td>SFWMD Permit No. 26-00279-S (excerpt)</td>
<td>15</td>
</tr>
<tr>
<td>Statement of Comprehensive Plan Consistency</td>
<td>16</td>
</tr>
<tr>
<td>Florida Land Use, Cover, and Forms Classification System (FLUCFCS) map</td>
<td>17</td>
</tr>
<tr>
<td>Current Future Land Use Map (FLUM - existing)</td>
<td>18</td>
</tr>
<tr>
<td>Proposed Future Land Use Map (FLUM – proposed)</td>
<td>19</td>
</tr>
<tr>
<td>General Concept Plan</td>
<td>20</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Florida Power & Light Company (FPL) is the property owner of approximately 957 ± acres of land (the “Property”) which is located approximately 5 miles south of the intersection of SR 80 and SR 29 in LaBelle and approximately 7.5 miles east of SR 29 in unincorporated Hendry County. Legal access to the Property is from the eastern terminus of Sears Road by way of a private road. FPL proposes to develop up to 456 acres of the Property with a state of the art electrical generating facility powered by solar energy to be known as the FPL Hammock Solar Energy Center.

Hendry County development approval of the project will be accomplished by the amendment of the Hendry County Comprehensive Plan and Future Land Use Map to change the Property’s present Agriculture future land use designation to Electrical Generating Facility. Applicant will then follow the text and map amendments with an application for Planned Unit Development Rezone. Final permitting will then follow with Applicant’s request for a Site Development Plan.

This submittal includes the application forms and supporting documentation to amend the Hendry County Comprehensive Plan as follows:

1. APPLICATION 1 – COMPREHENSIVE PLAN TEXT AMENDMENT
   The purpose of this proposed text amendment is twofold: (1) to provide an alternate access standard for solar-only facilities, and (2) to provide a specific subarea policy for the Property describing the specific electrical generating facility that may be constructed on the Property.

2. APPLICATION 2 – FUTURE LAND USE MAP AMENDMENT
   The purpose of the map amendment is to change the future land use designation for the Property from Agriculture to Electrical Generating Facility (EGF).
APPLICATION 1
COMPREHENSIVE PLAN TEXT AMENDMENT

EGF Access and Specific Subarea Policy

1.1 – Applicant

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1.3 – Submittal Requirements

The attached Exhibits itemized on the Exhibit List are incorporated herein and include the relevant Submittal Requirements listed on the Application form, together with Additional Data, Materials and Information discussed in the narrative below.
1.4 – Proposed Future Land Use Element Text Amendment Request

Applicant’s Comprehensive Plan text amendment application (APPLICATION 1) is a companion application to its Future Land Use Map amendment application (APPLICATION 2) included in this submittal document. These petitions are filed in support of Applicant’s request to develop land for an electrical generation facility in Hendry County to be powered exclusively by solar energy.

This text amendment application requests the amendment of Hendry County Comprehensive Plan, Policy 1.1.14 Electrical Generating Facility Land Use Category (EGF), to provide an alternate access standard for solar powered electrical generating facilities as set forth in subsection 1.4.1 below, and to provide a specific subarea policy for the “Property” (that real property made the subject of this request as described in the Surveyor’s Description on the Boundary Survey attached as Exhibit 4) in accordance with the requirements outlined in the EGF future land use category description and guidelines as set forth in subsection 1.4.2 below. While the map amendment proposes to change the future land use designation on the Property from Agriculture to Electrical Generating Facility, this text amendment request describes the specific electrical generating facility that may be constructed on the Property.

1.4.1 – EGF Location Standards – Alternative Access for Solar Power Facilities

Currently, Policy 1.1.14, Electrical Generating Facility Land Use Category, Location Standards provides, in part:

Lands classified as Electrical Generating Facility shall be located in rural areas of the County, where large amounts of undeveloped acreage exist. The adequacy/appropriateness of EGF project locations will be determined by the Hendry County Board of County Commissioners utilizing the following guidelines:

- The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no degradation to the level of service below the adopted standard.

Solar powered electrical generating facilities do not require public facilities and may be located in remote areas of the County which have access to electrical transmission lines. Solar facilities are monitored remotely and do not require onsite personnel for their day-to-day operation. Only periodic maintenance of grounds and equipment is required. Unlike other electrical generating facilities, a solar powered facility does not need direct access from arterial or collector roads. Applicant’s Property does not have direct access to an existing or planned arterial or collector road, but has legal access from a public road. Accordingly, Applicant proposes amending the EGF Location Standard by adding the following language to this subsection (bold, underlined, not italicized):

- The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no
degradation to the level of service below the adopted standard; an EGF restricted to solar power generation only may or may not have direct access from a public road, but must have permanent legal access to the property;

1.4.2 – EGF Form of Development Approval - Specific Subarea Policy

Policy 1.1.14, Electrical Generating Facility Land Use Category, Form of Development Approval, provides, in part for the filing of:

- A comprehensive plan text amendment outlining a specific subarea policy applicable to the EGF, including, but not limited to, fuel source and estimated power generating capacity.

Pursuant to said subsection, Applicant requests an amendment to the Hendry County Comprehensive Plan Future Land Use Element text to add a subarea policy (proposed Policy 1.1.14.3) which identifies specific details applicable to the proposed solar facility. This text amendment application proposes the following specific subarea policy for the Property in accordance with the requirements outlined in Policy 1.1.14, Electrical Generating Facility Land Use Category (the proposed amended text is in bold print and underlined):

**Policy 1.1.14.3:** The development of an electrical generating facility (“Hammock Solar Energy Center”) and related uses will be allowed on approximately 957 ± acres (“Subject Site”), as defined by the legal description included in Comprehensive Plan Amendment No. 16-0006. The electrical generating facility on the Subject Site will be limited to a total of 74.5 Megawatts (MW) of electricity generated by solar photovoltaic facilities.

1.5 – The Facility

The proposed “facility”, known as the FPL Hammock Solar Energy Center (“Hammock Solar Energy Center”), is a state of the art electrical generating facility powered exclusively by solar energy to be located on up to 456 acres of Applicant’s 957 ± acre Property as more particularly described herein.

1.5.1 – Location of Property

The Property is generally located approximately 5 miles south of the intersection of State Road 80 and State Road 29 in LaBelle and approximately 7.5 miles east of State Road 29 in unincorporated Hendry County, Florida. Legal access to the Property is from the eastern terminus of Sears Road by way of a private road.
Other geographic features within proximity to the Property include the following (estimated straight lines):

<table>
<thead>
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<th>Geographic Feature</th>
<th>Approximate Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felda</td>
<td>12 miles</td>
</tr>
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<td>City of Clewiston</td>
<td>23 miles</td>
</tr>
<tr>
<td>Lake Okeechobee</td>
<td>17 miles</td>
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</tbody>
</table>

The Property is depicted on the Area Location Map (Exhibit 6) and Aerial Photograph of Property (Exhibit 7).

### 1.5.2 – Parcel Identification Numbers

The Property is comprised of twenty-one (21) contiguous parcels of land which are identified by the Hendry County Property Appraiser with the following parcel ID numbers:

<table>
<thead>
<tr>
<th>Hendry County Parcel ID Numbers</th>
</tr>
</thead>
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<tr>
<td>1-30-44-03-A00-0006.0000</td>
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<td>1-30-44-04-A00-0001.0000</td>
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</tr>
</tbody>
</table>

### 1.5.3 – Section, Township, Range

As shown on the legal description (Exhibit 5), the Property is located within the following Sections, Townships and Range:

Sections 33 and 34, Township 43 South, Range 30 East and Sections 3, 4, 9 and 10, Township 44 South, Range 30 East.
1.5.4 – Property Size

As shown on the Boundary Survey (Exhibit 4), the total size of the Property is 957.37 acres (“957 ± acres”). The Property is described in the Surveyor’s Description on the Boundary Survey and in the Legal Description attached (Exhibits 4 and 5).

1.5.5 – Property Description – Existing Land Use

The Property’s land use is Agriculture and it is zoned AG-2. Approximately two-thirds of the irregularly shaped Property is highly impacted uplands utilized in active citrus production. The remainder of the Property contains wetlands, and other adjoining natural and impacted areas. An existing 175 feet wide electrical transmission line corridor traverses the Property near its northern boundary which will be used to transmit electricity from the proposed facility to Florida’s electrical grid. Access to the Property is from the eastern terminus of Sears Road by way of a private road.

1.5.6 – Surrounding Land Uses

The Property is remotely located within a rural area of unincorporated Hendry County. Contiguous parcels and parcels in the general area are farmed or remain undeveloped in their natural state. Existing farming (agricultural) uses include citrus and sugarcane production, and water management facilities. The electric transmission line corridor discussed in the previous subsection extends offsite to the east and west. The nearest residence is located approximately one mile to the southwest of the Property boundary. A summary of existing land uses within 750 feet of the Property is attached (Exhibit 9).

1.5.7 – Comprehensive Plan Future Land Use Designation – Existing

The Property is designated Agriculture on the Hendry County Comprehensive Plan Future Land Use Map (Exhibit 18). “The purpose of the Agriculture Land Use Category is to define those areas within Hendry County which will continue in a rural and/or agricultural state through the planning horizon of 2040” (Policy 1.1.1, Agriculture Future Land Use Category).

Lands classified as Agriculture are primarily rural areas of the County. Land uses authorized within this designation are divided into two (2) categories: Level one and Level two. Level one uses include the production of food, feed, fiber and other goods by the growing and/or harvesting of plants, animals and other life forms, specialty farms, animal husbandry, production and processing of agricultural products, including bi-products, ornamental horticulture, nurseries, food processing and production, rural residential, agricultural housing and retail oriented to agricultural uses. State of Florida Everglades Restoration projects and activities are also permitted as level one uses in the Agriculture land use category. Level one uses may occur as permitted uses, special exceptions or accessory uses, as outlined in the County’s Land Development Code.
Level two uses, which require rezoning to a Planned Unit Development (PUD) to determine the appropriateness of the use on a particular property, include utilities, biofuel plants, mining and earth extraction and processing operations, solid waste facilities, recreation uses, resource recovery facilities and other similar uses.

The maximum permissible residential density in the Agriculture future land use category is one (1) unit per five (5) acres. Farm worker housing is permitted at a maximum density of six (6) units per acre for attached and detached residences, mobile homes and duplexes. Multi-family farm worker housing projects are permitted at a maximum density of ten (10) units per acre, and require the provision of central water and central sewer systems. There is no minimum Open Space requirement; however, the maximum floor area ratio (FAR) for non-agricultural/non-residential uses is 0.40.

The potential density and/or intensity impacts of the Property’s existing land use are substantially greater than those of the proposed EGF land use designation.

The properties surrounding the subject site and within the immediate area are also designated Agriculture on the County’s Future Land Use Map.

1.5.8 – Comprehensive Plan Future Land Use Designation – Proposed

This plan amendment proposal requests to change the future land use designation of the Property from Agriculture (AG) to Electrical Generating Facility (EGF). The proposed Future Land Use Map is attached (Exhibit 19). The purpose of the EGF future land use element is to “Provide guidelines for future designation of areas within Hendry County which can be utilized for electrical generating facilities . . . .” As established by the EGF category, an electrical generating facility on the Property would be required to comply with the guidelines and standards for the location and intensity of such electrical generating facilities and associated uses.

1.5.9 – Proposed Development

The proposed development known as the FPL Hammock Solar Energy Center ("Hammock Solar Energy Center" or “facility”) is a state of the art electrical generating facility powered by solar energy to be located on up to 456 acres of Applicant’s 957 ± acre site. The facility will be limited to the total generation of 74.5 MW of electricity.

Solar panels will be installed within the Facility Area designated on the attached General Concept Plan (Exhibit 20). Major improvements to the Facility Area include solar panels (not to exceed a height of 20’) and ancillary equipment and improvements such as transformers, transmission facilities, switchyard and substation facilities, fencing, signage, equipment shed(s), temporary construction office/trailer(s), and water management facilities. The GCP depicts “Open Space” designated on approximately one-third of the Property. The Open Space area contains wetlands, which have not been impacted, and other natural and impacted areas. To facilitate the movement of wildlife, no fencing will be constructed in the Open Space area.
Crossing the Open Space area for connectivity will be authorized by regulatory permitting, if required. The remaining area of the Property – that portion outside of the Facility Area and Open Space area – will continue its existing agriculture use.

Solar panels are passive structures that are not powered by any fossil fuel source (only sunlight), do not require water for their operation, and do not produce emissions, odors, noise or light pollution, or waste products of any kind. The maximum height of the facility’s solar panels is twenty feet (20’).

The Hammock Solar Energy Facility will create clean, renewable energy by converting sunlight via photovoltaic solar arrays into direct current (DC) electricity and then converting it into alternating current (AC) utilizing power inverters. The zero-emissions electricity then travels through transformers where the voltage is boosted for transmission through the electric grid where it is distributed to homes and businesses.

The facility will not be subject to the Florida Electrical Power Plant Siting Act (PPSA), ss. 403.501-518, Florida Statutes as it does not meet or exceed the 75 MW generation threshold for same. The facility will be reviewed and permitted in accordance with all applicable federal, state and local regulations.

The proposed development requires approval of this Comprehensive Plan text amendment, a Future Land Use Map amendment, and a Planned Unit Development (PUD) rezone of the Property.

1.6 – Data and Analysis

1.6.1 – Consistency with Policy 1.1.14 Electrical Generating Facility Land Use Category

Applicant proposes to develop the solar facility consistent with the standards and guidelines outlined in the EGF Land Use Category, as amended. As an approved EGF use, the proposed facility on the Property demonstrates consistency with the EGF Land Use Category as follows:

Location Standards

- The Property is located in a remote, rural area of the County where large amounts of undeveloped acreage exist.
- The Facility Area is traversed by an existing, appropriately sized, electrical transmission line to support the facility, located within a 175-foot wide corridor near the Property’s northern boundary; no fuel transportation facilities are required by solar power.
- Only solar power electrical generation will be authorized. Site improvements will be low profile (20’ height limitation for solar panels). The facility will be unmanned (only
occasionally visited for inspection and maintenance purposes), and will not produce emissions, odors, noise or light pollution, or waste products of any kind. The nearest residence is approximately 1.75 miles from the Facility Area. Setbacks will be provided along Property boundaries as depicted on the General Concept Plan (Exhibit 20). Therefore, no buffers are proposed to screen the abutting agricultural uses from proposed improvements.

- Consistent with the proposed Location Standards site access amendment proposed herein, the Property’s permanent legal access is from the eastern terminus of Sears Road by way of a private road. Given that the proposed EGF use is limited to the solar generation of electricity, there is no need for daily employees on site; only visits for facility maintenance. As such, impact on the roadway network for the proposed solar facility will be de minimis.
- The proposed facility is restricted to solar power electricity generation and will not be powered by nuclear, coal, gas or other fossil fuel sources; the proposed facility is not located within two (2) miles of the Big Cypress Seminole Indian Reservation.

Residential/Density

- There are no residences associated with the electrical generating facility proposed.

Non-Residential Intensity

- This standard requires that the proposed electrical generating facility and related structures occupy no more than 70% of the entire site and shall be subject to a maximum impervious surface ratio of 0.70. The General Concept Plan (Exhibit 20) demonstrates compliance with this standard by committing to a Facility Area totaling approximately 48 percent of the property.
- This standard requires that a minimum of thirty percent (30%) of the entire site shall be designated Open Space. The General Concept Plan designates approximately 311 ± acres of the site as Open Space, which equates to 32 percent of the Property. The proposed Open Space complies with the required minimum.

Form of Development Approval

- In accordance with this standard, companion applications for this text amendment outlining a specific subarea policy and FLUM amendment designating the location of the EGF, together with an associated application for PUD rezone of the Property, are being filed for the proposed facility.

Special Development Requirements for Electrical Generating Facilities

- The solar powered facility will generate no noise above background levels necessitating mitigation. There are no sensitive noise receptors in the surrounding area.
- Setbacks will be provided along Property boundaries of the Facility Area (Exhibit 20), and a maximum 20 foot height restriction will be provided to reduce potential visual
impacts from the proposed electrical generating facility.

- The Property is surrounded by land designated Agriculture on the FLUM which is zoned Ag-2. Residential use is allowed on AG-2 land at a density of one unit per 5 acres. Currently, there is no residential development or designated residential future land use categories within one mile of the Property boundaries.
- There are no air quality impacts associated with the proposed solar power generation.
- Liners and leachate controls will not be required as there will be no fuel storage onsite; there will be no need for by-product storage facilities and/or waste disposal areas as no by-products or wastes will be produced.
- There will be minimal impacts, if any, to environmentally sensitive areas on the site which will be mitigated in accordance with review and regulations by the applicable local, state and federal agencies.
- There is no proposed development within the 100-year floodplain, therefore compensatory storage is not required.
- No industrial wastewater will be generated on site.
- No centralized potable water system is available to the site. Potable water, if required, will be by onsite well permitted in accordance with law.

Compliance

- The proposed facility will be limited to a total capacity of 74.5 MW and is therefore not subject to the Florida Electrical Power Plant Siting Act (PPSA).
- The proposed facility will comply with all applicable federal, state and local regulations including the Goals, Objectives and Policies of the Hendry County Comprehensive Plan, and will be subject to the conditions and requirements of its PUD rezone.
- The proposed facility will comply with the requirements of the EGF land use category and its guidelines.

Filed concurrently with this future land use text amendment, and as required by the EGF land use category, is a separate map amendment application (Application 2) which is proposed in conjunction with this application. The map amendment application requests to amend the Hendry County Comprehensive Plan Future Land Use Map (FLUM) for the subject Property by changing its future land use designation from Agriculture (AG) to Electrical Generating Facility (EGF). As required by the EGF Future Land Use category, an application to rezone the Property to a Planned Unit Development (PUD) will also be filed with Hendry County.

1.6.2 – Land Use Evaluation and Analysis

The proposed Comprehensive Plan Amendment was evaluated and analyzed to determine the Property’s suitability for the Proposed Development and the existing maximum development potential for the Property. Compatibility with surrounding land uses and facility impacts are discussed in later sections as is the proposal’s consistency with the documented Goals, Objectives and Policies of the Hendry County Comprehensive Plan.
1.6.2.1 – Suitability

The Property is suitable for the proposed future land use designation and electrical generating facility as demonstrated by the analyses, reports and studies that have been prepared by the Applicant’s experts. These analyses, reports and studies are included as part of this Application and are contained within the attached Exhibits.

1.6.2.2 – Existing Maximum Development Potential

Maximum development potential was considered based on the current future land use category designation on the property. Under the Agriculture designation, the Property could potentially be developed with a varied range of Level one and Level two uses described in Section 1.5.7, above. For example, the maximum rural residential density permitted in the Agriculture land use category is specified as one (1) dwelling unit per five (5) acres. Although the Property’s future land use designation also permits farmworker housing at densities between six (6) and ten (10) dwelling units per acre, the most probable development scenario for the Property would be non-farmworker related, single family residences. Therefore, with a rezoning of the Property to a Planned Unit Development (PUD), a residential development could be approved for up to 191 residential lots on the 957 ± acre Property. This type of maximum development scenario would require clustering of residential units within the upland area to preserve the wetland areas.

The potential density impacts of the Property’s existing land use are substantially greater than those of the proposed EGF land use designation which has no residential element.

1.6.3 – Analysis of Impacts on Public Facilities

The facility will comply with the Level of Service standards for public facilities and services described in the Hendry County Comprehensive Plan, Chapter 5: Infrastructure Element. Each of the necessary public facilities and services in Chapter 5 have been evaluated.

The proposed electrical generating facility use will not adversely impact the County’s adopted levels of service for public facilities. There will be no impact on public potable water, sanitary wastewater service, solid waste disposal or recreational facilities. Area roadways will not be adversely impacted, drainage (stormwater management) will be addressed onsite, and offsite discharge will not exceed historic levels. No new public stormwater facilities will be required for the construction of the facility. The proposed development will have no impact on aquifer recharge. Public facilities are discussed with particularity in the following subsections.

1.6.3.1 – Potable Water and Sanitary Sewer

There is no centralized public potable water service or centralized sanitary sewer system available to the site, nor are such services included on any existing County Capital
Improvement Plan for this area. There is no need for such facilities to serve a solar energy facility. Consequently, the facility will have no impact on same.

Potable water, although not likely to be required, will be supplied to the facility by onsite well permitted, constructed and approved in accordance with Hendry County Health Department permitting criteria and the applicable chapter of the Florida Administrative Code.

Domestic wastewater which may be generated at the proposed facility, if any, will be served by a septic system. Such system will be permitted, constructed and approved in accordance with all applicable State and local regulations and standards including Hendry County Health Department permitting criteria and Chapter 64E-6 of the Florida Administrative Code. The adequacy of onsite soils to support an onsite septic system will be determined at the design stage and soil will be imported for such purpose, if necessary. Portable restrooms may be utilized on a temporary basis as necessary. No industrial wastewater will be generated on site.

1.6.3.2 – Arterial and Collector Roads

The proposed facility will have a de minimis impact on public roadways, and will not degrade the level of service of area roadways below their adopted level of service standards as discussed in the attached Traffic Impact Statement (Exhibit 10). Once operational the facility will not require daily onsite personnel; it will only be accessed for maintenance purposes.

1.6.3.3 – Drainage

The County shall continue to implement the level of service standards for stormwater management consistent with the requirements of the South Florida Water Management District (SFWMD). The Property is currently subject to SFWMD surface water management Permit No. 26-00279-S described in Exhibit 15. Depending on the State’s determination of agency jurisdiction, it is possible that the Facility Area may be removed from the SFWMD permit and incorporated into a new Environmental Resource Permit to be issued by FDEP. The Property is also within the Collins Slough Water Control District and Gerber Groves Water Control District, Chapter 298 drainage and water control special districts. Therefore, coordination will be conducted with both the State and local water districts.

The provision of public facilities for stormwater management is not required for the proposed electrical generating facility. The Facility Area is surrounded by agricultural operations, which necessarily control their water table artificially. Therefore, it is anticipated that the existing surface water pumps and reservoir will continue serving their functions albeit to a lesser intensity than is currently required for the citrus operation within the proposed Facility Area. The facility will have no negative impact on groundwater resources of surrounding properties.

The facility will incorporate a stormwater management system that is designed to detain and discharge the runoff from a 25-year, 72-hour storm at peak discharge rates which do not exceed pre-development rates (or as determined by other agencies having jurisdiction if more stringent
Design of said stormwater management facilities will comply with State-wide Environmental Resource Permitting (SWERP) criteria for water quality, quantity and any additional water standards specific to the receiving water body that may be established by all applicable federal, state, and local agencies.

The Facility Area on the Property is located outside of Flood Zone A (the 100-year flood area) as shown on the applicable Flood Insurance Rate Maps (FIRMs) for this area of Hendry County, prepared by the Federal Emergency Management Agency (FEMA) and adopted by the Hendry County Board of County Commissioners, effective July 6, 2015 (Exhibit 11). There is no development proposed within the 100-year floodplain.

1.6.3.4 – Solid Waste

The proposed facility is not expected to generate solid waste and, therefore, will not exceed the Level of Service Standard described in Policy 7.C.1.1 of the Hendry County Comprehensive Plan. Accordingly, the facility will have no adverse impact on Hendry County’s solid waste management system. This standard does not apply to construction waste. FPL will utilize the services of the County’s contracted franchise hauler for any waste generated during construction or by facility operations.

1.6.3.5 - Recreation and Open Space

The facility will have no impact on the public recreation services provided within Hendry County.

The Applicant is proposing to designate approximately 32% of the Property (311 ± acres) as Open Space, which exceeds the minimum Open Space requirement of 30% outlined in the EGF Land Use Category. Open Space Areas 1 and 2 will remain Open Space for the life of the PUD associated herewith.

1.6.3.6 – Schools

There will be no impact on the Hendry County school system because the facility has no residential component.

1.6.3.7 – Fire Protection

Fire protection is provided by the Hendry County Public Safety Department. Given the nature of the proposed use and low potential for fire from neighboring groves, it is estimated that demand for fire protection will be minimal. Private access roads are maintained to support the weight of trucks and heavy equipment serving area agriculture operations and are suitable for firefighting trucks and equipment.
1.6.3.8 – Law Enforcement

The proposed facility will not adversely impact the law enforcement resources of Hendry County. There will be no daily employees onsite, only those scheduled for routine maintenance on a less than daily basis. Access to the site is by private road and the Facility Area will be secured.

1.6.3.9 – Emergency Medical Services

Emergency medical services (EMS) are provided by the Hendry County Public Safety Department. There will be no onsite personnel other than for routine maintenance. The Applicant will have safety programs in place during the construction and operations phases to minimize emergency medical events to the greatest extent practicable. There will be minimal or no demand for this service.

1.6.3.10 - Well Fields and Cones of Influence

The facility is not located within the zone of influence of any wells which supply potable water for general public consumption (see Map, Exhibit 12).

1.6.4 – Site Assessments and Impact Analysis

1.6.4.1 – Archaeological and Historical

In October 2016 SEARCH, Inc. performed site reconnaissance for its November 2016 Cultural Resources Assessment Survey (Exhibit 14). The 457 acre area studied includes all of the Facility Area. Field investigations will be expanded to other areas of the Site and an amended Cultural Resources Assessment Survey shall be submitted in support of any future application for PUD amendment to change the existing use of said areas.

The Hammock Solar Energy Center Survey targeted the Facility Area as the “Area of Potential Effect (APE).” The purpose of the survey was to identify and document archaeological resources, historic structures, and other cultural resources within the APE and to assess their potential for listing in the National Register of Historic Places (NRHP). The analysis included review of the Florida Master Site File for recorded cultural sites and fieldwork consisting of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests throughout the APE. No archaeological sites, resource groups, or historic buildings were identified within the APE. The Survey concluded that no historic properties will be affected by development within the Facility Area.
1.6.4.2 – Wetlands and Wildlife

The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. (Exhibit 13). Based upon sound environmental planning, the Facility Area was delineated on land that has historically been heavily impacted by citrus farming. Thirty-two percent (32%) of the site including wetlands and other communities is designated as “Open Space” on the General Concept Plan (Exhibit 20).

The Open Space area has been established with a clear understanding of the habitats onsite, the listed species documented as occurring onsite and areas of five (5) acres or more dominated by 50 percent or more of native vegetation (Policies 1.10.4 and 6.2.7, Hendry County Comprehensive Plan). The Open Space area incorporates habitat suitable for use by listed species; the remainder of the site is heavily impacted with citrus groves. No wetland impacts are proposed. Any unavoidable Wetland impacts, will be subject to the review and approval of applicable local, state and federal agencies.

1.6.4.3 – Visual / Aesthetic

The proposed solar power generating facility is located 7.5 miles from the nearest major roadway. The areas on all sides of the Facility Area, and indeed the entire Property, are in agriculture use or are natural vegetative communities. Therefore, the facility will have no adverse visual or aesthetic impact upon the motoring public or upon surrounding properties.

The nearest residence is approximately 1.75 miles southwest of the Facility Area. The proposed solar facility will not produce emissions, odors, vibration, dust, light pollution, or waste products. Noise produced by the facility, if any, will not exceed the sound level limits described in Hendry County Land Development Code Chapter 1-14.5. The height of the panels will be limited to a maximum of 20 feet, substantially limiting their visual impact on neighboring property.

1.6.4.4 – Economic Impact

This summer Florida voters approved a Constitutional amendment (“Amendment 4”) expanding the current Constitutional provisions regarding exemptions for renewable energy source devices to all real property, not just for real property used for residential purposes. As verified by the staff analysis prepared for the House of Representatives, the provisions of the amendment are permissive, and do not require the Legislature to enact implementing legislation. Amendment 4 takes effect January 1, 2018, and expires on December 31, 2037.

The language of Amendment 4 provides that the Legislature may enact limitations on the exemption, and thus it is unclear what impact Amendment 4 will have until the Legislature acts on its implementation. As a result, it is unclear what tax revenue will be generated by the construction of the facility.
Approximately 501 acres of the 957-acre parcel will continue in its present agriculture use and will be taxed accordingly. Therefore, only the 456-acre facility area is subject to change. Construction of the facility is anticipated to add approximately 200 construction jobs and take approximately 8-12 months. Use of local labor is encouraged, where possible.

An economic study was prepared by Fishkind & Associates, Inc. in September 2016 for a similar potential project in Hendry County. It reflects a ratio of approximately 3:1 between direct and indirect economic output to payroll during construction. Based on FPL’s experience, wages for constructing solar fields will range between $12 and $20 per hour. By utilizing a similar approach to the one used by the 2016 Fishkind study, then applying an average of $15 per hour to 200 wage earners working only 8 months, Hammock Solar site conservatively yields approximately $4 million in payroll and $12 million in direct and indirect benefits in Hendry County, including increased local expenditures, goods and services.

1.6.5 – Compatibility with Surrounding Land Uses

As discussed, the Property is remotely located within a rural area of unincorporated Hendry County. It consists of land in agricultural use (citrus farming) and land which is undeveloped. The Facility Area is nearly entirely uplands in citrus production.

Contiguous parcels and parcels in the general area are farmed or remain undeveloped in their natural state. Existing farming (agriculture) uses include citrus and sugarcane production, and water management facilities. The nearest residence is located approximately one mile to the southwest of the Property boundary and approximately 1.75 miles from the Facility Area. A summary of existing land uses within 750 feet of the Property is attached (Exhibit 9). The electric transmission line corridor which transects the Facility Area extends offsite to the east and west.

The supporting documentation submitted with this Application demonstrates compatibility with the surrounding land uses. The development standards and guidelines outlined in and mandated by the Comprehensive Plan’s EGF future land use category and the Hendry County Land Development Code provide assurances that proposed development of the facility will be compatible with the adjacent land uses and the surrounding area. Compatibility with surrounding land uses has been addressed through the provision of Open Space, orientation and height of structures, and placement of uses. As discussed above, the facility will have minimal visual impact on surrounding properties. There will be no emissions, light pollution, adverse noise, odor, vibration, dust, or waste generated by facility operations. To further limit the visual impact upon surrounding properties, the height of solar panels has been limited to 20 feet.

Additional development controls which protect surrounding land uses from potential land use impacts may be established through the application of PUD zoning conditions or other applicable federal, state and local review and permitting processes.
The requested subarea policies will ensure that the proposed electrical generating facility will complement the established land uses and future land use designations in the vicinity by establishing a specific regulatory framework over the Property to: (1) require permanent designation of Open Space for wetlands, habitat and the movement of wildlife while balancing the need for suitable minimum area for development; (2) encourage the use of innovative land development regulations and standards in order to more effectively manage future growth and development activities on the Property; and (3) enhance the growth and vitality of the economy of Hendry County.

1.7 – Consistency with the Hendry County Comprehensive Plan

Proposed amendments to the Hendry County Comprehensive Plan must demonstrate consistency with its applicable Goals, Objectives and Policies. In accordance with this submittal requirement, Applicant’s Statement of Comprehensive Plan Consistency is attached (Exhibit 16).
APPLICATION 2

COMPREHENSIVE PLAN FUTURE LAND USE MAP AMENDMENT

Future Land Use Map Amendment – From AG to EGF

2.1 – Applicant

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL  33408

2.2 – Authorized Agent and Legal Counsel

Authorized Agent:  Rock Aboujaoude, PE
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870 W. Hickpochee Avenue
LaBelle, Florida 33935
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Legal Counsel: Scott Goorland, Senior Attorney
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Scott.Goorland@fpl.com

Linda Shelley, Esquire
Buchanan Ingersoll & Rooney, PC
101 North Monroe Street, Suite 1090
Tallahassee, Florida 32301
(850) 681-4260
linda.shelley@bipc.com

2.3 – Submittal Requirements

The attached Exhibits itemized on the Exhibit List are incorporated herein and include the relevant Submittal Requirements listed on the Application form, together with Additional Data, Materials and Information discussed in the narrative below.
2.4 – Proposed Future Land Use Map Amendment Request

Applicant’s Future Land Use Map amendment application (APPLICATION 2) is a companion application to its Comprehensive Plan text amendment application (APPLICATION 1) included in this submittal document. These petitions are filed in support of Applicant’s request to develop land for an electrical generation facility in Hendry County to be powered exclusively by solar energy.

This application requests to amend the Hendry County Comprehensive Plan Future Land Use Map (FLUM) for the subject “Property” (that real estate made the subject of this request as described in the Surveyor’s Description on the Boundary Survey attached as Exhibit 4) by changing its future land use designation from Agriculture (AG) to Electrical Generating Facility (EGF). Copies of the existing and proposed Future Land Use Maps are attached as Exhibits 18 and 19, respectively.

This comprehensive plan map amendment application is a companion application to the text and subarea policy comprehensive plan text amendment included in this submittal document as APPLICATION 1. Said text amendment proposes to supplement Policy 1.1.14 Electrical Generating Facility Land Use Category (EGF) to provide an alternate access standard for solar powered electrical generating facilities, and its subarea policy defines the specific details and development parameters associated with the proposed electrical generating facility. While this future land use map amendment application proposes to change the future land use designation on the Property from Agriculture (AG) to Electrical Generating Facility (EGF) to accommodate the proposed development, the companion text amendment request describes the specific electrical generating facility that may be constructed on the Property.

2.5 – The Facility

The proposed “facility”, known as the FPL Hammock Solar Energy Center (“Hammock Solar Energy Center”), is a state of the art electrical generating facility powered exclusively by solar energy to be located on up to 456 acres of Applicant’s 957 ± acre Property as more particularly described herein.

2.5.1 – Location of Property

The Property is generally located approximately 5 miles south of the intersection of State Road 80 and State Road 29 in LaBelle and approximately 7.5 miles east of State Road 29 in unincorporated Hendry County, Florida. Legal access to the Property is from the eastern terminus of Sears Road.

Other geographic features within proximity to the Property include the following (estimated straight lines):
<table>
<thead>
<tr>
<th>Geographic Feature</th>
<th>Approximate Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felda</td>
<td>12 miles</td>
</tr>
<tr>
<td>City of Clewiston</td>
<td>23 miles</td>
</tr>
<tr>
<td>Lake Okeechobee</td>
<td>17 miles</td>
</tr>
</tbody>
</table>

The Property is depicted on the Area Location Map (Exhibit 6) and Aerial Photograph of the Property (Exhibit 7).

2.5.2 – Parcel Identification Numbers

The Property is comprised of twenty-one (21) contiguous parcels of land which are identified by the Hendry County Property Appraiser with the following parcel ID numbers:

<table>
<thead>
<tr>
<th>Hendry County Parcel ID Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1-30-44-03-A00-0006.0000</td>
</tr>
<tr>
<td>2 1-30-43-34-A00-0001.0000</td>
</tr>
<tr>
<td>3 1-30-43-33-A00-0001.0000</td>
</tr>
<tr>
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<td>5 1-30-44-03-A00-0003.0000</td>
</tr>
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<td>6 1-30-44-03-A00-0004.0000</td>
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<tr>
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<tr>
<td>9 1-30-44-10-A00-0001.0000</td>
</tr>
<tr>
<td>10 1-30-44-10-A00-0005.0000</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

2.5.3 – Section, Township, Range

As shown on the legal description (Exhibit 5), the Property is located within the following Sections, Townships and Range:

Sections 33 and 34, Township 43 South, Range 30 East and Sections 3, 4, 9 and 10, Township 44 South, Range 30 East.

2.5.4 – Property Size

As shown on the Boundary Survey (Exhibit 4), the total size of the Property is 957.37 acres (“957 ± acres”). The Property is described in the Surveyor’s Description on the Boundary Survey and in the Legal Description attached (Exhibits 4 and 5).
2.5.5 – Property Description – Existing Land Use

The Property’s land use is Agriculture and it is zoned AG-2. Approximately two-thirds of the irregularly shaped Property is highly impacted uplands utilized in active citrus production. The remainder of the Property contains wetlands, and other adjoining natural and impacted areas. An existing 175 feet wide electrical transmission line corridor traverses the Property near its northern boundary which will be used to transmit electricity from the proposed facility to Florida’s electrical grid. Access to the Property is from the eastern terminus of Sears Road by way of a private road.

2.5.6 – Surrounding Land Uses

The Property is remotely located within a rural area of unincorporated Hendry County. Contiguous parcels and parcels in the general area are farmed or remain undeveloped in their natural state. Existing farming (agricultural) uses include citrus and sugarcane production, and water management facilities. The electric transmission line corridor discussed in the previous subsection extends offsite to the east and west. The nearest residence is located approximately one mile to the southwest of the Property boundary. A summary of existing land uses within 750 feet of the Property is attached (Exhibit 9).

2.5.7 – Comprehensive Plan Future Land Use Designation – Existing

The Property is designated Agriculture on the Hendry County Comprehensive Plan Future Land Use Map (Exhibit 18). “The purpose of the Agriculture Land Use Category is to define those areas within Hendry County which will continue in a rural and/or agricultural state through the planning horizon of 2040” (Policy 1.1.1, Agriculture Future Land Use Category).

Lands classified as Agriculture are primarily rural areas of the County. Land uses authorized within this designation are divided into two (2) categories: Level one and Level two. Level one uses include the production of food, feed, fiber and other goods by the growing and/or harvesting of plants, animals and other life forms, specialty farms, animal husbandry, production and processing of agricultural products, including bi-products, ornamental horticulture, nurseries, food processing and production, rural residential, agricultural housing and retail oriented to agricultural uses. State of Florida Everglades Restoration projects and activities are also permitted as level one uses in the Agriculture land use category. Level one uses may occur as permitted uses, special exceptions or accessory uses, as outlined in the County’s Land Development Code.

Level two uses, which require rezoning to a Planned Unit Development (PUD) to determine the appropriateness of the use on a particular property, include utilities, biofuel plants, mining and earth extraction and processing operations, solid waste facilities, recreation uses, resource recovery facilities and other similar uses.
The maximum permissible residential density in the Agriculture future land use category is one (1) unit per five (5) acres. Farm worker housing is permitted at a maximum density of six (6) units per acre for attached and detached residences, mobile homes and duplexes. Multi-family farm worker housing projects are permitted at a maximum density of ten (10) units per acre, and require the provision of central water and central sewer systems. There is no minimum Open Space requirement; however, the maximum floor area ration (FAR) for non-agricultural/non-residential uses is 0.40.

The potential density and/or intensity impacts of the Property’s existing land use are substantially greater than those of the proposed EGF land use designation.

The properties surrounding the subject site and within the immediate area are also designated Agriculture on the County’s Future Land Use Map.

2.5.8 – Comprehensive Plan Future Land Use Designation – Proposed

This plan amendment proposal requests to change the future land use designation of the Property from Agriculture (AG) to Electrical Generating Facility (EGF). The proposed Future Land Use Map is attached (Exhibit 19). The purpose of the EGF future land use element is to “Provide guidelines for future designation of areas within Hendry County which can be utilized for electrical generating facilities . . . .” As established by the EGF category, an electrical generating facility on the Property would be required to comply with the guidelines and standards for the location and intensity of such electrical generating facilities and associated uses.

2.5.9 – Proposed Development

The proposed development known as the FPL Hammock Solar Energy Center (“Hammock Solar Energy Center” or “facility”) is a state of the art electrical generating facility powered by solar energy to be located on up to 456 acres of Applicant’s 957 ± acre site. The facility will be limited to the total generation of 74.5 MW of electricity.

Solar panels will be installed within the Facility Area designated on the attached General Concept Plan (Exhibit 20). Major improvements to the Facility Area include solar panels (not to exceed a height of 20’) and ancillary equipment and improvements such as transformers, transmission facilities, substation and switchyard facilities, fencing, signage, equipment shed(s), temporary construction office/trailer(s), and water management facilities. The GCP depicts “Open Space” designated on approximately one-third of the Property. The Open Space area contains wetlands, which have not been impacted, and other natural and impacted areas. To facilitate the movement of wildlife, no fencing will be constructed in the Open Space area. Crossing the Open Space area for connectivity will be authorized by regulatory permitting, if required. The remaining area of the Property – that portion outside of the Facility Area and Open Space area – will continue its existing agriculture use.
Solar panels are passive structures that are not powered by any fossil fuel source (only sunlight), do not require water for their operation, and do not produce emissions, odors, noise or light pollution, or waste products of any kind. The maximum height of the facility’s solar panels is twenty feet (20’).

The Hammock Solar Energy Facility will create clean, renewable energy by converting sunlight via photovoltaic solar arrays into direct current (DC) electricity and then converting it into alternating current (AC) utilizing power inverters. The zero-emissions electricity then travels through transformers where the voltage is boosted for transmission through the electric grid where it is distributed to homes and businesses.

The facility will not be subject to the Florida Electrical Power Plant Siting Act (PPSA), ss. 403.501-518, Florida Statutes as it does not meet or exceed the 75 MW generation threshold for same. The facility will be reviewed and permitted in accordance with all applicable federal, state and local regulations.

The proposed development requires approval of the Comprehensive Plan text amendment, this Future Land Use Map amendment, and a Planned Unit Development (PUD) rezone of the Property.

2.6 – Data and Analysis

2.6.1 – Consistency with Policy 1.1.14 Electrical Generating Facility Land Use Category

Applicant proposes to develop the solar facility consistent with the standards and guidelines outlined in the EGF Land Use Category (as amended in Application 1 – Comprehensive Plan Text Amendment). As an approved EGF use, the proposed facility on the Property demonstrates consistency with the EGF Land Use Category as follows:

Location Standards

- The Property is located in a remote, rural area of the County where large amounts of undeveloped acreage exist.
- The Facility Area is traversed by an existing, appropriately sized, electrical transmission line to support the facility, located within a 175-foot wide corridor near the Property’s northern boundary; no fuel transportation facilities are required by solar power.
- Only solar power electrical generation will be authorized. Site improvements will be low profile (20’ height limitation for solar panels). The facility will be unmanned (only occasionally visited for inspection and maintenance purposes), and will not produce emissions, odors, noise or light pollution, or waste products of any kind. The nearest residence is approximately 1.75 miles from the Facility Area. Setbacks will be provided along Property boundaries of the Facility Area (Exhibit 20). Therefore, no buffers are proposed to screen the abutting agricultural uses from proposed improvements.
• Consistent with the Location Standards site access amendment proposed in companion Application 1 – Comprehensive Plan Text Amendment, the Property’s permanent legal access is from the eastern terminus of Sears Road by way of a private road. Given that the proposed EGF use is limited to the solar generation of electricity, there is no need for daily employees on site; only visits for facility maintenance. As such, impact on the roadway network for the proposed solar facility will be de minimis.

• The proposed facility is restricted to solar power electricity generation and will not be powered by nuclear, coal, gas or other fossil fuel sources; the proposed facility is not located within two (2) miles of the Big Cypress Seminole Indian Reservation.

Residential/Density

• There are no residences associated with the electrical generating facility proposed.

Non-Residential Intensity

• This standard requires that the proposed electrical generating facility and related structures occupy no more than 70% of the entire site and shall be subject to a maximum impervious surface ratio of 0.70. The General Concept Plan (Exhibit 20) demonstrates compliance with this standard by committing to a Facility Area totaling approximately 48 percent of the Property.

• This standard requires that a minimum of thirty percent (30%) of the entire site shall be designated Open Space. The General Concept Plan designates approximately 311 ± acres of the site as Open Space, which equates to 32 percent of the Property. The proposed Open Space complies with the required minimum.

Form of Development Approval

• In accordance with this standard, companion applications for a text amendment outlining a specific subarea policy and this FLUM amendment designating the location of the EGF, together with an associated application for PUD rezone of the Property, are being filed for the proposed facility.

Special Development Requirements for Electrical Generating Facilities

• The solar powered facility will generate no noise above background levels necessitating mitigation. There are no sensitive noise receptors in the surrounding area.

• Setbacks will be provided along Property boundaries of the Facility Area (Exhibit 20), and a maximum 20 foot height restriction will be provided to reduce potential visual impacts from the proposed electrical generating facility.

• The Property is surrounded by land designated Agriculture on the FLUM which is zoned Ag-2. Residential use is allowed on AG-2 land at a density of one unit per 5 acres. Currently, there is no residential development or designated residential future land use categories within one mile of the Property boundaries.

• There are no air quality impacts associated with the proposed solar power generation.
• Liners and leachate controls will not be required as there will be no fuel storage onsite; there will be no need for by-product storage facilities and/or waste disposal areas as no by-products or wastes will be produced.
• There will be minimal impacts, if any, to environmentally sensitive areas on the site which will be mitigated in accordance with review and regulations by the applicable local, state and federal agencies.
• There is no proposed development within the 100-year floodplain, therefore compensatory storage is not required.
• No industrial wastewater will be generated on site.
• No centralized potable water system is available to the site. Potable water, if required, will be by onsite well permitted in accordance with law.

Compliance

• The proposed facility will be limited to a total capacity of 74.5 MW and is therefore not subject to the Florida Electrical Power Plant Siting Act (PPSA).
• The proposed facility will comply with all applicable federal, state and local regulations including the Goals, Objectives and Policies of the Hendry County Comprehensive Plan, and will be subject to the conditions and requirements of its PUD rezone.
• The proposed facility will comply with the requirements of the EGF land use category and its guidelines.

Filed concurrently with this future land use map amendment, and as required by the EGF land use category, is a separate text amendment application for the addition of a subarea policy which provides required details related to the specific facility. APPLICATION 1 – Comprehensive Plan Text Amendment of this submission includes the application for the subarea policy text amendment to the Hendry County Comprehensive Plan Future Land Use Element, which is proposed in conjunction with this application. As required by the EGF Future Land Use category, an application to rezone the Property to a Planned Unit Development (PUD) will also be filed with Hendry County.

2.6.2 – Land Use Evaluation and Analysis

The proposed future land use map amendment was evaluated and analyzed to determine the Property’s suitability for the Proposed Development and the existing maximum development potential for the Property. Compatibility with surrounding land uses and facility impacts are discussed in later sections as is the proposal’s consistency with the documented Goals, Objectives and Policies of the Hendry County Comprehensive Plan.

2.6.2.1 – Suitability

The Property is suitable for the proposed future land use designation and electrical generating facility as demonstrated by the analyses, reports and studies that have been prepared by the Applicant’s experts. These analyses, reports and studies are included as part of this Application.
and are contained within the attached Exhibits.

2.6.2.2 – Existing Maximum Development Potential

Maximum development potential was considered based on the current future land use category designation on the Property. Under the Agriculture designation, the Property could potentially be developed with a varied range of Level one and Level two uses described in Section 2.5.7, above. For example, the maximum rural residential density permitted in the Agriculture land use category is specified as one (1) dwelling unit per five (5) acres. Although the Property’s future land use designation also permits farmworker housing at densities between six (6) and ten (10) dwelling units per acre, the most probable development scenario for the Property would be non-farmworker related, single family residences. Therefore, with a rezoning of the Property to a Planned Unit Development (PUD), a residential development could be approved for up to 191 residential lots on the 957 ± acre Property. This type of maximum development scenario would require clustering of residential units within the upland area to preserve the wetland areas.

The potential density impacts of the Property’s existing land use are substantially greater than those of the proposed EGF land use designation which has no residential element.

2.6.3 - Analysis of Impacts on Public Facilities

The facility will comply with the Level of Service standards for public facilities and services described in the Hendry County Comprehensive Plan, Chapter 5: Infrastructure Element. Each of the necessary public facilities and services in Chapter 5 have been evaluated.

The proposed electrical generating facility use will not adversely impact the County’s adopted levels of service for public facilities. There will be no impact on public potable water, sanitary wastewater service, solid waste disposal or recreational facilities. Area roadways will not be adversely impacted, drainage (stormwater management) will be addressed onsite, and offsite discharge will not exceed historic levels. No new public stormwater facilities will be required for the construction of the facility. The proposed development will have no impact on aquifer recharge. Public facilities are discussed with particularity in the following subsections.

2.6.3.1 – Potable Water and Sanitary Sewer

There is no centralized public potable water service or centralized sanitary sewer service available to the site, nor are such services included on any existing County Capital Improvement Plan for this area. There is no need for such facilities to serve a solar energy facility. Consequently, the facility will have no impact on same.

Potable water, although not likely to be required, will be supplied to the facility by onsite well permitted, constructed and approved in accordance with Hendry County Health Department
permitting criteria and the applicable chapter of the Florida Administrative Code.

Domestic wastewater which may be generated at the proposed facility, if any, will be served by a septic system. Such system will be permitted, constructed and approved in accordance with all applicable State and local regulations and standards including Hendry County Health Department permitting criteria and Chapter 64E-6 of the Florida Administrative Code. The adequacy of onsite soils to support an onsite septic system will be determined at the design stage and soil will be imported for such purpose, if necessary. Portable restrooms may be utilized on a temporary basis as necessary. No industrial wastewater will be generated on site.

2.6.3.2 – Arterial and Collector Roads

The proposed facility will have a *de minimis* impact on public roadways, and will not degrade the level of service of area roadways below their adopted level of service standards as discussed in the attached Traffic Impact Statement (Exhibit 10). Once operational the facility will not require daily onsite personnel; it will only be accessed for maintenance purposes.

2.6.3.3 – Drainage

The County shall continue to implement the level of service standards for stormwater management consistent with the requirements of the South Florida Water Management District (SFWMD). The Property is currently subject to SFWMD surface water management Permit No. 26-00279-S described in Exhibit 15. Depending on the State’s determination of agency jurisdiction, it is possible that the Facility Area may be removed from the SFWMD permit and incorporated into a new Environmental Resource Permit to be issued by FDEP. The Property is also within the Collins Slough Water Control District and Gerber Groves Water Control District, Chapter 298 drainage and water control special districts. Therefore, coordination will be conducted with both the State and local water districts.

The provision of public facilities for stormwater management is not required for the proposed electrical generating facility. The Facility Area is surrounded by agricultural operations, which necessarily control their water table artificially. Therefore, it is anticipated that the existing surface water pumps and reservoir will continue serving their functions albeit to a lesser intensity than is currently required for the citrus operation within the proposed Facility Area. The facility will have no negative impact on groundwater resources of surrounding properties.

The facility will incorporate a stormwater management system that is designed to detain and discharge the runoff from a 25-year, 72-hour storm at peak discharge rates which do not exceed pre-development rates (or as determined by other agencies having jurisdiction if more stringent criteria apply). Design of said stormwater management facilities will comply with State-wide Environmental Resource Permitting (SWERP) criteria for water quality, quantity and any additional water standards specific to the receiving water body that may be established by all applicable federal, state, and local agencies.
The Facility Area on the Property is located outside of Flood Zone A (the 100-year flood area) as shown on the applicable Flood Insurance Rate Maps (FIRMs) for this area of Hendry County, prepared by the Federal Emergency Management Agency (FEMA) and adopted by the Hendry County Board of County Commissioners, effective July 6, 2015 (Exhibit 11). There is no development proposed within the 100-year floodplain.

2.6.3.4 – Solid Waste

The proposed facility is not expected to generate solid waste and, therefore, will not exceed the Level of Service Standard described in Policy 7.C.1.1 of the Hendry County Comprehensive Plan. Accordingly, the facility will have no adverse impact on Hendry County’s solid waste management system. This standard does not apply to construction waste. FPL will utilize the services of the County’s contracted franchise hauler for any waste generated during construction or by facility operations.

2.6.3.5 - Recreation and Open Space

The facility will have no impact on the public recreation services provided within Hendry County.

The Applicant is proposing to designate approximately 32% of the Property (311 ± acres) as Open Space, which exceeds the minimum Open Space requirement of 30% outlined in the EGF Land Use Category. Open Space Areas 1 and 2 will remain Open Space for the life of the PUD associated herewith.

2.6.3.6 – Schools

There will be no impact on the Hendry County school system because the facility has no residential component.

2.6.3.7 – Fire Protection

Fire protection is provided by the Hendry County Public Safety Department. Given the nature of the proposed use and low potential for fire from neighboring groves, it is estimated that demand for fire protection will be minimal. Private access roads are maintained to support the weight of trucks and heavy equipment serving area agriculture operations and are suitable for fire-fighting trucks and equipment.
2.6.3.8 – Law Enforcement

The proposed facility will not adversely impact the law enforcement resources of Hendry County. There will be no daily employees onsite, only those scheduled for routine maintenance on a less than daily basis. Access to the site is by private road and the Facility Area will be secured.

2.6.3.9 – Emergency Medical Services

Emergency medical services (EMS) are provided by the Hendry County Public Safety Department. There will be no onsite personnel other than for routine maintenance. The Applicant will have safety programs in place during the construction and operations phases to minimize emergency medical events to the greatest extent practicable. There will be minimal or no demand for EMS service.

2.6.3.10 - Well Fields and Cones of Influence

The facility is not located within the zone of influence of any wells which supply potable water for general public consumption (see Map, Exhibit 12).

2.6.4 – Site Assessments and Impact Analysis

2.6.4.1 – Archaeological and Historical

In October 2016 SEARCH, Inc. performed site reconnaissance for its November 2016 Cultural Resources Assessment Survey (Exhibit 14). The 457 acre area studied includes all of the Facility Area. Field investigations will be expanded to other areas of the Site and an amended Cultural Resources Assessment Survey shall be submitted in support of any future application for PUD amendment to change the existing use of said areas.

The Hammock Solar Energy Center Survey targeted the Facility Area as the “Area of Potential Effect (APE).” The purpose of the survey was to identify and document archaeological resources, historic structures, and other cultural resources within the APE and to assess their potential for listing in the National Register of Historic Places (NRHP). The analysis included review of the Florida Master Site File for recorded cultural sites and fieldwork consisting of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests throughout the APE. No archaeological sites, resource groups, or historic buildings were identified within the APE. The Survey concluded that no historic properties will be affected by development within the Facility Area.
2.6.4.2 – Wetlands and Wildlife

The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. (Exhibit 13). Based upon sound environmental planning, the Facility Area was delineated on land that has historically been heavily impacted by citrus farming. Thirty-two percent (32%) of the site categorized as wetlands and other communities is designated as “Open Space” on the General Concept Plan (Exhibit 20).

The Open Space area has been established with a clear understanding of the habitats onsite, the listed species documented as occurring onsite and areas of five (5) acres or more dominated by 50 percent or more of native vegetation (Policies 1.10.4 and 6.2.7, Hendry County Comprehensive Plan). The Open Space area incorporates habitat suitable for use by listed species; the remainder of the site is heavily impacted with citrus groves. No wetland impacts are proposed. Any unavoidable Wetland impacts, will be subject to the review and approval of applicable local, state and federal agencies.

2.6.4.3 – Visual / Aesthetic

The proposed solar power generating facility is located 7.5 miles from the nearest major roadway. The areas on all sides of the Facility Area, and indeed the entire Property, are in agriculture use or are natural vegetative communities. Therefore, the facility will have no adverse visual or aesthetic impact upon the motoring public or upon surrounding properties.

The nearest residence is approximately 1.75 miles southwest of the Facility Area. The proposed solar facility will not produce emissions, odors, vibration, dust, light pollution, or waste products. Noise produced by the facility, if any, will not exceed the sound level limits described in Hendry County Land Development Code Chapter 1-14.5. The height of the panels will be limited to a maximum of 20 feet, substantially limiting their visual impact on neighboring property.

2.6.4.4 – Economic Impact

This past summer Florida voters approved a Constitutional amendment (“Amendment 4”) expanding the current Constitutional provisions regarding exemptions for renewable energy source devices to all real property, not just for real property used for residential purposes. As verified by the staff analysis prepared for the House of Representatives, the provisions of the amendment are permissive, and do not require the Legislature to enact implementing legislation. Amendment 4 takes effect January 1, 2018, and expires on December 31, 2037.

The language of Amendment 4 provides that the Legislature may enact limitations on the exemption, and thus it is unclear what impact Amendment 4 will have until the Legislature acts on its implementation. As a result, it is unclear what tax revenue will be generated by the construction of the facility.
Approximately 501 acres of the 957-acre parcel will continue in its present agriculture use and will be taxed accordingly. Therefore, only the 456-acre facility area is subject to change. Construction of the facility is anticipated to add approximately 200 construction jobs and take approximately 8-12 months. Use of local labor is encouraged, where possible.

An economic study was prepared by Fishkind & Associates, Inc. in September 2016 for a similar potential project in Hendry County. It reflects a ratio of approximately 3:1 between direct and indirect economic output to payroll during construction. Based on FPL’s experience, wages for constructing solar fields will range between $12 and $20 per hour. By utilizing a similar approach to the one used by the 2016 Fishkind study, then applying an average of $15 per hour to 200 wage earners working only 8 months, Hammock Solar site conservatively yields approximately $4 million in payroll and $12 million in direct and indirect benefits in Hendry County, including increased local expenditures, goods and services.

2.6.5 – Compatibility with Surrounding Land Uses

As discussed, the Property is remotely located within a rural area of unincorporated Hendry County. It consists of land in agricultural use (citrus farming) and land which is undeveloped. The Facility Area is nearly entirely uplands in citrus production.

Contiguous parcels and parcels in the general area are farmed or remain undeveloped in their natural state. Existing farming (agriculture) uses include citrus and sugarcane production, and water management facilities. The nearest residence is located approximately one mile to the southwest of the Property boundary and approximately 1.75 miles from the Facility Area. A summary of existing land uses within 750 feet of the Property is attached (Exhibit 9). The electric transmission line corridor which transects the Facility Area extends offsite to the east and west.

The supporting documentation submitted with this Application demonstrates compatibility with the surrounding land uses. The development standards and guidelines outlined in and mandated by the Comprehensive Plan’s EGF future land use category and the Hendry County Land Development Code provide assurances that proposed development of the facility will be compatible with the adjacent land uses and the surrounding area. Compatibility with surrounding land uses has been addressed through the provision of Open Space, orientation and height of structures, and placement of uses. As discussed above, the facility will have minimal visual impact on surrounding properties. There will be no emissions, light pollution, adverse noise, odor, vibration, dust, or waste generated by facility operations. To further limit the visual impact upon surrounding properties, the height of solar panels has been limited to 20 feet.

Additional development controls which protect surrounding land uses from potential land use impacts may be established through the application of PUD zoning conditions or other applicable federal, state and local review and permitting processes.

The proposed map amendment will complement the established land uses and future land use
designations in the vicinity by establishing a specific regulatory framework over the Property to: (1) require permanent designation of Open Space for wetlands, habitat and the movement of wildlife while balancing the need for suitable minimum area for development; (2) encourage the use of innovative land development regulations and standards in order to more effectively manage future growth and development activities on the Property; and (3) enhance the growth and vitality of the economy of Hendry County.

2.7 – Consistency with the Hendry County Comprehensive Plan

Proposed amendments to the Hendry County Comprehensive Plan must demonstrate consistency with its applicable Goals, Objectives and Policies. In accordance with this submittal requirement, Applicant’s Statement of Comprehensive Plan Consistency is attached (Exhibit 16).
HENDRY COUNTY PLANNING AND ZONING DEPARTMENT
P.O. Box 2340
LaBelle, Florida 33937-2340
863-675-5240  ✉  FAX: 863-674-4194
http://www.hendryfla.net/planning.php

COMPREHENSIVE PLAN AMENDMENT APPLICATION

NOTE: This application with all supporting exhibits and data must be complete and returned to the Planning and Zoning Department before advertising for public hearing. The applicant or his/her agent must be present at the hearing for the application to be considered.

Please check applicable box(es):

☐ Small Scale Amendment (Under 20 Acres)  ☐ Large Scale Amendment (20 Acres or greater)

☑ Text Amendment

Name of Applicant: Florida Power & Light Company

Address: 700 Universe Boulevard, Juno Beach, Florida 33408

Tel:  Fax:  e-mail:

Name of Agent: See attached Exhibit "A"

Address:  

Tel:  Fax:  e-mail:

Property Address: Sears Rd.

Property Acreage: 957.37 ac.

Property Strap or Folio Number(s): See attached Exhibit "B"

Current Future Land Use Designation: Agriculture  Proposed Future Land Use Designation: EGF

Existing Zoning: A-2


Adjacent Future Land Use: North: Agriculture  South: Agriculture  East: Agriculture  West: Agriculture

Describe Nature of Change(s) Requested (use additional sheets if necessary): To amend the Comprehensive Plan, Policy 1.1.14, to provide an alternate access standard for solar-only electrical generating
facilities, and to provide a specific subarea policy for the subject Property.

Is there an existing approval for a special exception, rezone, variance, and/or administrative waiver on the property?

No __________ If yes, please provide resolution and/or ordinance numbers ________________________________

All data and exhibits submitted in support of this application shall become a permanent part of the public records of Hendry County, Florida.

SUBMITTAL REQUIREMENTS (unless waived at the pre-application meeting):

1. Original application.
2. Proof of ownership or contract to purchase or lease property.
3. A copy of the pre-application meeting notes.
4. Copies of any resolutions or ordinances for land use changes that apply to the subject property(s).
5. Boundary Survey of property (11” x 17” minimum), must be less than one-year old, signed, sealed, and prepared by a professional surveyor and mapper, showing the location and dimensions of all property lines, existing streets or roads, easements, rights-of-way, and areas dedicated to the public. In the case of improved property, the survey is to show all vertical improvements.
7. Electronic version of area location map
8. Most recent aerial photograph of site.
10. Map showing existing land uses and principal roadways within 750 linear feet from boundaries of subject property.
11. Document the impact the proposed change(s) will have on the following public facilities:
   a. Potable Water
   b. Sanitary Sewer
   c. Arterial and Collector Roads – submit traffic impact statement, signed, sealed, and prepared by a Florida Licensed Engineer
   d. Drainage
   e. Solid Waste
   f. Recreation and Open Space
   g. Schools
   h. Fire Protection
   i. Law Enforcement
   j. Emergency Medical Services
13. Document location of well fields and cones of influence, if applicable.
15. Archeological and Historical site assessment report.
17. Description of how the request complies with the applicable Goals, Objectives, and Policies in the Hendry County Comprehensive Plan.
18. Florida Land Use Cover Classification System (FLUCC) map
19. Any additional data, materials or information deemed necessary by the County to make a determination.
20. Processing fee payable to the Hendry County Board of County Commissioners:
   $1,500.00 – Text Amendment
   $1,500.00 - Small Scale Map Amendment (less than 20 acres)
   $3,000.00 - Large Scale Map Amendment (20 acres or greater)
   Advertising charges will be invoiced prior to public hearings

Please submit original application plus supporting documentation for sufficiency review. Once the application has been deemed sufficient, please submit 4 copies and 1 CD of all documents for formal review. The Local Planning Agency public hearing will require 10 copies and the Board of County Commissioners public hearing will require 13
copies plus a CD. Additional copies will be required for transmittal to the Florida Department of Economic Opportunity.

ALL TEXT DOCUMENTS ARE TO BE SUBMITTED ON DOUBLE-SIDED PAGES. ANY GRAPHS OR MAPS ARE TO BE ONE-SIDED.
Exhibit “A”

Comprehensive Plan Text Amendment Application

Authorized Agents:

Rock Aboujaoude, PE
Rock Enterprises, Inc.
870 W. Hickpochee Avenue
LaBelle, Florida 33935
(863) 612-0011
rock@rockhendry.com

Scott Goorland, Senior Attorney
Florida Power & Light Company
700 Universe Boulevard, LAW/ JB
Juno Beach, FL 33408
(561) 304-5633
Scott.Goorland@fpl.com

Linda Shelley, Esquire
Buchanan Ingersoll & Rooney, PC
101 North Monroe Street, Suite 1090
Tallahassee, Florida 32301
(850) 681-4260
linda.shelley@bipc.com
The Property is comprised of twenty-one (21) contiguous parcels of land which are identified by the Hendry County Property Appraiser with the following parcel ID numbers:

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Address:  700 Universe Boulevard, Juno Beach, Florida 33408

Tel: ___________________________ Fax: ___________________________ e-mail: ___________________________

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Existing Zoning: A-2


Adjacent Future Land Use: North: Agriculture  South: Agriculture  East: Agriculture  West: Agriculture

Describe Nature of Change(s) Requested (use additional sheets if necessary): Comprehensive Plan Map

Amendment to change the Property’s future land use designation from Agriculture to Electrical
Is there an existing approval for a special exception, rezone, variance, and/or administrative waiver on the property?

No ______________ If yes, please provide resolution and/or ordinance numbers ______________________________

All data and exhibits submitted in support of this application shall become a permanent part of the public records of Hendry County, Florida.

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Exhibit “A”

Comprehensive Plan Map Amendment Application

Authorized Agents:

Rock Aboujaoude, PE
Rock Enterprises, Inc.
870 W. Hickpochee Avenue
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(863) 612-0011
rock@rockhendry.com

Scott Goorland, Senior Attorney
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700 Universe Boulevard, LAW/JB
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Scott.Goorland@fpl.com

Linda Shelley, Esquire
Buchanan Ingersoll & Rooney, PC
101 North Monroe Street, Suite 1090
Tallahassee, Florida 32301
(850) 681-4260
linda.shelley@bipc.com
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This instrument prepared by or under the supervision of
(and after recording should be returned to):

Seth S. Sheitelman, Esq.
Florida Power Light Company (LAW/JB)
700 Universe Boulevard
Juno Beach, Florida 33408

Parcel I.D. Nos.: 1-30-43-33-A00-0001.0000;
1-30-43-34-A00-0001.0000; 1-30-44-03-A00-0001.0000;
1-30-44-03-A00-0003.0000; 1-30-44-03-A00-0004.0000;
1-30-44-03-A00-0006.0000; 1-30-44-03-A00-0001.0000;
1-30-44-04-A00-0001.0000; 1-30-44-04-A00-0002.0000;
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1-30-44-10-A00-0007.0000; 1-30-44-10-A00-0008.0000;
1-30-44-10-A00-0009.0000; 1-30-44-10-A00-0010.0000;
1-30-44-10-A00-0011.0000; and 1-30-44-10-A00-0012.0000

NOTE TO CLERK: THIS IS A CONVEYANCE OF UNENCUMBERED REAL PROPERTY FROM THE GRANTOR TO AN ENTITY THAT WHOLLY OWNS GRANTOR. ACCORDINGLY, PURSUANT TO THE FLORIDA SUPREME COURT'S RULING IN CRESCENT MIAMI CENTER, LLC V. FLORIDA DEPARTMENT OF REVENUE, AS CONFIRMED BY SECTION 201.0201, FLORIDA STATUTES, MINIMUM DOCUMENTARY STAMP TAXES ARE BEING PAID IN CONNECTION HEREWITH.

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made and entered into as of the 18th day of August, 2016 by RGS Realty, LLC, a Delaware limited liability company ("Grantor"), whose mailing address is c/o Chicago Title Insurance Agency, Inc., 3067 East Commercial Boulevard, Fort Lauderdale, Florida 33308, to Florida Power & Light Company, a Florida corporation ("Grantee"), whose mailing address is 700 Universe Boulevard, Juno Beach, Florida 33408. Wherever used herein, the terms "Grantor" and "Grantee" shall include all of the parties to this instrument and their heirs, personal representatives, and assigns.

WITNESSETH:

GRANTOR, for and in consideration of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, has granted, bargained and sold, and by these presents does hereby grant, bargain and sell to Grantee and Grantee’s successors and/or assigns forever, the following described land situate and being in Hendry County, Florida ("Property"), to wit:

SEE ATTACHED EXHIBIT “A”.

TOGETHER WITH all the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining.

THIS CONVEYANCE is subject to: (a) taxes and assessments for the year of closing and subsequent years which are not yet due and payable; (b) zoning, restrictions, prohibitions and other requirements imposed by governmental authority, (c) restrictions and matters appearing on the plat or otherwise common to the subdivision, and (d) all covenants, conditions, restrictions, rights of way, limitations, easements and similar matters of record, if any, but this reference shall not operate to reimpose same.

TO HAVE and to hold the same in fee simple forever.
GRANTOR hereby covenants with Grantee that it is lawfully seized of the Property in fee simple, that it has good right and lawful authority to sell and convey the Property, that it hereby fully warrants the title to the Property and will defend the same against the lawful claims of all persons claiming by, through or under Grantor, but no others.

IN WITNESS WHEREOF, Grantor has hereunto set his hand and seal as of the day and year first above written.

Signed, sealed and delivered in the presence of:

[Signature]

RGS REALTY, LLC,
a Delaware limited liability company

By: [Signature]

Name: Barbara Morris
Title: President

STATE OF DELAWARE
COUNTY OF NEW CASTLE

The foregoing instrument was acknowledged before me this 18th day of August, 2016, by Barbara Morris, as President of RGS Realty, LLC, a Delaware limited liability company, on behalf of the company.

[Notarial Seal]

Notary: [Signature]
Print Name: Heddi L. Mitchell
Notary Public, State of Delaware
My commission expires: 5/1/19

Personally Known [ ] Produced Identification
Type of Identification Produced: Driver's License
EXHIBIT A

Legal Description

Parcel of land lying in Sections 33 & 34, Township 43 South, Range 30 East and Sections 3, 4, 9 & 10, Township 44 South, Range 30 East, Hendry County, Florida, being more particularly described as follows:

Beginning at the Southwest corner of the North Half (N 1/2) of the Southwest Quarter (SW 1/4) of Section 10, Township 44 South, Range 30 East; thence S 89°13'43" W along the south line of said portion of a section for a distance of 82.65 feet to the East line of Gerber Groves Section Two as recorded in Plat Book 3, Pages 26 through 31, Public Records of Hendry County, Florida; thence N 01°03'17" W along said East line for a distance of 2391.50 feet; thence N 89°16'23" E for a distance of 2306.16 feet; thence N 34°58'02" E for a distance of 300.00 feet; thence N 01°32'23" W for a distance of 1400.00 feet to the North line of said Section 10; thence N 89°26'22" E along said North line for a distance of 78.39 feet; thence N 01°42'31" W for a distance of 1308.69 feet; thence N 89°27'51" E for a distance of 284.42 feet; thence N 01°06'48" W for a distance of 882.23 feet; thence S 89°30'00" W for a distance of 1050.00 feet; thence S 01°41'17" E for a distance of 450.00 feet; thence S 89°30'00" W for a distance of 1050.00 feet; thence N 31°04'57" W for a distance of 695.11 feet; thence S 89°27'51" W for a distance of 636.77 feet to said East line of Gerber Groves Section Two; thence N 01°02'49" W along said East line for a distance of 3404.98 feet to the South line of said Gerber Groves Section Two; thence N 88°57'43" E along said South line for a distance of 5630.19 feet to the East line of said Section 34; thence S 01°16'32" E along said East line for a distance of 423.58 feet to the Southeast corner of said Section 34; thence S 00°57'16" E along the East line of said Section 3 for a distance of 2685.10 feet to the East Quarter (E 1/4) corner of said Section 3; thence S 89°30'35" W along the North line of the Southeast Quarter (SE 1/4) of said Section 3 for a distance of 1297.29 feet; thence S 00°57'16" E for a distance of 1343.55 feet; thence N 89°28'26" E for a distance of 1297.28 feet to said East line of Section 3; thence S 00°57'16" E along said East line for a distance of 1317.38 feet to a line 25.00 feet North of and Parallel to the South line of said Section 3; thence S 89°26'22" W along said parallel line for a distance of 665.59 feet; thence S 01°32'23" W for a distance of 1031.17 feet; thence N 89°23'19" E for a distance of 664.95 feet; thence S 01°31'07" E for a distance of 3017.19 feet to the Southeast corner of said North Half (N 1/2) of the Southwest Quarter (SW 1/4) of Section 10; thence S 89°13'43" W for a distance of 5309.74 feet to the Point of Beginning.

Together with that certain road easement described in Exhibit C of Road Easement Agreement recorded in O.R. Book 524, Page 163, Public Records of Hendry County, Florida.
12/12/16 Addendum

CONFERENCE NOTES

Application type: Comp Plan Amendment & Rezone – Solar Facility

Date: November 1, 2016 Time: 10 AM

Applicant: FPL Agent: Darren Stowe

Phone Number/Contact Information: dstowe@ectinc.com

Acres: +/- 958 Proposed Use: Electric Facility – Solar Only

Current Use: Agriculture ID#: Various (See attached table)

Attendees: Margaret Emblidge, Shane Parker, Darren Stowe, Erin Walkowiak, Rock Aboujaoude

Address: Sears Rd. Area

Existing Zoning: A-2 Current Future Land Use: Agriculture

Notes:

Proposing a Solar Facility on 958 +/- acres. Only 400 + acres are proposed for the 1st phase of development. Proposing 74.5 Megawatts so no PPSA required. Target is for the site to be operational 1st quarter of 2018. Agent is looking at a submittal within the next 30 days.

These applications will be a Map and Text Amendment (2 separate applications) and a PUD Rezone (1 application). Will provide 30% O.S. The access will be on the NW corner. The facility will be unmanned when operational and should take 6-10 months for construction.

Access does not meet the EGF language which will require an amendment to the EGF access language. Asked Staff to consider if the solar paneled area could be deemed open space. This would not meet the definition in the LDC. (Open space means undeveloped lands suitable for passive recreation or conservation uses.)

Applicant requested a cleaner copy of the Conservation map 3: FLUCMs Map. See attached.

Staff has preliminarily reviewed the October 20, 2015 survey and determined that it can be used for the proposed applications. Therefore Staff is waiving the one-year requirement for surveys.
LEGAL DESCRIPTION

Parcel of land lying in Sections 33 & 34, Township 43 South, Range 30 East and Sections 3, 4, 9 & 10, Township 44 South, Range 30 East, Hendry County, Florida, being more particularly described as follows:

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Said parcel contains 41,703,052 square feet (957.37 acres), more or less.
LETTER OF AUTHORIZATION

ATTEST:

I, Michael Sole, on behalf of and as Vice President of Environmental Services of Florida Power & Light Company, being first duly sworn, depose and say that we/I are/am the owners of the property described herein and which is the subject matter of the proposed hearing; that all the answers to the questions in this application, all sketches, data, and other supplementary matter attached to and made a part of this application, are true and correct to the best of my/our knowledge and belief. We/I understand that the information requested on this application must be complete and accurate and that the content of this form, whether computer generated or County printed shall not be altered.

As property owner We/I further authorize

Rock Aboujaoude, PE
Rock Enterprises, Inc.
870 W. Hickpochee Ave., Ste. 100
LaBelle, Florida 33935

and

Linda Shelley, Esq.
Buchanan Ingersoll & Rooney, PC
101 North Monroe Street, Suite 1090
Tallahassee, Florida 32301

to act as our/my representatives in any matters regarding this Petition.

(Signature of Property Owner)

(Signature of Property Owner)

Michael W. Sole
(Typed or Printed Name of Owner)

(Typed or Printed Name of Owner)

State of Florida
County of Palm Beach

The foregoing instrument was acknowledged before me this 12 day of December, 2016, by _____________________ who is personally known to me or has produced as identification.

(Signature of Notary Public – State of Florida)

(Print, Type, or Stamp Committed Name of Notary Public)
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Traffic Impact Statement
(Comprehensive Plan and Zoning Level)

FPL's
Hammock Solar Energy Center

February, 2017

Prepared for:
Florida Power & Light Company (FPL)
700 Universe Boulevard
Juno Beach, Florida 33408

Prepared by:
Rock Aboujaoude, PE
870 W. Hickpochee Ave., Ste. 100
LaBelle, Florida 33935
(863) 612-0011
Table of Contents

A- Introduction and Background ................................................................................................................. 3
B- Summary, Conclusion and Recommendations ......................................................................................... 3
C- Proposed Development ................................................................................................................................. 3
   1. Location and Access ................................................................................................................................. 4
   2. Site Development ...................................................................................................................................... 4
D- Analysis .......................................................................................................................................................... 5
   1. Development ............................................................................................................................................. 5
   2. Directional Distribution ............................................................................................................................ 6
   3. Level of Service Analysis ......................................................................................................................... 7
   4. Access Management ............................................................................................................................... 8
   5. Left Turn Lane Analysis ......................................................................................................................... 8
   6. Right Turn Lane Analysis ....................................................................................................................... 8
E- Conclusions and recommendations ........................................................................................................... 9

Figures

Figure 1 – Location and Access ...................................................................................................................... 4
Figure 2 - Area of Influence traffic distribution ............................................................................................ 6
Figure 3 - An excerpt from Hendry County’s Comprehensive Plan ............................................................... 7

Tables

Table 1 – Site Generated Trips ...................................................................................................................... 5
Table 2 – Significant Impact Analysis ......................................................................................................... 7
Table 3 – Roadway Links LOS Analysis ....................................................................................................... 8

Exhibits

• Exhibit 1 – Methodology Report
• Exhibit 2 – Legal Access
• Exhibit 3 – Hammock Solar Energy Center General Concept Plan

Appendix

1. 2006 Hendry County Traffic Report
2. FDOT Traffic Reports for SR 29 north and south of Sears Road
3. Generalized Peak Hour Directional Volume (Table 9)
A. Introduction and Background

This Traffic Impact Statement (TIS) is prepared in connection with Florida Power & Light Company’s (FPL’s) application for Comprehensive Plan text and map amendments to change the Agriculture land use and zoning on its 957 ± acre site in northwest Hendry County, Florida, to the Electrical Generating Facility (EGF) Land Use Category, and its associated application for Planned Unit Development (PUD) zoning on the site.

FPL proposes to construct and operate a solar powered electric generating facility (the “Project”) on approximately 450 ± acres of the site presently utilized for citrus production. Approximately one-third of the site is a functional reservoir serving the citrus grove that is not proposed to be impacted and will be designated open space. For the purpose of this TIS, the remainder of the site will continue to be utilized for citrus production. Changes in use, if any, may require an updated study.

B. Summary, Conclusion and Recommendations

Based upon the findings and conclusions of this report, the traffic generated by the proposed Hammock Solar Energy Center is de minimus and will have no adverse impact upon the surrounding road network.

The roadways within the project’s area of influence currently have a surplus of capacity and can accommodate the traffic associated with the proposed use; the project will not create any transportation deficiencies that need to be mitigated. Accordingly, site-generated traffic will not degrade the operation of surrounding roadways below their adopted performance standards as set forth in the Hendry County Comprehensive Plan. Therefore, the Project is consistent with the Transportation Element of the Hendry County Comprehensive Plan.

C. Proposed Development

FPL acquired 957± acres of farm land of which it proposes to convert a little over 450 acres from an active citrus grove into a solar field. This will be an unmanned solar power generation facility while the remainder of the grove will continue being cultivated as a grove for the foreseeable future.

To establish the methods and procedures of this report, a Traffic Impact Statement Methodology Report was submitted to the Hendry County Engineer (Mr. Shane Parker) for his review and acceptance. A copy of the accepted Methodology Report is included in the Appendix as Exhibit 1.

Using the volume of new traffic that is estimated to be generated by the proposed land use, this analysis determines whether there is adequate roadway capacity to support the estimated impact on the existing State and County roadway network. Further, it will identify deficiencies in the public roadways serving the Project and provide recommendations to mitigate same, if any.

For purposes of this traffic analysis, the assumed first year of project operation is 2018.
1. Location and Access

The Site is in northwest Hendry County with no frontage on a public roadway. It lies in the Collin Slough Water Control District immediately east of Gerber Groves Water Control District. Its access is from the eastern terminus of Sears Road, a Hendry County Local Rural roadway, by way of a private, deeded access easement as shown on the Location Map below. Documents evidencing such legal access are attached as Exhibit 2.

![Location Map](image)

**Figure 1 – Location and Access**

2. Site Development

The 957 ± acre site is currently designated Agriculture on the Hendry County Future Land Use Map and zoned AG-2. Approximately two-thirds of the site is in active citrus production. The remainder of the site is a functioning reservoir, which is not proposed to be impacted by this project. Approximately 450 acres of the northern portion of the site will be developed into a solar facility as depicted on the project’s General Concept Plan Exhibit 3. The remainder of the site will continue to be utilized for farming.
This TIS addresses long-term traffic impacts only. Prior to construction, the applicant will submit a construction-phase Maintenance of Traffic Plan (“MOT Plan”) to the Hendry County Engineer for approval. Project construction is estimated to be completed by 2018.

The solar facility will be remotely monitored and will not require onsite personnel for operation. Periodic maintenance of equipment and grounds will occasion infrequent visits. This modification will yield less trips than is currently existing, but for purposes of this analysis, and as provided in the attached Methodology Report, an average of one site visit per day (2 trips) will be generated by the solar facility. Traffic (trips) generated by the agriculture operations (citrus production) which will continue after development. Trips generated from same are considered existing background traffic having no new impacts on public roadways. Note that although approximately 450 acres of citrus operations will be replaced by the solar facility, no reduction of background traffic impacts resulting from the elimination of associated maintenance and harvest personnel have been credited to the proposed project.

**D. Analysis**

With an estimated average of only one site visit per day, the project’s traffic generation is characterized as de minimus. The project will have no adverse impact upon the level of service of public roadways and will not create any transportation deficiencies that need to be mitigated.

1. Development

FPL proposes to utilize the north 450 ± acres as an unmanned solar power generation facility while the remainder of the site will continue to be in citrus production. It is expected that construction will be completed and operational in Horizon Year 2018.

Trip generation estimates are normally based on procedures established by the Institute of Transportation Engineers (ITE) Trip Generation Manual. However, the ITE does not include representative surveys of either existing or proposed uses. Table 1 below reflects proposed trips for the solar field only.

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</tr>
</tbody>
</table>

*ADT - Average Daily Trips

**VPH - Vehicles Per Hour**

![Table 1](attachment:image.png)
2. Directional Distribution

For this TIS, it is recommended that 50% of the site generated trips will be distributed north of Sears Road and 50% south of same. Figure 2 reflects this breakdown on the County’s road network.

Hendry County’s TIS Guidelines require that the area of study include all roadway links which are “influenced” by the proposed development. The Area of Influence includes links where Project generated trips equal or exceed five percent (5%) of the Maximum Service Flow Rate based on the Performance Standard for that link.

Figure 2 – Area of Influence traffic distribution.
In order to determine the Area of Influence, peak hour trips shown in Table 1 were distributed according to Figure 2 above and reflected in Table 2 below.

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>Adopted LOS</th>
<th>Pk Hr. Dir. Vol. (V/Hr/Day)*</th>
<th>Project Traffic Distribution (%)</th>
<th>Project Traffic Distribution (V/Hr/Day)</th>
<th>Percent of LOS</th>
<th>Significant (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sears Road</td>
<td>2 lane undivided</td>
<td>C</td>
<td>430</td>
<td>100%</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>SR 29 North of Sears Rd</td>
<td>2 lane undivided</td>
<td>C</td>
<td>430</td>
<td>50%</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>SR 29 South of Sears Rd</td>
<td>2 lane undivided</td>
<td>C</td>
<td>430</td>
<td>50%</td>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>

* Based on generalized Table #9 (rev. date 12/18/12)

The Project has no influence on any of the affected roadway networks but per the County Engineer’s request at the pre-application meeting, the following Level of Service analysis is provided.

3. Level of Service Analysis

“LOS” is a qualitative measure that describes operational conditions within a traffic stream and their perception by drivers and/or passengers. Levels of service include six categories, ranging from A (best) to F (worst). Hendry County Comprehensive Plan Policy 9.1.2 reflects its adoption of LOS C for a Performance Standard on both the affected roadways.

Policy 9.1.2:

The public facility level of service standards are listed below. The levels of service standards pertain to unincorporated Hendry County only unless otherwise specified.

A. Roadways:

Arterials and collectors located within urban Hendry County shall maintain LOS C. This shall specifically apply to the roadway segments in Labelle and Clewiston.

All multi-lane segments of State roads in rural Hendry County shall have the LOS Standard of “B” at peak hour. The minimum acceptable level of service for two lane State roadways is as follows:

<table>
<thead>
<tr>
<th>Road</th>
<th>Type</th>
<th>Minimum LOS at Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 80</td>
<td>FIHS</td>
<td>C</td>
</tr>
<tr>
<td>SR 82</td>
<td>Emerging SIS</td>
<td>C</td>
</tr>
<tr>
<td>SR 29</td>
<td>Emerging SIS</td>
<td>C</td>
</tr>
</tbody>
</table>

LOS for all County Roads is “C.”

Figure 3 – Excerpt from Comp. Plan

Generalized Table 9 were used to determine the LOS on Sears Road and SR 29 in the Horizon Year (See Appendix).
Coincidentally, FDOT has two permanent traffic count stations, one north of Sears Road at the Duda Packinghouse Road and one south of Sears Road on SR 29. A growth rate of 0.32% was computed using their historical data in this geometric growth formula:

\[ AADT_f = AADT_p (1 + i)^n \]

where (i) is the growth rate and (n) is the number of years.

Sears Road is a public roadway, it serves mostly agricultural farms and dead ends at an abandoned railroad. East of said terminus, is a platted roadway network, which provides private, legal and stable access to the area landowners. Hendry County has not collected traffic counts on Sears Road since 2003. The computed growth rate was applied to same to determine current estimates on Sears Road and projected same to Horizon year 2018.

Table 3 reflects a projected level of service in 2018, the Horizon Year to be within the adopted capacity of the roadway with the Project’s added trips.

<table>
<thead>
<tr>
<th>Roadway Links LOS Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 Peak Hour Direction Background</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Sears Rd</td>
</tr>
<tr>
<td>SR 29 N of Sears Rd</td>
</tr>
<tr>
<td>SR 29 S of Sears Rd</td>
</tr>
</tbody>
</table>

No further analysis is required.

4. Access Management

There are no access points other than existing Sears, therefore no such analysis is warranted.

5. Left Turn Lane Analysis

A left turn lane exists on SR 29, therefore no further analysis is warranted.

6. Right Turn Lane Analysis

Hendry County applies Lee County’s Right Turn Lane Policy as follows:

V. **DECELERATION AND RIGHT TURN LANES**

A. *Arterial Street...*

B. *Collector Streets*
As defined in Section III. A. 1 and 2. b., a deceleration and right turn will be required when any two (2) or more of the following warrants are satisfied:

1. Posted speed limit of the collector street is equal to or greater than thirty-five (35) mph. **(YES)**
2. Number of right turning movements from the collector street is equal to or greater than forty-five (45) during either the A.M. or P.M. peak hour of the collector street. **(N/A)**
3. Available Sight Distance for a right turning vehicle to be seen by through traffic traveling in the same direction is less than the value shown in Table A-1 for the posted speed limit of the collector street. **(N/A)**
4. Traffic Control of the intersecting street or access point connection is a traffic signal. **(N/A)**

No two conditions of V (B). were met, therefore a right (deceleration) turn lane is not warranted.

**E. Conclusions and recommendations**

This Traffic Statement demonstrated insignificant impact to the county and state roadway networks while maintaining acceptable levels of service on both. Accordingly, no mitigation improvements are warranted.
METHODOLOGY MEETING CHECKLIST

This Checklist is provided for use as a worksheet to ensure that no important elements are overlooked. Mark the items that do not apply with “N/A.”

Date: 11/28/16
Time: 11:45 AM
Location: RET Office

Attendees:
Name, Organization, and Telephone Numbers

1) Rock Aboujaoude, Rock Enterprises, Inc.; Tel: (863) 612-0011 (Preparer)
2) Shane Parker, PE., Hendry County Engineer; Tel: (863) 675-5222 (Reviewer)
3) 
4) 

Study Preparer:
Preparer's Name and Title: Rock Aboujaoude, PE
Organization: Rock Enterprises, Inc.
Address & Telephone Number: 870 W. Hickpochee Ave. # 100, LaBelle, FI 33935,
Tel: (863) 612-0011

Reviewer(s):
Reviewer's Name & Title: Shane Parker, PE, County Engineer
Organization & Tel. Number: Hendry County, Tel: (863) 675-5222

Applicant:
Applicant's Name: Florida Power and Light Company
Address: 700 Universe Blvd, Juno Beach, Florida 33480
Telephone Number: (561) 304-5480

Proposed Development:
Name: Hammock Solar Energy Center
Location: Approximately 4.5 miles NE of Sears Road terminus
Description:
FPL owns 959± Acres presently utilized for citrus production. It proposes to construct and operate a solar powered electric generating facility on approximately 450 ± acres of the site. Approximately one-third of the site is a functional reservoir serving the citrus grove. The remainder of the site will continue to be utilized for citrus production.
Land Use Type: The land is currently classified as Agriculture
Source of Trip Generation Rates: Estimated
Proposed number and type of development units: 1

Zoning:
Existing: A-2
Comprehensive plan recommendation: Agriculture
Requested: EGF
Findings of the Preliminary Study: The project will yield less trips than is currently generated by the existing citrus operation.

Study Type:

- Small Development [x]
- Medium Development [ ]
- Large Development [ ]
- Comprehensive Plan Amendment [x]
- Zoning Change [x]
- Subdivision/Platting [ ]
- Site Development Plan [ ]

Area of Influence:
Boundaries: Site Access at Sears Rd. and SR 29
Additional intersections to be analyzed: None
Horizon Year(s): 2018
Analysis Time Period(s): Weekday AM and PM Peak Hours

Future Off-Site Developments that may impact project: None known.

Reductions in Trip Generation Rates:
None: [x]
Pass-by trips: 
Internal trips (PUD): 
Other: 

Horizon Year Roadway Network Improvements:
None other than resurfacing SR 29 from South of CR 832 to South of C Road in 2018.

Methodology & Assumptions:
Non-site traffic estimate method: Background trips provided by FDOT's online database.
Site-trip generation: The solar component is an unmanned project; therefore, trips are estimated based on periodic maintenance.
Trip distribution method: 50% - 50% going north and south on SR 29.
Traffic assignment method: Manual
Traffic growth rate: \[ AADT_t = AADT_0 (1 + r)^n \] AADT between 2001 and 2015 averaged 0.32%
Special Features: (from preliminary study or prior experience)

Accident locations: [Signature]

Sight distance: No Site Constraints

Queuing: Existing left turn lane on SR 29 to Sears Rd.

Access location & configuration: Existing

Traffic control: STOP control at Sears Rd for access to SR 29

Signal system location & progression needs:

On-site parking needs:

Data Sources: FDOT

Base maps:

Prior study reports:

Access policy and jurisdiction: Hendry County

Review process:

Requirements:

Miscellaneous:

SIGNATURES

Study Preparer: Rock Aboujaoude, PE

Reviewer: Shane Parker, PE

Applicant
# Hendry County 2006 Traffic Report

<table>
<thead>
<tr>
<th>Street</th>
<th>Location</th>
<th>Station #</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
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<tbody>
<tr>
<td>Ft. Denaud Bridgeway</td>
<td>North of Ft. Denaud Rd.</td>
<td>51</td>
<td>1332</td>
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<td></td>
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<td>Ft. Denaud Rd.</td>
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<td>1378</td>
<td>1007</td>
<td>1141</td>
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<td>Georgia Ave</td>
<td>North of SR 80</td>
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<td>700</td>
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<td>904</td>
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<td>1853</td>
<td>4625</td>
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<td>800</td>
<td>1144</td>
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<td></td>
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<td>1791</td>
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FDOT Traffic Reports for SR 29 North and South of Sears Road
### County: 07 - Hendry

#### Site: 0024 - SR 29, South of Duda Packinghouse Road

<table>
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<th>Year</th>
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<th>Direction 1</th>
<th>Direction 2</th>
<th>K Factor</th>
<th>D Factor</th>
<th>T Factor</th>
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<td>S 2600</td>
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<td>S 2400</td>
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<tr>
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</table>

### County: 07 - Hendry

#### Site: 0025 - SR 29, South of Sears Road

<table>
<thead>
<tr>
<th>Year</th>
<th>AADT</th>
<th>Direction 1</th>
<th>Direction 2</th>
<th>K Factor</th>
<th>D Factor</th>
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<td>10.30</td>
<td>55.50</td>
<td>20.40</td>
</tr>
</tbody>
</table>

**AADT Flags:**
- C = Computed
- E = Manual Estimate
- F = First Year Estimate
- S = Second Year Estimate
- T = Third Year Estimate
- V = Fifth Year Estimate
- G = Sixth Year Estimate
- X = Unknown

**K Factor:** Starting with year 2011 is standard, prior years are K30 values
**TABLE 9**

Generalized Peak Hour Directional Volumes for Florida's Rural Undeveloped Areas and Developed Areas Less Than 5,000 Population

<table>
<thead>
<tr>
<th>Lanes</th>
<th>Median</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undivided</td>
<td>670</td>
<td>740</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>2</td>
<td>Divided</td>
<td>1,530</td>
<td>1,580</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>3</td>
<td>Divided</td>
<td>2,360</td>
<td>2,400</td>
<td>**</td>
<td>**</td>
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</table>

Non-State Signalized Roadway Adjustments

(All corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

<table>
<thead>
<tr>
<th>Lanes</th>
<th>Median</th>
<th>Exclusive Left Lanes</th>
<th>Exclusive Right Lanes</th>
<th>Adjustment Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Divided</td>
<td>Yes</td>
<td>No</td>
<td>+5%</td>
</tr>
<tr>
<td>1</td>
<td>Undivided</td>
<td>No</td>
<td>Yes</td>
<td>-20%</td>
</tr>
<tr>
<td>Multi</td>
<td>Undivided</td>
<td>Yes</td>
<td>No</td>
<td>-5%</td>
</tr>
<tr>
<td>Multi</td>
<td>Undivided</td>
<td>No</td>
<td>Yes</td>
<td>+5%</td>
</tr>
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One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

**UNINTERRUPTED FLOW FACILITIES**

**FREeways**

<table>
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<tr>
<th>Lanes</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>2,500</td>
<td>3,720</td>
<td>4,560</td>
<td>5,400</td>
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Freeway Adjustments

Auxiliary Lanes

Present in both Directions

+1,000

**UNINTERRUPTED FLOW HIGHWAYS**

**Rural Undeveloped**

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Document Review

The dual signatory process is an integral part of Environmental Consulting & Technology, Inc.’s (ECT’s) Document Review Policy No. 9.03. All ECT documents undergo technical/peer review prior to dispatching these documents to any outside entity.

This document has been authored and reviewed by the following employees:

Matthew D. Goff
Author
Signature
February 3, 2017
Date

Philip W. Simpson
Peer Review
Signature
February 3, 2017
Date
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2.0 Methods</td>
<td>4</td>
</tr>
<tr>
<td>2.1 Habitat Classification</td>
<td>4</td>
</tr>
<tr>
<td>2.2 Wetlands</td>
<td>4</td>
</tr>
<tr>
<td>2.3 Threatened and Endangered Species</td>
<td>4</td>
</tr>
<tr>
<td>3.0 Results</td>
<td>6</td>
</tr>
<tr>
<td>3.1 Wetlands and Surface Waters</td>
<td>6</td>
</tr>
<tr>
<td>3.2 Threatened and Endangered Species</td>
<td>6</td>
</tr>
<tr>
<td>3.2.1 Species Identification</td>
<td>6</td>
</tr>
<tr>
<td>3.2.2 Listed Wildlife</td>
<td>9</td>
</tr>
</tbody>
</table>
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
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Listed Species Known to Occur or Potentially Occurring within the Project Site

List of Figures

<table>
<thead>
<tr>
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<th>Page</th>
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Site Vicinity

Subject Property and Project Area

Land Use/Land Cover

Wood Stork Foraging Area

Florida Panther Focus Area
# List of Acronyms and Abbreviations

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<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>ECT</td>
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<td>ESA</td>
<td>U.S. Endangered Species Act of 1973</td>
</tr>
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<td>FDEP</td>
<td>Florida Department of Environmental Protection</td>
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<tr>
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<td>Florida Department of Transportation</td>
</tr>
<tr>
<td>FLUCFCS</td>
<td>Florida Land Use, Cover, and Forms Classification System</td>
</tr>
<tr>
<td>FWC</td>
<td>Florida Fish and Wildlife Conservation Commission</td>
</tr>
<tr>
<td>GPS</td>
<td>global positioning system</td>
</tr>
<tr>
<td>ha</td>
<td>hectare</td>
</tr>
<tr>
<td>SFWMD</td>
<td>South Florida Water Management District</td>
</tr>
<tr>
<td>SR</td>
<td>State Road</td>
</tr>
<tr>
<td>subject property</td>
<td>Hammock Solar Energy Center</td>
</tr>
<tr>
<td>USACE</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>USFWS</td>
<td>U.S. Fish &amp; Wildlife Service</td>
</tr>
<tr>
<td>VHF</td>
<td>very high frequency</td>
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</table>
1.0 Introduction

Environmental Consulting & Technology, Inc. (ECT) conducted a desktop wetlands and wildlife assessment of the Hammock Solar Energy Center comprising 21 parcels totaling approximately 957+/- acres in Hendry County, Florida (subject property) (Figure 1). The subject property is located approximately 5 miles south of the intersection of State Road (SR) 80 and SR 29 in LaBelle and approximately 7.5 miles east of SR 29 in unincorporated Hendry County, Florida. Investigations were conducted for the Hammock Solar Energy Center project area, which is an area of approximately 450 acres proposed for a solar generation facility (Figure 2). The purpose of this assessment was to evaluate the subject property for the presence of wetlands or protected flora and fauna. This assessment is based on a review of available desktop research material and field reconnaissance conducted on July 26 and 27, 2016.

The project area has been previously developed and currently supports an active citrus grove interlaced with linear drainage canals. The project area vegetation consists solely of cultivated citrus trees with ruderal grasses and herbaceous plants in the groundcover. No natural habitats remain within the project area. The project area is surrounded by agricultural operations, which necessarily control their water table artificially.
FIGURE 1.
SITE VICINITY
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FL

Sources: USGS, 2016; Hendry County PA, 2016; ECT, 2016.
FIGURE 2
SUBJECT PROPERTY AND PROJECT AREA
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FL

Sources: FDOT, 2014; Hendry County PA, 2016; ECT, 2016.
2.0 Methods

2.1 Habitat Classification

Land use/land cover data were acquired from the South Florida Water Management District (SFWMD) utilizing the Florida Land Use, Cover, and Forms Classification System (FLUCFCS) (Florida Department of Transportation [FDOT], 1999). The FLUCFCS protocol assigns land use/cover habitat codes based on the dominant vegetative species and landscape features. While land use codes illustrate the current use of a property (i.e., residential, industrial, commercial, etc.), land cover codes provide information regarding the natural ecological condition of the land (i.e., freshwater marsh, oak hammock, pine flatwoods, cypress swamp, etc.). Habitat classification is useful for evaluation of the potential utilization of a site by threatened or endangered species (listed species). Based on the habitat present, inferences can be made regarding the potential for listed species occurrence.

2.2 Wetlands

ECT performed an onsite assessment of the project area to evaluate the potential presence of jurisdictional wetlands in accordance with applicable federal and state wetland criteria as set forth by the U.S. Army Corps of Engineers (USACE) and Florida Department of Environmental Protection (FDEP). An ECT ecologist conducted a site visit in July 2016 to assess the extent and quality of the wetlands in the project area.

2.3 Threatened and Endangered Species

The status and potential for occurrence of wildlife species listed as endangered, threatened, or of special concern in the project areas were determined using literature survey, agency records, agency websites, the Florida Natural Areas Inventory database (May 2016), the U.S. Fish &

Wildlife Service (USFWS) Information Planning and Conservation database (September 2016), and field assessments of the project area on July 26 and 27, 2016.
3.0 Results

Figure 3 presents the FLUCFCS map for the subject property. The subject property contains major land uses that include citrus groves (221), ditch/canal (512), upland scrub/brush (320), wetland forested mixed (630), freshwater marsh (641), and roads (814).

3.1 Wetlands and Surface Waters

Approximately 215 acres of wetlands were identified within the subject property. Nearly all of those wetlands are located within a continuous corridor that extends offsite to the south of the subject property (Figure 3). The wetlands within this corridor consist primarily of freshwater herbaceous marshes, intermixed with forested wetland components. In addition, there is an isolated forested wetland (approximately 0.4 acre) in the northwest portion of the subject property. Vegetation within this wetland consists primarily of the invasive exotic Brazilian pepper (*Schinus terebinthifolius*).

The subject property contains several man-made, linear agricultural ditches (approximately 74.5 acres total within the subject property). These ditches are generally vegetated with an assortment of nuisance and exotic vegetation, including water lettuce (*Pistia stratioides*), water hyacinth (*Eichornia crassipes*), cattail (*Typha* sp.), and primrose willow (*Ludwigia* sp.).

3.2 Threatened and Endangered Species

3.2.1 Species Identification

Based on available desktop data and the results of the field assessments, nine terrestrial- or wetland-dependent wildlife species were identified as either known to occur or potentially occurring within the subject property: six birds, two reptiles, and one mammal. No federally or state-listed species were observed during field investigations. This is likely due to the altered condition of the subject property. Table 1 summarizes the status and likelihood of occurrence for these species. Species whose USFWS consultation or focal areas and/or known distribution do...
FIGURE 3.
LAND USE/LAND COVER
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FL

Table 1. Listed Species Known to Occur or Potentially Occurring within the Project Site

<table>
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<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Federal Status*</th>
<th>State Status*</th>
<th>Likelihood of Occurrence</th>
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<tbody>
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<td>Eastern indigo snake</td>
<td>T</td>
<td>T</td>
<td>Low</td>
</tr>
<tr>
<td>Egretta caerulea</td>
<td>Little blue heron</td>
<td>N</td>
<td>T</td>
<td>Moderate</td>
</tr>
<tr>
<td>Egretta tricolor</td>
<td>Tricolored heron</td>
<td>N</td>
<td>T</td>
<td>Moderate</td>
</tr>
<tr>
<td>Grus canadensis pratensis</td>
<td>Florida sandhill crane</td>
<td>N</td>
<td>T</td>
<td>Moderate</td>
</tr>
<tr>
<td>Mycteria americana</td>
<td>Wood stork</td>
<td>T</td>
<td>T</td>
<td>Moderate</td>
</tr>
<tr>
<td>Puma concolor coryi</td>
<td>Florida panther</td>
<td>E</td>
<td>E</td>
<td>Moderate</td>
</tr>
<tr>
<td>Polyborus plancus audubonii</td>
<td>Audubon’s crested caracara</td>
<td>T</td>
<td>T</td>
<td>Known</td>
</tr>
<tr>
<td>Rostrhamus sociabilis plumbeus</td>
<td>Everglade snail kite</td>
<td>E</td>
<td>E</td>
<td>Moderate</td>
</tr>
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*N = none.  
T = threatened.  
E = endangered.

Source: ECT, 2016.
not overlap with the subject property (e.g., Florida bonneted bat), or those where appropriate habitat clearly does not exist (e.g., Florida scrub-jay, gopher tortoise, red-cockaded woodpecker), are not considered.

### 3.2.2 Listed Wildlife

**Eastern Indigo Snake (Drymarchon couperi)**
This distinctive large, black snake can occur in suitable habitats throughout Florida. It has a wide range of habitat preferences and prey species and requires large tracts of land for survival. Often considered a gopher tortoise commensal, it can be found in xeric habitats but also uses more mesic or wetland habitats for foraging. No gopher tortoises have been observed, and the subject property lacks gopher tortoise burrows and other subterranean refuges the indigo snake prefers.

**Little Blue Heron and Tricolored Heron (Egretta caerulea and Egretta tricolor)**
These state-threatened wading bird species can be found in suitable wetland habitats throughout Florida. Foraging occurs in shallow freshwater, brackish, and saltwater habitats. Both species breed in colonial nesting sites with other wading and waterbird species. No specific surveys for these birds are proposed. There are several man-made ditches within the project site that are likely used for foraging by these species, although none were observed during the field assessment. The Florida Fish and Wildlife Conservation Commission’s (FWC’s) Breeding Atlas does not contain any records of these birds breeding in the vicinity of the project area. As such, there is a moderate potential these birds may use the project site as foraging habitat but are unlikely to nest there.

**Florida Sandhill Crane (Grus canadensis)**
The Florida sandhill crane is listed as threatened by FWC. This species prefers freshwater marshes for nesting and pastures, wet prairies, or farm fields for foraging. No suitable nesting or foraging habitat is present within the project area, and no individuals were observed either nesting or foraging during the field assessment. As such, it is not likely this species can be found within the project area. Nonetheless, wetlands adjacent to the project area and within the limits of the subject property may provide suitable habitat.
Wood Stork (*Mycteria americana*)
The wood stork is an endangered species as listed by USFWS. This large bird is primarily associated with freshwater and estuarine habitats for nesting, roosting, and foraging. Wood storks typically construct their nests in medium to tall trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water. They are found across much of peninsular Florida. Wood storks tend to use the same colony sites over many years, as long as the sites remain undisturbed and sufficient feeding habitat remains in the surrounding wetlands. There are no known nesting colonies on the subject property or within 1 mile, though individuals of the species might occasionally be found foraging in the ditches that occur on the subject property. No wood storks have been observed on the subject property to date. In South Florida, the wood stork core foraging area (CFA) is an 18.6-mile radius around active nesting colonies where storks may likely forage. According to data provided by USFWS, the subject property intersects within one wood stork CFA (Okoloacoochie Slough; colony No. 619141; Figure 4).

Audubon’s Crested Caracara (*Polyborus plancus audubonii*)
This raptor is listed as a threatened species by USFWS. It is present in Central and South Florida, including Hendry County. Caracaras commonly occur in dry or wet prairie areas with scattered cabbage palms or in lightly wooded areas of scattered saw palmetto, scrub oaks, and cypress. Caracaras are highly opportunistic in their feeding habits, eating carrion and capturing live prey. The subject property contains suitable foraging habitat for this species and is within USFWS’s consultation area for this species. Two individual caracaras were observed within the project area during the field assessment in July 2016. The project area does not contain suitable nesting substrate for the caracara, so none would be expected to nest within the limits of the Hammock Solar Energy Center, nor have any been documented to date.

In evaluating project impacts to the caracara in south Florida, USFWS defines a primary zone as 300 meters (985 feet) and a secondary zone as 1,500 meters (4,920 feet) outward from the nest tree. Preclearing surveys in the nesting season prior to construction will be performed in accordance with USFWS’s Crested Caracara Survey Protocol to determine if there are any nest trees within a critical distance of the subject property.
FIGURE 4.
WOOD STORK FORAGING AREA
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FLORIDA

**Everglade Snail Kite (Rostrhamus sociabilis plumbeus)**

This federally endangered bird prefers habitats consisting of slow-moving water with emergent vegetation, such as maidencane or sawgrass. Nesting almost always occurs in shrubs or small trees over water. This species is typically found in the Lake Okeechobee area southward through the Everglades. The snail kite was not observed during the field assessment, the subject property is located outside the critical habitat for this species, and the project area lacks nesting habitat for this species. As such, there is a low likelihood of this species to occur there. However, suitable foraging habitat is present within and adjacent to the project area, and nesting may occur within adjacent freshwater marshes.

**Florida Panther (Puma concolor coryi)**

The Florida panther is listed as endangered under the U.S. Endangered Species Act of 1973 (ESA), as amended (Title 16, Chapter 35, Section 1531 *et seq.*, United States Code [U.S.C.]). Whereas the species historically occurred throughout the southeastern United States, panthers are now restricted to approximately 5 percent of their former range. The current range of the Florida panther covers approximately 1.26 million hectares (ha) (3.11 million acres) of southern Florida, but the adult breeding range of panthers recently was estimated at 557,900 ha (1.38 million acres). The Florida panther is a wide-ranging predator that occurs at low densities and has a population estimated to be in the range of 100 to 180 individuals (i.e., adults and subadult). Home range sizes have been estimated at 43,500 to 65,000 ha (107,500 to 160,600 acres) for males and 19,300 to 39,600 ha (47,700 to 97,900 acres) for females.

The habitat of the Florida panther is an extensive landscape comprised of a mix of natural, seminatural, and agricultural uses. Forested habitats, including pinelands, upland hardwood forests, hardwood swamps, and cypress swamps, are of vital importance to panthers in South Florida, providing habitats most needed by panthers to meet life cycle needs, including selection of den sites, daytime/rest sites, and hunting prey. Nonforested habitats are used more during nighttime than daytime hours. Global positioning system (GPS) telemetry records were reported in forest cover 59 percent of the time and in open habitats 41 percent of the time. Panthers utilize forest patches of any size. Freshwater marsh, shrub and brush land, shrub swamp, and prairie grasslands are also selected by panthers but to a lesser extent. Agricultural lands and other habitats (e.g., open water, salt marshes, mangrove swamps, exotic plants, urban land uses) are
used in proportion to availability. Although panthers may be found at distances of more than 1,000 meters (3,280 feet) from forest patches, 74 percent and 85 percent of telemetry records were located within 100 meters and 200 meters, respectively, of forest cover.

The Florida panther is a top predator that is not preyed on by other species except humans. The primary prey of panthers are white-tailed deer \((Odocoileus virginianus)\), wild hogs \((Sus scrofa)\), marsh rabbits \((Sylvilagus palustris)\), raccoons \((Procyon lotor)\), and armadillos \((Dasypus novemcinctus)\). Panthers are ambush predators that must be able to approach prey within a certain minimal distance to improve hunting success.

USFWS has developed a consultation area map and a panther key to assist USACE in identifying those projects that may have an effect on the Florida panther and result in the need for consultation with USFWS (USFWS February 17, 2007, letter to USACE). The consultation area map, referred to as the panther focus area, consists of the primary zone, dispersal zone, and secondary zone, and a primary dispersal/expansion area north of the Caloosahatchee River identified by Thatcher et al. (2006)\(^2\).

The subject property is located in the secondary zone of the panther focus area in Hendry County, Florida (Figure 5). It is approximately 1.6 miles east of the dispersal zone, 2.5 miles north of Okaloacoochee Slough Wildlife Management Area, 2.7 miles north of adult breeding habitat as mapped by Frakes et al. (2015)\(^3\), and 3.1 miles north of the primary zone. The subject property is dominated by citrus groves and is located in a large regional landscape comprised primarily of citrus groves, croplands, and associated stormwater management systems. No Florida panthers have been recorded on the subject property based on very high frequency (VHF) telemetry (February 1981 - June 2016), GPS telemetry (February 2002 - January 2015), mortality (February 1972 - October 2016), den (May 1986 - May 2016), and depredation (May 2004 - November 2016) records obtained from FWC. The only records near the subject property are three VHF telemetry records of FP28, a subadult male who traveled to within 0.2 to 1.2 miles east of the subject property in 1989.


FIGURE 5.
FLORIDA PANTHER FOCUS AREA
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FLORIDA

CULTURAL RESOURCES ASSESSMENT SURVEY OF THE FPL HAMMOCK SOLAR ENERGY CENTER, HENDRY COUNTY, FLORIDA

PREPARED FOR

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC. (ECT)
AND
FLORIDA POWER AND LIGHT COMPANY (FPL)

PREPARED BY

DAVID BREETZKE

MICHAEL ARBUTHNOT, MS, RPA
PRINCIPAL INVESTIGATOR

SEARCH

WWW.SEARCHINC.COM

NOVEMBER 2016
# TABLE OF CONTENTS

Table of Contents ............................................................................................................................ iii
List of Figures .................................................................................................................................. iv
List of Tables ................................................................................................................................. iv

Introduction .................................................................................................................................... 1
Project Location and Environment ................................................................................................. 3
  Soils and Drainage ......................................................................................................................... 3
  Paleoenvironment ......................................................................................................................... 3
Cultural Overview .......................................................................................................................... 9
  Pre-Contact History .................................................................................................................... 9
  Post-Contact History .................................................................................................................. 12
Background Research and Methods ............................................................................................... 17
  Research Design ......................................................................................................................... 17
  Florida Master Site File Review .................................................................................................. 17
  Historic Map and Aerial Photograph Review ............................................................................. 19
  Methods .................................................................................................................................. 23
  Evaluation Criteria .................................................................................................................... 25
Survey Results ............................................................................................................................... 27
Conclusions and Recommendations ............................................................................................... 32
References Cited ............................................................................................................................ 33

Appendix A: Unanticipated Discoveries Statement
Appendix B: FDHR Survey Log Sheet
LIST OF FIGURES

Figure 1. Location of the project area in Hendry County, Florida ............................................... 2
Figure 2. Topographic map showing the project area ..................................................................... 4
Figure 3. Aerial photograph showing the project area .................................................................... 5
Figure 4. Soil drainage characteristics within the project area ...................................................... 6
Figure 5. Orange grove in the southwest portion of the project area, facing north .................... 7
Figure 6. Orange grove in the northeast portion of the project area, facing northwest ............. 7
Figure 7. Map showing previous cultural resource surveys and resources within one mile of the project area .......................................................................................................... 18
Figure 8. 1873 GLO map showing project area ............................................................................ 20
Figure 9. 1949 USDA aerial photograph showing the project area ............................................. 21
Figure 10. 1958 USGS topographic map showing the project area .............................................. 22
Figure 11. 1968 aerial photograph of project area ........................................................................ 24
Figure 12. CRAS results showing the locations of the excavated shovel tests ......................... 28
Figure 13. Aerial photograph showing the results of the metal detector survey ....................... 29
Figure 14. Representative shovel test in poorly drained soil (ST 2) ............................................ 30
Figure 15. Representative shovel test in very poorly drained soil (ST 7) .................................... 30

LIST OF TABLES

Table 1. Soil Types and Drainage Classifications within the Project Area ................................. 3
INTRODUCTION

This report presents the findings of a cultural resources assessment survey (CRAS) of 457 acres for the FPL Hammock Solar Energy Center in Hendry County, Florida (Figure 1). This undertaking is identified as the FPL Hammock Solar Energy Center Project (Project). Fieldwork was completed October 17-20, 2016, by SEARCH at the request of Environmental Consulting & Technology, Inc. (ECT) on behalf of Florida Power and Light Company (FPL) in support of plans to construct a 457-acre solar array. For this project, the Area of Potential Effect (APE) consists of the entire 457-acre parcel, which is located north of County Road (CR) 832, south of State Route (SR) 80, west of CR 833 and east of SR 29 in Sections, 3, 4, 33, and 34 of Townships 43 and 44 South, Range 30 East.

The purpose of the survey was to identify and document archaeological resources, historic structures, potential districts, and other cultural resources within the APE and to assess their potential for listing in the National Register of Historic Places (NRHP). No structures are located in the APE.

The fieldwork consisted of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests throughout the APE. No archaeological sites, resource groups, or historic buildings were identified within the APE. Two historic corridors (the Ft. Thompson Road and a historic railroad grade) noted on historic maps were subjected to a systematic archaeological and metal detector survey. No evidence of either of these roads was found during this investigation.

Unanticipated discoveries found subsequent to this report should be treated in accordance with the Unanticipated Discoveries Statement provided in Appendix A. A Survey Log Sheet is presented in Appendix B.

This investigation was conducted in anticipation of compliance with Chapter 267, Florida Statutes. Chapter 267 mandates the identification and management of cultural resources in Florida in accordance with Public Law 113-287 (Title 54 USC), which incorporates the provisions of the National Historic Preservation Act of 1966, as amended. Work was performed by professional archaeologists meeting the qualifications established in the Secretary of the Interior’s Standards and Guidelines (48 FR 44716 [September 29, 1983]). This report was prepared by David Breetzke, MA, RPA.

It is the opinion of SEARCH that the current cultural resources assessment satisfies the above requirements, and no further cultural resource work is warranted. It is the recommendation of SEARCH that no historic properties will be affected by the development of the FPL Hammock Solar Energy Center Project.
Figure 1. Location of the project area in Hendry County, Florida.
PROJECT LOCATION AND ENVIRONMENT

The Project is located in Hendry County, Florida, southwest of Lake Okeechobee, within active orange groves. The 457-acre APE is located north of CR 832, south of SR 80, west of CR 833 and east of SR 29 in Sections, 3, 4, 33, and 34, Townships 43 and 44 South, Range 30 East. The APE lies 10.7 kilometers (6.7 miles) south of the Caloosahatchee River. Brooks (1981:6) places the APE in the Southwestern Flatwoods physiographic district and the Immokalee Rise Subdistrict, described as a broad area typically between 30 and 40 feet in elevation with gentle slopes and slightly higher than the surrounding land. The underlying geologic formation consists of Pleistocene-age calcareous shelly sand of the Caloosahatchee Formation (Geologic Map of Florida 1976). Figure 2 depicts the boundary of the APE on a topographic map, and Figure 3 shows the same information on an aerial photograph.

SOILS AND DRAINAGE

Soils within the APE are either poorly drained or very poorly drained. Table 1 identifies the acreage of each of the soil types and their drainage classifications across the APE, and Figure 4 depicts the soil classifications on an aerial photograph. Native vegetation is characterized by pine flatwoods with some wet prairies and cypress swamps, but has been largely supplanted by commercial agriculture (Figures 5 and 6). The APE is near the western edge of the Lake Okeechobee basin; however, the local surface hydrology has been significantly altered by an extensive network of canals that ultimately drain into the Caloosahatchee River over six miles to the north. The Caloosahatchee River is the major permanent stream in Hendry County. It is part of the Okeechobee Waterway, a navigable canal that crosses the state and passes through Lake Okeechobee.

Table 1. Soil Types and Drainage Classifications within the Project Area.

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<thead>
<tr>
<th>Soil Type</th>
<th>Drainage Classification</th>
<th>Acres</th>
<th>Acreage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immokalee sand, 0 to 2 percent slopes</td>
<td>Poorly drained</td>
<td>260.3</td>
<td>57.0</td>
</tr>
<tr>
<td>Malabar sand</td>
<td>Poorly drained</td>
<td>161.2</td>
<td>35.3</td>
</tr>
<tr>
<td>Wabasso sand, limestone substratum, 0 to 2 percent slopes</td>
<td>Poorly drained</td>
<td>8.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Basinger sand, 0 to 2 percent slopes</td>
<td>Poorly drained</td>
<td>3.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Rivera sand, depressional, 0 to 1 percent slopes</td>
<td>Very poorly drained</td>
<td>11.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Holopaw sand, depressional</td>
<td>Very poorly drained</td>
<td>12.3</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>457</td>
<td>100</td>
</tr>
</tbody>
</table>

PALEOENVIRONMENT

Between 18,000 and 12,000 years before present (BP), Florida was a much cooler and drier place than it is today. Melting of the ice sheets led to a major global rise in sea level (Rohling et al. 1998) that started from a low stand of -120 meters at 18,000 BP. The rise was slow while glacial conditions prevailed at high latitudes but became very rapid in the latest Pleistocene and
Figure 2. Topographic map showing the project area.
Figure 3. Aerial photograph showing the project area.
Figure 4. Soil drainage characteristics within the project area.
Figure 5. Orange grove in the southwest portion of the project area, facing north.

Figure 6. Orange grove in the northeast portion of the project area, facing northwest.
early Holocene. It became warmer and wetter rather rapidly during the next three millennia. By about 9000 BP, a warmer and drier climate began to prevail. These changes were more drastic in northern Florida and southern Georgia than in southern Florida, where the “peninsular effect” and a more tropically influenced climate tempered the effects of the continental glaciers that were melting (Watts 1969, 1971, 1975, 1980). Sea levels, though higher, were still much lower than at present; surface water was limited, and extensive grasslands likely existed, which may have attracted mammoth, bison, and other large grazing mammals. By 6000–5000 BP, the climate had changed to one of increased precipitation and surface water flow. By the late Holocene, ca. 4000 BP, the climate, water levels, and plant communities of Florida attained essentially modern conditions and have been relatively stable over the past 4,000 years.
CULTURAL OVERVIEW

PRE-CONTACT HISTORY

The following prehistoric overview of south Florida consists of a three-part chronology, with each period based on distinct cultural and technological characteristics recognized by archaeologists. From oldest to most recent, the three temporal periods include Paleoindian, Archaic, and the post-Archaic Belle Glade Culture. For further information on the region’s past, readers are referred to Milanich (1994, 1996), Milanich and Fairbanks (1980), Tebeau (1981), Worth (1998) and Sears (1982).

Paleoindian Period (10,000–8000 BC)

Although prehistoric native peoples entered Florida at least 12,000 years ago, and while there is abundant archaeological evidence for an early occupation of northern and central Florida (Milanich 1994), there is no firm evidence for people inhabiting the Everglades region at this early time. Lake Okeechobee and the Everglades did not exist, sea levels were much lower than at present, surface water was limited, and extensive grasslands probably existed, which may have attracted mammoth, bison, and other large grazing mammals. This bleak landscape inhibited intensive human habitation except perhaps along the coast; however, any coastal sites are probably now inundated by higher sea levels.

The climate during the Paleoindian period was cooler and the land drier, with coastal sea levels and the inland water table much lower than at present (Carbone 1983; Watts and Hansen 1988). The paucity of potable water sources may have played a crucial role in the distribution of Paleoindian bands across the landscape. Human groups could have frequented sinkholes and springs to collect water and plant materials as well as fauna which were also attracted to these locations (Dunbar 1991; Milanich 1994; Webb et al. 1984). In addition, many of these freshwater sources were located in areas of exposed silicified limestone which provided the Paleoindians with raw material (chert) for tool manufacture. Thus, it is thought that permanent freshwater sources (sinkholes, springs) along with loci of high quality chert were primary factors influencing Paleoindian settlement patterns in Florida.

Archaic Period (8000–500 BC)

Around 8000 BC, the environment and physiology of Florida underwent pronounced changes due to climatic amelioration. These changes were interconnected and include a gradual warming trend, a rise in sea levels, a reduction in the width of peninsular Florida, and the spread of oak-dominated forests and hammocks throughout much of Florida (Milanich 1994; Smith 1986).
A dramatic increase in precipitation and runoff in south Florida is indicated by peat deposits in the Everglades that began to form about 4050-3050 BC (Gleason and Stone 1994). This enabled native peoples to expand into formerly inhospitable locations. Sea levels reached modern levels and may have exceeded them for short periods (Bader and Parkinson 1990; Dorsey 1997; Stapor et al. 1991; Tanner 1991). Modern estuaries began to form and exploitation of coastal resources began in earnest, particularly along the northern Atlantic coast (Ste. Claire 1990).

Prehistoric Archaic sites (8000-1000 BC) have been documented in the interior around Lake Okeechobee (Gleason and Stone 1994; Hale 1989:48, 55-56) and in the lower levels of Everglades’s tree island sites (Carr 2006; Schwadron et al. 2006).

By 2000 BC, the climate and environments of Florida had reached essentially modern conditions. During this Late Archaic period, the first pottery was made by the native peoples of Florida. In southern Florida, this period is referred to as the Glades Archaic culture (Carr et al. 1995). The presence of this culture is suggested by bone middens now recognized as typical on nearly every interior tree island or former tree island in nearly every marsh or former marsh in southern Florida (e.g., Carr 2006; Carr and Steele 1993; Ehrenhard et al. 1978, 1979; Ehrenhard and Taylor 1980; Griffin 1988; Schwadron et al. 2006). Faunal remains from these sites consist of mainly freshwater species, such as turtle, fish, and pond apple snail, which were plentiful in the surrounding marshes. Several such sites are recorded in Hendry County and often are called “Prehistoric,” in the Florida Master Site File (FMSF) database, likely due to their lack of pottery and other temporally diagnostic artifacts. All of the Late Archaic sites identified in Hendry County are middens.

**Belle Glade Culture (500 BC–AD 1700)**

By 500 BC, regional adaptations had become so well established that it is possible for archaeologists to subdivide the state by geographic areas that share similar archaeological traits. The Project falls within the Okeechobee Region, which includes the Kissimmee River, Lake Okeechobee, and the northern Everglades (Milanich 1994:279-280). This region is associated with the prehistoric Belle Glade culture. This culture is recognized archaeologically by its distinctive pottery: a hard sand-tempered ware with a spiculite paste, scraped and cut vessel walls, and flat, beveled, and comma-shaped rims referred to as Belle Glade Plain (Porter 1951; Sears 1982; Willey 1949).

Distinctive features of the Belle Glade culture, particularly in the Lake Okeechobee area, are the presence of large earthworks consisting of circular ditches and embankments, linear ridges, canals, mounds, and middens (e.g., Allen 1948; Carr 1985; Johnson 1994; Willey 1949). Much of what is known about the Belle Glade culture is derived from the extensive excavations that were conducted by William Sears (1982) at Fort Center in Glades County during the 1960s. Willey (1949) summarized the Works Progress Administration (WPA) excavations by Matthew Stirling at the Belle Glade site, while more recent research by Austin (1987, 1996, 1997), Hale (1995), Johnson (1991, 1994, 1996), Mitchell (1996), and Wilder and Frederick (2006) have
contributed new information on Belle Glade adaptations in the Lake Okeechobee and Kissimmee River basins.

The Belle Glade period is divided into four sub-periods (Period I, Period II, Period III, and Period IV). What follows is a brief description of these cultural periods. Belle Glade Period I began sometime prior to 450 BC (Sears 1982:185, 192). Sand-and-fiber-tempered pottery is the diagnostic ceramic type found in these type sites. Belle Glade Period I assemblages tend to be small, often localized, and were quickly replaced by a ceramic assemblage dominated by sand-tempered ceramics. Evidence of the use of maize has been found in these sites. The inference is that population size was small and that the shift to intensive exploitation of wetland habitats was not yet fully realized.

The Belle Glade Period II, beginning at about AD 200, is represented archaeologically by the dominance of sand-tempered plain pottery in midden deposits. Socially, it is characterized by a larger population and the appearance of distinct mortuary ceremonialism similar to the practices seen in Hopewell cultures.

The Belle Glade Period III begins at about AD 600-800, and according to Sears (1982:199) it represents a transition from ceremonial center to a new pattern of residential settlement that dominates during the subsequent Belle Glade Period IV. Hopewell-like artifacts disappear although there are still ceramics, chert, and shell indicating economic contact with other regions of Florida. During this time there was a shift in the local production of pottery from a predominately sand-tempered plain ware to one characterized by spiculite paste, sand temper, and a cut and smoothed surface. This ceramic ware is known as Belle Glade Plain and it began to dominate the ceramic assemblage.

The Belle Glade Period IV, beginning about AD 1200-1400 and lasting until about AD 1700, was characterized by low house mounds in the savannas with attached linear earthworks that Sears (1982:200) believes were used to grow maize. Of particular interest during this period are tenoned plaques or badges (also referred to as ceremonial badges or tablets) that were often made from silver, gold, or non-local stone (Allerton et al. 1984). The distribution of these badges corresponds very closely to the distribution of Belle Glade ceramics (cf. Allerton et al. 1984:Table 1; Luer 1989:Figure 11), with the Kissimmee River and Lake Okeechobee basins having the greatest number. Sears (1982:200) felt that tenoned badges, and other exotic artifacts, were symbols of rank and authority within Belle Glade and Calusa societies. Milanich (1995:68-70) has suggested that the presence of European artifacts at sites in central and south-central Florida are the result of a Spanish effort to establish missions in this area during the seventeenth century (cf. Hann 1993). Other archaeologists have suggested that these artifacts are reflective of the increasing economic and political relationship that was established by the Serrope and Mayaimi with the Calusa of the southwest coast (Austin 1987:297; Luer 1989; Marquardt 1987:107-108).

Historical accounts suggest that the political organization of native groups in south Florida was highly stratified. Marquardt (1988) has suggested that contact with the Spanish resulted in
rapid changes to native societies that affected inter-polity dynamics such that the situation observed by the Spanish were uncharacteristic of those present in prehistory. Within the Calusa polity there seems to have been a degree of instability as various leaders competed with one another for political control and power (Marquardt 1987:104-110). In the Okeechobee region, one cacique, Serrope, seems to have attempted to consolidate his power and may have been perceived as posing a political threat to the Calusa (Marquardt 1988:173). It may be the case that the Calusa’s influence over the interior was less strong than traditionally thought, or sporadic in nature.

European contact marked dramatic change for the native populations throughout Florida. It has been estimated that there were about 20,000 natives in southern Florida when the Spanish arrived (Milanich and Fairbanks 1980). By 1763, when the English gained control of Florida, the population had been reduced to several hundred. Many were reported to have migrated to Cuba with the Spanish (Romans 1775[1998]). However, it is likely that the “Spanish Indians” who remained in Florida by the late eighteenth century were the mixed-blood descendants of the south Florida tribes or refugees from the northern Florida missions that were raided by the English in the early eighteenth century (Sturtevant 1953). These Spanish Indians became part of the Seminoles, who had fled into southern Florida after the 1838 Battle of Okeechobee. Seminole sites have been recorded in Hendry County.

POST-CONTACT HISTORY

Early Settlement and the Seminole Wars

This historic context provides an overview of Hendry County’s history from the exploration period to the present. European explorers reached Florida in the early sixteenth century, but their interactions with the peninsula remained along the coast. In fact, much of the American settlement in Florida continued along the coasts and in north Florida; the geography of the interior of southern Florida was poorly understood through much of the seventeenth, eighteenth, and nineteenth centuries. Many early maps depicted the region traversed by a series of interconnecting rivers that flowed into the ocean or as a void surrounded by a detailed coast line. Jacques Le Moyne, a French cartographer, referred to the area that is now the Everglades as the land of Carlos, the Spanish name for the Chief of the Calusa Native Americans (Paige 1986:13-15; Ste. Claire 1997:22, 41, 49, 53; Vignoles 1823[1977]:51).

Early European maps also refer to the region as “River Glades” and “Ever Glades” (Paige 1986:26-27). Most Native Americans did not live in the Everglades, but those who lived nearby typically resided at the mouths of rivers or inlets on offshore islands. The Calusa lived along Florida’s west coast while the Tequesta were another contact-period Native American group that resided in South Florida along the eastern side of the peninsula. The Tequesta culture centered near the mouth of Miami River, but ranged from modern day Pompano in the north to Cape Sable and the Florida Keys in the south (Tebeau 1968:37-41).
War and disease greatly reduced the population of Florida’s contact period indigenous groups. Creeks, Oconee, Mikasuki, and other Native American groups from Georgia and the Carolinas began to migrate into North Florida in the mid-eighteenth century. In 1765, these migrating Native Americans were referred to with the Spanish term *Cimarron*, or “wild” and “runaway,” in the field notes accompanying de Brahm’s 1765 map of Florida. These “Cimarrones” moved into wild, unsettled territories and were indistinguishable from the Native Americans settled in the vicinity of St. Augustine (Fairbanks 1973). The term “Seminole” is thought to have derived from this reference (Fernald and Purdum 1992).

By the time Spain ceded Florida to the United States in 1821, the United States was pressuring the Seminoles ever southward into Florida. The Treaty of Moultrie Creek in 1823 stipulated that all Native Americans in Florida move onto a reservation in the middle of the state. When the Second Seminole War erupted in 1835, the US Army’s attempt to remove the Seminoles from Florida eventually spilled over into the region. Several Everglades expeditions by the US military occurred throughout the war (US Senate 1911:141). Lt. Levi Powell led a detachment of soldiers into the Everglades’ interior early in 1838 during a season so dry that boats had to be carried instead of paddled (Mahon 1985:232). Surgeon General Thomas Lawson, along with a group of 240 soldiers and officers, explored the Everglades’ southern coast in 1838 in an attempt to capture Seminoles who reportedly were obtaining guns and ammunition from Cuban fishermen (Tebeau 1968:63-65). Lt. Col. William S. Harney with 90 men in 16 canoes set out from Fort Dallas at the mouth of the Miami River on December 4, 1840, to search for the Seminoles in the Everglades. Traversing much of the Everglades and successfully engaging their enemy, the Harney expedition laid the foundation for other US military expeditions into the interior of the state (Mahon 1985:283-284,289,303-304,310; Tebeau 1968:66-70).

At the close of the Second Seminole War in 1842, the US government shipped several hundred Seminoles to the western territories, but many remained in the region (Covington 1957:129; 1993). At the war’s conclusion, the Seminole reservation shifted south. The northernmost point of the reservation encompassed the southeastern half of Hardee County and stretched to the northern end of Whitewater Bay in Everglades National Park (Mahon 1985:390-391). In addition, the war spurred American exploration of the region. As early as 1843 the US House of Representatives inquired into the possible drainage of the Everglades (Carter 1962:250,386, 589; House of Representatives 1843:1-2). Under the Swamplands Act of 1850 Florida received approximately 10 million acres of federaly-owned swamp and overflowed lands for the purpose of drainage and reclamation (US Senate 1911:67-68; Tebeau 1971:189-191). In response, Florida created the Internal Improvement Board in 1851 to manage the lands plus an additional 500,000 acres the state had received upon becoming a state in 1845. The Board had the task of making Florida prosperous by developing industry and encouraging settlement. Railroad and canal projects approved by the government received a 200-foot right-of-way through state lands and also title to alternate sections of land along their routes (Light and Dineen 1994:53).
Once again, the state and federal government came to view the Seminoles in Florida as an impediment to the settlement and prosperity of Florida. In an attempt to drive the remaining 300 or so Seminole and Miccosukee Native Americans out of South Florida, Secretary of War Jefferson Davis allowed settlers to begin moving onto the northern portion of the reservation. Land surveyors and military personnel began pushing into the reservation throughout 1854 and 1855, and white settlers quickly followed (Brown 1991:100-104,130).

With pressure from settlers, surveyors, and military personnel, the Third Seminole War (1855-1858) began. Chief Billy Bowlegs led the determined opposition to the US Army and state militia forces. The war, like its predecessor, spurred exploration of the region with Captain Dawson, First Artillery, conducting two expeditions into the Everglades between 1855 and 1856 (US Senate 1911:71-72). By 1858, after a series of sporadic skirmishes, the Third Seminole War ended with the shipment of 123 Seminoles to Oklahoma. However, 100 to 300 Seminoles who evaded capture remained in the Everglades (Fernald and Purdum 1992). The present-day Seminole and Miccosukee Tribes of Florida and the Independent Seminole of Florida are direct descendants of the Seminoles that could not be forcibly removed during the wars. As a result of forced removal, Seminole Native Americans now also live in Texas and Oklahoma.

**Late Nineteenth and Twentieth Centuries**

Following the Civil War (1861-1865), the call for drainage efforts in south Florida reemerged, but the suffering postwar economy precluded such substantial investments. By 1881, the state’s Internal Improvement Board was prepared to make a deal that would bring prosperity to southern Florida and also much needed revenue to the state. In that year, the Board sold 4 million acres of land to Hamilton Disston’s Florida Land and Improvement Company. Disston gathered dredges at Fort Myers and Kissimmee to begin dredging and draining the Caloosahatchee and Kissimmee River valleys. Disston’s company later purchased more land from the state in the 1890s, including much of present-day Hendry County. Though Disston never saw an agricultural mecca emerge in the Everglades region, his drainage projects served as inspiration for later efforts (Tebeau 1971).

When Florida became a US territory in 1821, present-day Hendry County was organized as part of St. Johns County. In 1823, Monroe County was formed from an area that encompassed all of Hendry County and much of southern Florida including the Keys. Fort Myers came to be the most significant peninsular settlement at the time. Lee County was formed from Monroe County in 1887. Much of the western section of this county was present-day Hendry (Morris 1995).

Between 1887 and the formation of Hendry County in 1923, major drainage efforts brought agricultural interests to southern Florida. Railroads also began to touch the edges of the region. The state of Florida completed four major canals just prior to World War I that connected Lake Okeechobee to the Atlantic Ocean by way of the Everglades: West Palm Beach Canal (42 miles), Hillsboro Canal (51 miles), North New River Canal (58 miles), and Miami Canal.
Drainage efforts set the stage for new settlement in southern Florida, including present-day Hendry County.

Hendry County was created in 1923 from the eastern portion of Lee County. The county was named after Captain Francis A. Hendry, a cattleman who played an important role in the development of Lee County and the region that is his namesake. Captain Hendry, originally from Polk County, established a 30,000-acre cattle operation based out of Fort Myers (Lee County) in 1870. In the following decade, he sponsored Hamilton Disston’s construction of a canal linking the Caloosahatchee River with Lake Okeechobee (Brown 1991; Morris 1995). Hendry served numerous terms in the state legislature and, in 1911, founded the town of LaBelle (in northwestern Hendry County) which later became the county seat of Hendry County (WPA 1938). At the time, settlement in the area was sparse and centered around a frontier outpost on the Caloosahatchee called Denaud (to the west of LaBelle) which dated to the Second Seminole War (1835-1842) (Bradbury and Hallock 1962[1993]:22; Grismer 1949[1982]:48). Cattle raising was the earliest interest in the region, but general agriculture became dominant in the 1920s (Florida State Chamber of Commerce 1935:141).

The agricultural prospects of the area were advertised across the nation. During the land boom of the 1920s, the Ford Motor Company purchased over 1,000 acres near LaBelle with the intention of developing a rubber tree plantation (Syracuse Herald 30 August 1925). Many other farms, both large and small, followed in decades to come.

Like LaBelle, the city of Clewiston (in northeastern Hendry County) also predates the creation of Hendry County. With the beginning of drainage along the southern shore of Lake Okeechobee in the early 1900s, land was made available for agricultural development. Inhabitants of Moore Haven (in present-day Glades County) began moving around 1920 to an area known as Sand Point on the southern shore of the lake. Among them were John J. and Marian O’Brien who, with Tampa banker Alonzo C. Clewis, purchased land in the area and began planning a town that was laid out within several years (Will 1964:275-276). Clewis had also provided financing for the extension of the railroad from Moore Haven to the new settlement, which was dubbed Clewiston in 1922 (Bradbury and Hallock 1962[1993]:17; Morris 1959:321).

Vegetable packing houses followed and agricultural land expanded. The most significant development was the arrival of the Southern Sugar Company (later known as the Unites States Sugar Corporation) at Clewiston in 1925 (Will 1964:222). Their facilities were expanded in 1929 and the company, which had vast acreage in Hendry County, became the main employer in the area by the 1930s (Florida State Chamber of Commerce 1935:141). Clewiston’s agricultural workers, the majority of whom were African American, began a settlement to the southwest of the town proper that came to be known as Harlem (Federal Writer’s Project 1939:478-479). Clewiston was incorporated in 1932 (Morris 1959:321).

Numerous other settlements, some no longer extant, came about in Hendry County in the 1920s. Goodno (located between LaBelle and Clewiston) was a small community that appeared in the opening decades of the twentieth century. E.E. Goodno, for whom the settlement was
named, was a progressive cattleman who imported Brahman bulls into the area as a way of improving beef stock. Prior to World War II, the town was still involved in cattle raising (Federal Writer’s Project 1939:478-479). Seeking to harvest timber for use in manufactured housing, Sears, Roebuck, and Company also purchased vast acreage in the area of LaBelle (Syracuse Herald 30 August 1925). The town of Sears, which appeared several miles south of LaBelle in 1926, was named for this venture (Bradbury and Hallock 1962[1993]:76). Also south of LaBelle was Felda, a community of fruit and vegetable growers that began in the early 1920s (Bradbury and Hallock 1962[1993]:28; Polk, R.L. and Company 1925:226). Each of these communities was reliant on the railroads to ship their products to market.

Busy as it was, Hendry County had only 1,111 inhabitants in 1925 (State of Florida 1925:33). Agricultural opportunity was what enticed further settlement in Hendry County. Though slow when compared to neighboring Palm Beach County, development in Hendry County was noticeable by the mid-1930s. The population consisted of 4,000 people with Clewiston, which counted 949 residents, as the largest town. Overlooking Clewiston were the massive mill facilities of the United States Sugar Corporation (Florida State Chamber of Commerce 1935:141). During the Great Depression, the town reportedly required no relief from the federal government because of the prosperity of the mill (Christian Science Monitor 14 December 1937).

Two railroads—the Atlantic Coast Line and the Seaboard Atlantic Line—serviced the county. State Road 25, connecting West Palm Beach with Fort Myers, passed through the northern part of the county where the main towns were located. LaBelle was home to a saw mill, two apiaries, cross-tie manufactories, and several cane syrup plants. In the far southeastern corner of the county, and practically isolated from the rest of Hendry County, was the Big Cypress Indian Reservation (Florida State Chamber of Commerce 1935:141).

Hendry County remained agricultural and rural well into the twentieth century. As agricultural land expanded, the need for laborers increased (State of Florida 1935:11). The population continued to grow as migrant laborers poured into the Everglades region in search of work during the Great Depression. At the conclusion of World War II, there were more than 5,000 residents of Hendry County, which was 1,000 more than in 1935 (State of Florida 1945:29).

While the population of Hendry County increased, the county did not experience the flood of new arrivals that characterized other counties in southern in Florida the post-World War II period. Agribusiness had, in the decades preceding the war, replaced small farming and there was little available land that was not under cultivation or used for pasturage. In short, the intense focus on agriculture of the preceding decades left little room for diversification. This legacy continues to shape the present in Hendry County. As of the a recent agricultural survey, the county was second in the state for orange production, second for sugarcane production, fourth for tomatoes, and fifth in other vegetables (Florida Farm Bureau 2002). Based on the fact that the railroad and other roads are located within close proximity to the project area, there is the potential for nineteenth and twentieth century sites to be located within the Project area.
BACKGROUND RESEARCH AND METHODS

RESEARCH DESIGN

The goal of this cultural resource survey is to identify archaeological deposits or historic resources within the APE and assess their eligibility for listing in the NRHP. The research strategy was composed of background investigation, a historical document search, and field survey. The background investigation involved a review of relevant archaeological and historical literature and previous cultural resource surveys undertaken near the project area. The FMSF database was queried for previously recorded sites within the project area, and this provided an indication of historic and Native American settlement and land-use patterns for the region. General Land Office (GLO) maps and early aerial photographs also were examined for information pertaining to the existence of historic structures or sites of historic events. Current soil surveys, vegetation maps, and relevant literature were consulted to provide a description of the physiographic and geological region of which the Project is a part and to develop expectations regarding the types of archaeological sites that may be present.

FLORIDA MASTER SITE FILE REVIEW

Previous Surveys

A review of the FMSF database indicated that one cultural resource survey had been previously conducted within a one-mile radius of the Project. The survey, A Cultural Resources Assessment Survey of over 31,000 Acres in Hendry County, Florida (Survey No. 359), was completed in 1979 by Carl J. Clausen. Figure 7 illustrates the proximity of this previous survey to the current Project.

Previously Recorded Cultural Resources

No resources have been previously recorded within the APE, and only one cultural resource group has been recorded within one mile of the APE (see Figure 7). Resource 8HN00361 is the Goodno Drainage Canal, a historic water control feature that drains in a north-northeasterly direction into the Caloosahatchee River. The canal is approximately 400 meters west of the APE at its closest point. Resource 8HN00361 has been previously evaluated by the SHPO as ineligible for listing in the NRHP. The Goodno Drainage Canal was constructed in the post-World War II era and is not associated with any significant early twentieth century reclamation activities.
Figure 7. Map showing previous cultural resource surveys and resources within one mile of the project area.


**HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW**

Historic maps and aerial photographs were examined in order to identify past land use in the vicinity of the Project. The earliest detailed maps consulted were GLO survey maps. The GLO maps were created by government land surveyors during the nineteenth century as part of the surveying, platting, and sale of public lands. In Florida, these maps characteristically show landscape features such as vegetation, bodies of water, roads, and Spanish land grants. The level of detail in GLO maps varies, with some also depicting structures, Indian villages, railroads, roads, and agricultural fields. GLO survey maps of Townships 43 and 44 South, Range 30 East created in 1873 are combined as **Figure 8** (GLO 1873a, 1873b). The sections of these township surveys are broken into smaller plots of land for individual claim. However, no documents pertaining to land ownership were available through the GLO.

Most noticeably depicted on the GLO maps is a road that passes through the northeastern portion of the project area and is labeled as a “road to Fort Thompson.” Fort Thompson was established ca. 1837 and was connected to the Second Seminole War. Later, the Confederate Army used Fort Thompson during the Civil War to raise cattle for their troops. By 1889, Captain Francis Asbury Hendry acquired the property where Fort Thompson was located, making it his home where he established a cattle ranch. Fort Thompson was located northwest of the Project, well outside of the APE near present-day LaBelle (Florida Department of State n.d.).

An aerial photograph from 1949 shows the APE to be uninhabited, consisting of prairie or grazing land with intermittent ponds and sloughs (**Figure 9**) (US Department of Agriculture [USDA] 1949). Unimproved roads and trails are visible throughout the Project area; two of these are oriented northwest-southeast and pass through the northern portion of the APE. Of these, the road to the west most closely aligns with the Fort Thompson road identified on the nineteenth century GLO maps and may reflect continued use of this military trail through the twentieth century.

The second of the two roads corresponds to an “Old Railroad Grade” identified on the 1958 US Geological Survey (USGS) topographic map (**Figure 10**) (USGS 1958). This rail line was part of the Seaboard-All Florida Railway that was a subsidiary of the Seaboard Air Line Railroad and was constructed during the land boom of the 1920s. This rail line extended from Fort Ogden south to Fort Myers and Naples, with branches from Punta Rassa to Fort Myers and on to LaBelle. This rail line extension allowed Seaboard-All Florida Railway to better compete with the Florida East Coast Railway and the Atlantic Coast Line Railroad. However, by 1958, the branch of the Seaboard-All Florida Railway that extended from Fort Myers to LaBelle and continued southeast of the town and was dismantled (Bradbury and Hallock 1962[1993]:17; Morris 1959:321; USGS 1958).
Figure 8. 1873 GLO map showing project area.
Figure 9. 1949 USDA aerial photograph showing the project area.
Figure 10. 1958 USGS topographic map showing the project area.
While the APE itself appears much the same on the 1968 USDA aerial photograph, this photograph indicates significant changes occurring on the surrounding parcels (Figure 11) (USDA 1968). A grid of drainage ditches has been excavated on the parcels north and west of the APE, and additional drainage canals are evident to the northeast. Various new roads also are evident, including one following the north boundary of the APE and one crossing through the northern portion from east to west. The old railroad line is still visible passing through the northeastern corner of the APE, but according to the 1958 USGS map, the railroad line was removed by the time the 1968 aerial was flown. The road potentially corresponding to the nineteenth century military trail is much less apparent.

**METHODS**

**Archaeological Survey**

To provide a precise methodology for testing the APE, SEARCH created probability zones utilizing environmental data, such as soil drainage and proximity to water, as well as background research and historic mapping of known or potential cultural resources. The environmental and soil data indicated a low probability for archaeological resources in the project area, with the exception of areas near two historic corridors in the northeast corner of the APE.

In order to identify the presence of cultural resources, pedestrian ground surface inspection was carried out for the entire project area, and subsurface shovel tests were pre-plotted at 25-meter intervals along the historic linear corridors (see Figures 8-11). Shovel tests were excavated judgmentally across the remainder of the property to test a minimum of 10 percent of the property at 100-meter intervals in accordance with Florida Division of Historical Resources (FDHR) Module Three: Section Guidelines for Use by Historic Preservation Professionals (FDHR 2002). Shovel tests measured 50 centimeters (20 inches) in diameter and were excavated to depths exceeding 100 centimeters below surface (cmbs) (39 inches), subsurface conditions permitting. Excavated soils were screened through 6.4-millimeter (1/4-inch) mesh hardware cloth. Global Positioning System (GPS) coordinates were taken of each shovel test with Wide Area Augmentation System (WAAS)-enabled handheld units. The cultural content (if any), strata, and environmental setting of each shovel test and metal detector hit were recorded on field forms. The location of each shovel test was marked on aerial photographs of the APE.

In addition, SEARCH conducted a metal detector survey along the historic railroad that appears on the 1949 and photograph and the 1958 USGS topographic map. The purpose of the metal detector survey was to gather additional archaeological information about this historic corridor and to supplement the shovel test data along this corridor. Metallic signatures picked up by the metal detector were recorded, and shovel tests excavated to determine the type and nature of each hit.
Figure 11. 1968 aerial photograph of project area.
Architectural Field Methods

The historic structure survey for the Project utilized standard procedures for the location, investigation, and recording of historic structures. In addition to a review of the FMSF for any previously recorded historic structures within the project area, older USGS quadrangle maps and aerial photos were examined for structures that were constructed prior to 1965. A thorough field check of the APE was undertaken. However, no structures were noted within the APE.

Laboratory Methods and Curation

No artifacts were collected. Field records, notes, and maps will be curated at the SEARCH archaeological laboratory in Newberry, Florida.

Evaluation Criteria

In assessing the significance of any cultural resource, standard criteria are used as the basis for interpretations and recommendations. Significant cultural resources are those meeting the criteria of eligibility for inclusion in the NRHP, as defined in 36 CFR 60.4, and in consultation with the SHPO. For an archaeological site, structure, or resource to be eligible for the National Register, it must meet at least one of the four National Register main criteria:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or
B. are associated with the lives of persons significant in our past; or
C. embody the distinctive characteristics of a type, period, or method of construction, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinctions; or
D. have yielded, or may be likely to yield, information important in prehistory or history.

While most NRHP-eligible archaeological sites are significant under Criterion D, this criterion requires a level of clarification to illuminate the issue of site importance. To be listed in the NRHP, a property must not only be shown to be significant under the National Register criteria (A-D), but it also must have integrity.

The evaluation of integrity is grounded in an understanding of a property's physical features and how they relate to its significance. Integrity is defined as the authenticity of a property's identity, revealed by the endurance of the site's physical characteristics. Archaeological integrity describes the value of information and level of preservation for an archaeological site. Good archaeological integrity is attributed to properties that are relatively intact and complete, and that have not been significantly impacted by modern activities or through natural processes. Poor integrity indicates that the site has been disturbed through the actions of
people (such as ground disturbances or artifact collecting) or by natural processes such as erosion. The archaeological record, however, is complex; any determination of integrity must be made within the historical and modern context of the property. Equally important, the resource must possess these critical qualities that include location, design, setting, materials, workmanship, feeling, and association Bulletin No. 15 (National Park Service [NPS] 1991:44–49).

- Location - is the place where the historic property was constructed or the place where the historic event occurred.
- Design - is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting - is the physical environment of a historic property.
- Materials - are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship - is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling - is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association - is the direct link between an important historic event or person and a historic property.

Even though an archaeological site must have integrity, archaeological properties rarely have undisturbed cultural deposits. Long-term occupation or repeated revisiting of sites creates complex stratigraphy. Features visible above ground and the distribution of artifacts may be used as evidence of below-ground integrity. For properties considered eligible under Criterion D, where most archaeological sites fall, integrity relates directly to the ability of the site to provide information to the research questions defined within the archaeologist’s research design. In general, however, archaeological integrity is demonstrated by the presence of spatial patterning of artifacts or features that represent differential uses or activities and the lack of serious disturbance to the property’s archeological deposits (NPS 1991:46–49).
SURVEY RESULTS

The CRAS utilized pedestrian survey, systematic subsurface testing, and metal detecting to investigate the 457-acre parcel. A total of 75 shovel tests were excavated, all of which were negative for cultural material. Shovel tests were placed at 25-meter intervals along three historic corridors derived from georeferencing linear features on historic maps and judgmentally across the entire APE. The locations of shovel tests are shown on Figure 12.

The road to Fort Thompson is noted in two different locations on the historic maps and aerial photographs in the northeastern portion of the APE (GLO 1873a, 1873b; USDA 1949) (see Figures 8 and 9). Systematic shovel testing was completed along both corridors, but failed to identify cultural resources or physical signs of the old roadbed. Extensive disturbances caused by grading, plowing, and the construction of numerous drainage channels were noted by crews. These activities have likely destroyed the resource, making it impossible for future investigations to identify the route of the road.

Crews also investigated a historic rail grade that appeared on historic maps and aerial photographs in the northeastern portion of the APE (Figures 12 and 13). This route was georeferenced using historic and modern aerial photos and preplotted shovel tests placed at 25-meter intervals. Systematic shovel testing and metal detecting along this route failed to identify cultural resources or physical signs of this railroad. Pedestrian inspection revealed extensive disturbances caused by grading, plowing, and the construction of numerous drainage channels. A metal detector survey identified eight targets that were systematically excavated (see Figure 13). Excavated targets produced modern trash only (i.e., soda cans); no historic cultural material related to the railroad was identified during the pedestrian survey, within any of the shovel tests, or as a result of the metal detector survey.

Soil drainage varies from poorly drained to very poorly drained across the APE. A representative shovel test profile in poorly drained soil revealed three strata consistent with mapped Immokalee sand (Figure 14):

- Stratum I (0-20 centimeters): gray (10YR 5/1) and light gray (10YR 6/1) sand.
- Stratum II (20-80 centimeters): dark gray (10YR 4/1) mottled with gray (10YR 6/1) sand.
- Stratum III (80-100 centimeters): black (10YR 2/1) sand with organics. Excavation was terminated at water.

Shovel tests excavated in very poorly drained soil (Rivera sand) encountered two strata above the water table (Figure 15):

- Stratum I (0-50 centimeters): very dark brown (10YR 2/2), black (10YR 2/1), yellowish brown (10YR 5/6), and light gray light gray (10YR 7/1) sand.
- Stratum II (50-100 centimeters): gray (10YR 5/1) mottled with black (10YR 2/1) medium sand with organic matter. Excavation was terminated in water.
Figure 12. CRAS results showing the locations of the excavated shovel tests.
Figure 13. Aerial photograph showing the results of the metal detector survey. No dig locations were located in standing water.
Figure 14. Representative shovel test in poorly drained soil (ST 2).

Figure 15. Representative shovel test in very poorly drained soil (ST 7).
As a result of this survey, no archaeological sites, architectural resources, or resource groups were identified within the APE. The portions of the historic transportation corridors within the APE were likely obliterated when the orange grove was created and through subsequent land modifications. Therefore, further archaeological survey within the APE is unlikely to yield important prehistoric or historical information. Based on these findings, it is the recommendation of SEARCH that no historic properties will be affected by the development of the FPL Hammock Solar Energy Center Project.
CONCLUSIONS AND RECOMMENDATIONS

In October 2016, SEARCH performed a CRAS of the 457-acre FPL Hammock Solar Energy Center site in Hendry County, Florida. The survey was conducted at the request of Environmental Consulting & Technology, Inc. on behalf of Florida Power and Light Company in support of plans to construct a 457-acre solar array. The goal of the assessment was to determine if cultural resources are present within the APE and to assess their eligibility for inclusion in the NRHP.

As a result of this survey, no archaeological sites, architectural resources, or resource groups were identified within the APE. The portions of the historic transportation corridors within the APE were likely obliterated when the orange grove was created and through subsequent land modifications. Therefore, further archaeological survey within the APE is unlikely to yield important prehistoric or historical information. Based on these findings, it is the recommendation of SEARCH that no historic properties will be affected by the development of the FPL Hammock Solar Energy Center Project.
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Fernald, Edward A. and Elizabeth D. Purdum  

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Florida Farm Bureau  

Florida State Chamber of Commerce  

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Hale, Stephen

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Wilder, Michael, and Charles D. Frederick  

Will, Lawrence E.  

Willey, Gordon R.  

Works Progress Administration (WPA)  

Worth, John E.  
APPENDIX A.

UNANTICIPATED DISCOVERIES STATEMENT
UNANTICIPATED DISCOVERIES
OF ARCHAEOLOGICAL AND HISTORIC SITES
INCLUDING HUMAN REMAINS

Although a project area may receive a complete cultural resource assessment survey, it is impossible to ensure that all cultural resources will be discovered. Even at sites that have been previously identified and assessed, there is a potential for the discovery of previously unidentified archaeological components, features, or human remains that may require investigation and assessment. Therefore, a procedure has been developed for the treatment of any unexpected discoveries that may occur during site development.

If unexpected cultural resources are discovered the following steps should be taken:

1) Initially, all work in the immediate area of the discovery should cease and reasonable efforts should be made to avoid or minimize impacts to the cultural resources.
2) A qualified Professional Archaeologist should be contacted immediately and should evaluate the nature of the discovery.
3) The Archaeologist should then contact the SHPO and if necessary, the State Archaeologist.
4) As much information as possible concerning the cultural resource, such as resource type, location, and size, as well as any information on its significance, should be provided to the SHPO.
5) Consultation with the SHPO should occur in order to obtain technical advice and guidance for the evaluation of the discovered cultural resource.
6) If necessary, a mitigation plan should be prepared for the discovered cultural resource. This plan should be sent to the SHPO for review and comment. The SHPO should be expected to respond with preliminary comments within two working days, with final comments to follow as quickly as possible.
7) If a formal data recovery mitigation plan is required, development activities in the near vicinity of the cultural resource should be avoided to ensure that no adverse impact to the resource occurs until the mitigation plan can be executed.

If human remains are encountered during site development, the stipulations of Chapter 872.05 (Offenses Concerning Dead Bodies and Graves) should be followed. All work in the near vicinity of the human remains should cease and reasonable efforts should be made to avoid and protect the remains from additional impact. In cases of inclement weather, the human remains should be protected with tarpaulins. A qualified Professional Archaeologist should be retained to investigate the reported discovery, inventory the remains and any associated artifacts, and assist in coordinating with state and local officials. The County Medical Examiner should be immediately notified as to the findings. If the remains are found to be other than human, any construction will be cleared to proceed. If the remains are human, and are less than 75 years old, the Medical Examiner and local law enforcement officials will assume jurisdiction. If the remains are found to be human and older than 75 years, the State Archaeologist should be notified and may assume jurisdiction of the remains.
1) If jurisdiction is assumed by the State Archaeologist, he will a) determine whether the human remains represent a significant archaeological resource, and b) make a reasonable effort to identify and locate persons who can establish direct kinship, tribal community, or ethnic relationship with the remains. If such a relationship cannot be established, then the State Archaeologist may consult with a committee of four to determine the proper disposition of the remains. This committee shall consist of a human skeletal analyst, two Native American members of current state tribes recommended by the Governor's Council on Indian Affairs, and “an individual who has special knowledge or expertise regarding the particular type of the unmarked human burial.”

2) A plan for the avoidance of any further impact to the human remains and/or mitigative excavation, reinterment, or a combination of these treatments will be developed in consultation with the State Archaeologist, the SHPO, and if applicable, appropriate Indian tribes or closest lineal descendents. All parties will be expected to respond with advice and guidance in an efficient time frame. Once the plan is agreed to by all parties, the plan will be implemented.

The points of contact for Florida are:

Dr. Timothy Parsons, Director and State Historic Preservation Officer
Florida Division of Historical Resources
R.A. Gray Building
500 S. Bronough St.
Tallahassee, FL 32399-0250
PH: 850-245-6333

Dr. Mary Glowacki, Chief and State Archaeologist
Bureau of Archaeological Research
B. Calvin Jones Center for Archaeology at the Governor Martin House
1001 de Soto Park Drive, Tallahassee, FL 32301
PH: 850-245-6301
APPENDIX B.

FDHR SURVEY LOG SHEET
Survey Log Sheet
Florida Master Site File
Version 4.1 1/07

Consult Guide to the Survey Log Sheet for detailed instructions.

### Identification and Bibliographic Information

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<th>3.</th>
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| Publication Date (year) | 2016 | Total Number of Pages in Report (count text, figures, tables, not site forms) | 40 |

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of American Antiquity.)

On file at SEARCH, Newberry, FL. SEARCH Project No. 3721-1612E

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### Supervisors of Fieldwork (even if same as author)

<table>
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<th>Names</th>
<th>Michael Arbuthnot</th>
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### Affiliation of Fieldworkers

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### Key Words/Phrases (Don’t use county name, or common words like archaeology, structure, survey, architecture, etc.)

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| Address/Phone/E-mail | |

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<th>David Breetzke</th>
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Date Log Sheet Completed 11-1-2016

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### Is this survey or project a continuation of a previous project?

☑ No ☐ Yes: Previous survey #s (FMSF only)

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### Mapping

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### USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

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| If Corridor (fill in one for each) Width: meters feet Length: kilometers miles |
|-------------------------------|----------|-----------------|-----------------|-----------------|

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HR6E066R0107 Florida Master Site File, Division of Historical Resources, Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250
Phone 850-245-6440, FAX 850-245-6439, Email: SiteFile@dor.state.fl.us
Research and Field Methods

Types of Survey (check all that apply): ☒archaeological ☒architectural ☒historical/archival ☐underwater ☐damage assessment ☐monitoring report ☐other (describe): metal detector

Scope/Intensity/Procedures 75 shovel tests and a pedestrian survey of the APE. Metal detector survey of a historic railroad in the APE.

Preliminary Methods (check as many as apply to the project as a whole)
☐Florida Archives (Gray Building) ☐Library research - local/public ☐local property or tax records ☐other historic maps
☐Florida Photo Archives (Gray Building) ☐Library-special collection - nonlocal ☐newspaper files ☐soils maps or data
☒Site File property search ☐Public Lands Survey (maps at DEP) ☐literature search ☐windshield survey
☒Site File survey search ☐local informant(s) ☐Sanborn Insurance maps ☐pedestrian survey
☐other (describe): Metal detector survey

Archaeological Methods (check as many as apply to the project as a whole)
☐Check here if NO archaeological methods were used.
☐surface collection, controlled ☐shovel test-other screen size ☐block excavation (at least 2x2 m)
☐surface collection, uncontrolled ☐water screen ☐soil resistivity
☒shovel test 1/4" screen ☐posthole tests ☐magnetometer
☒shovel test 1/8" screen ☐auger tests ☐side scan sonar
☒shovel test 1/16" screen ☐coring ☐pedestrian survey
☒shovel test-unscreened ☐test excavation (at least 1x2 m) ☐unknown
☐other (describe): Metal detector survey

Historical/Architectural Methods (check as many as apply to the project as a whole)
☐Check here if NO historical/architectural methods were used.
☐building permits ☐demolition permits ☐neighbor interview ☐subdivision maps
☐commercial permits ☐exposed ground inspected ☐occupant interview ☐tax records
☐interior documentation ☐local property records ☐occupation permits ☐unknown
☐other (describe): historic maps reviewed for any structure

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☒Yes ☐No

Count of Previously Recorded Sites 0 Count of Newly Recorded Sites 0

Previously Recorded Site #'s with Site File Update Forms (List site #’s without “8”. Attach additional pages if necessary.)

Newly Recorded Site #’s (Are all originals and not updates? List site #’s without “8”. Attach additional pages if necessary.)

Site Forms Used: ☐Site File Paper Form ☐Site File Electronic Recording Form

***REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)***
CULTURAL RESOURCES ASSESSMENT SURVEY OF THE FPL HAMMOCK SOLAR ENERGY CENTER, HENDRY COUNTY, FLORIDA
South Florida
Water Management District

SURFACE WATER MANAGEMENT PERMIT NO. 26-00279-S
(NON-ASSIGNABLE)

DATE ISSUED: October 8, 1987

AUTHORIZING: CONSTRUCTION AND OPERATION OF A WATER MANAGEMENT SYSTEM SERVING 1442.3 ACRES OF AGRICULTURAL LANDS DISCHARGING VIA AN INTERNAL CANAL AND CANAL NO. 3 INTO THE CALOOSAHATCHEE RIVER.

LOCATED IN: HENDRY COUNTY, SECTION ---- TWP. 43,44S RGE. 30W

ISSUED TO: Gutwein Growers, Inc. (Gutwein Citrus)
P. O. Box 158
LaBelle, Florida 33935

This Permit is issued pursuant to Application for Permit No. 03067-H dated March 5, 1987. Permittee agrees to hold and save the South Florida Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance, or use of any work or structure involved in the Permit. Said application, including all plans and specifications attached thereto, as addressed by the staff report, is by reference made a part hereof.

This Permit may be revoked or modified at anytime pursuant to the appropriate provisions of Chapter 373, Florida Statutes.

This Permit does not convey to Permittee any property rights or privileges other than those specified herein, nor relieve the Permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies. All structures and works installed by Permittee hereunder shall remain the property of the Permittee.

Within thirty (30) days after the completion of the construction of any work or structure relative to this permit, the Permittee shall file with the District a written statement of completion on the appropriate form provided by the Board.

SPECIAL CONDITIONS ARE AS follows:

SEE SHEETS 2 AND 3 OF 3 - 17 PROJECT SPECIAL CONDITIONS.
SPECIAL CONDITIONS

1. DISCHARGE FACILITIES:

DESCRIPTION: 2 IDENTICAL WEIRS, EACH CONSISTING OF 1-6.0' WIDE WEIR SET AT ELEVATION 27.4' NGVD, 1-120° V-NOTCH BLEEDER WITH AN INVERT AT ELEVATION 26.0' NGVD AND 30 LF OF 72" DIAMETER CMP CULVERT.

RECEIVING WATER: CALOOSAHATCHEE RIVER VIA AN INTERNAL CANAL AND CANAL NO. 3.

CONTROL ELEVATION: 26.0 FEET NGVD.

2. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.

3. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION, SHOALING OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

4. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.

5. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF GUTWEIN GROWERS, INC. AND COLLINS SLough WATER CONTROL DISTRICT.

6. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.

7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.

8. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE ANY FACILITY AUTHORIZED BY THE PERMIT.

9. THIS PERMIT IS ISSUED BASED ON THE APPLICANT’S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE
RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.

10. SPECIAL CONDITIONS OF RULE 40E-4.381 (SURFACE WATER MANAGEMENT) ARE WAIVED UNLESS OTHERWISE PROVIDED HEREIN.

11. FACILITIES OTHER THAN THOSE STATED HEREIN SHALL NOT BE CONSTRUCTED WITHOUT AN APPROVED MODIFICATION OF THIS PERMIT.

12. LAND USE BY THE PERMITTED FACILITIES IS AGRICULTURAL. PROPOSED CONSTRUCTION OF RESIDENCES MAY REQUIRE MODIFICATION OF THIS PERMIT AND MUST BE REPORTED TO THE DISTRICT.

13. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY INTO SURFACE WATERS OR GROUND WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED OR THE PERMITTEE SHALL PARTICIPATE IN A DISTRICT APPROVAL REGIONAL WATER QUALITY STUDY AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO WATERS OF THE STATE.

14. UPON COMPLETION OF CONSTRUCTION, AND ON AN ANNUAL BASIS (IN MARCH OF EACH YEAR) THE PERMITTEE SHALL SUBMIT REPORTS TO THIS DISTRICT FOR STRUCTURAL ADEQUACY OF ALL ABOVE GROUND DIKES, LEVEES AND BERM'S BEHIND WHICH WATER IS TO BE CONTAINED AND WHERE FAILURE COULD IMPACT OFF-SITE AREAS. SUCH REPORTS SHALL INCLUDE PROPOSAL OF TECHNIQUE AND SCHEDULE FOR REPAIR OF ANY DEFICIENCIES NOTED, AND SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

15. PRIOR TO CONSTRUCTION, A WETLAND MONITORING PROGRAM SHALL BE SUBMITTED FOR STAFF REVIEW AND APPROVAL. THIS PROGRAM SHALL INCLUDE, BUT NOT BE LIMITED TO, WEEKLY WATER LEVEL READINGS IN THE RESERVOIRS, WEEKLY RAINFALL MEASUREMENTS AND SEMI-ANNUAL SAMPLING ALONG PRE-ESTABLISHED TRANSECT LINES. TRANSECTS IN THE EXISTING WETLANDS ARE TO BE SET AND SAMPLED INITIALLY PRIOR TO CONSTRUCTION TO ESTABLISH BASELINE ENVIRONMENTAL CONDITIONS. SAMPLING METHODS SHOULD BE DESIGNED TO DETERMINE THE CONDITION OF EXISTING VEGETATION AND SUCCESSIONAL TRENDS. FIXED POINT PANORAMA PHOTOGRAPHS SHALL BE TAKEN DURING EACH SAMPLE PERIOD. OBSERVATIONS OF FORAGE FISHES, AQUATIC MACROINVERTEBRATES AND WILDLIFE UTILIZATION SHALL BE RECORDED DURING EACH SAMPLE PERIOD. INITIAL BACKGROUND SAMPLING SHALL BE CONDUCTED PRIOR TO CONSTRUCTION, WITH 3 YEARS OF SEMI-ANNUAL SAMPLING BEGINNING FOLLOWING RESERVOIR COMPLETION. SAMPLING IS TO BE DONE AT END OF DRY SEASON (APRIL - MAY) AND END OF WET SEASON (OCTOBER - NOVEMBER). TECHNICAL REPORTS SHOULD INCLUDE THE QUANTITATIVE SAMPLING DATA AND A NARRATIVE DISCUSSION OF THE OVERALL ENVIRONMENTAL CONDITION OF THE RESERVOIRS.

16. PRIOR TO CONSTRUCTION, A DETAIL OF THE CONTROL STRUCTURE WHICH SHOWS THE INCORPORATION OF A BAFFLE SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.

17. PRIOR TO CONSTRUCTION, DOCUMENTATION SHALL BE SUBMITTED TO THE DISTRICT WHICH DEMONSTRATES THE AVAILABILITY OF AN OUTFALL ROUTE TO CANAL NO. 3.
Hammock Solar Energy Center
Comprehensive Plan Amendment

Statement of Comprehensive Plan Consistency

The proposed Comprehensive Plan Amendment is consistent with the relevant Goals, Objectives and Policies of the Hendry County Comprehensive Plan as discussed below. This consistency statement is being submitted in support of and as an exhibit to Applicant’s Comprehensive Plan Amendment Application. The real property made the subject hereof (“Property”), the proposed development (“facility” and “Facility”), that area of the Property to be developed (“Facility Area”), and other descriptive terms are defined in the Application narrative and are used here for consistency. Reference to other exhibits herein are to companion exhibits in support of said Application.

Chapter 1: Future Land Use Element

GOAL 1: To ensure the development and maintenance of a functional and well related pattern of land use types that provides for population growth, land development and redevelopment, and the appropriate distribution, location and densities and intensities of use consistent with adequate services and facilities and consideration of natural resources.

Response:

The proposed electrical generating facility (“Facility”) is consistent with this Goal. The Facility is located in a rural area of the County on land currently used for citrus farming. The surrounding area is rural and is not planned or programmed for population growth and/or extensive development. The proposed Comprehensive Plan Amendment and the development of this Property for the proposed Facility would not have an adverse impact on land use patterns or the adequate provision of services and facilities.

The proposed Facility is an orderly and timely use of a property that is approximately 68 percent in agricultural use. The proposed use will designate open space of 311 acres of wetlands and other areas (32 percent of the Property) after development. Although agricultural uses, including cropland, pastureland, orchards, groves and forestry, are permitted within the EGF land use category, the Facility will convert the Agricultural land use designation which could have resulted in the development of up to 191 dwelling units on private wells and septic tanks. The proposed use is located in an appropriate area of the County and is a sustainable, long-term use.

OBJECTIVE 1.1 - FUTURE LAND USE CATEGORIES AND MAP SERIES: The Future Land Use Map Series 2040, dated as of the effective date of this Comprehensive Plan, is hereby adopted as the County’s Future Land Use Map and detailed map series and shall direct the pattern for future development and redevelopment of the unincorporated area of Hendry County. The Future Land Use Map presented in this text is for general illustrative purposes only, and is not intended to be regulatory. The following policies describe the land use categories located on the Future Land Use Map 2040, and describes the nature, densities, intensities, and criteria for permitting of various land uses within each land use category.
The County shall explore the use of Transfer of Development Rights or Units programs to accommodate growth in areas where services are provided or are intended to be provided. In addition, the County shall develop standards for development that support residential development at densities to support building, expansion, and maintenance of utility facilities. At a minimum, these standards shall include density minimums, provisions for clustering, and smart growth features to achieve efficiency and rural resource protection. Public and conservation lands will be depicted as such on the Future Land Use Map series to the extent practicable.

Response:

Hendry County has adopted the Comprehensive Plan’s Future Land Use Element and Map Series, which is consistent with and achieves the intent of this Objective. The various future land use categories identified within the County’s Comprehensive Plan, including the EGF future land use category, establish appropriate permissible uses within each category and provide guidelines for development within the categories. The proposed Facility involves a change to the FLUM and, if approved, will result in the change of agricultural land use to electrical power generation using a renewable resource.

Policy 1.1.14: Electrical Generating Facility Land Use Category

Purpose

The purpose of the Electrical Generating Facility (EGF) Future Land Use Category is to provide guidelines for future designation of areas within Hendry County which can be utilized for electrical generating facilities and to establish guidelines and standards for the intensity and location of electrical generating facilities and associated ancillary uses.

Description/Uses

Lands in this category include properties which are designated or appropriate for either: 1) electrical generating facilities that obtain approval through the Florida Electrical Power Plant Siting Act (PPSA), ss. 403.501-518, Florida Statutes; or 2) electrical generating facilities not subject to approval through the PPSA. Uses may include all forms of electric generating facilities, including, but not limited to, electric power plants, combustion turbines, combined cycle units, thermal or photovoltaic solar fields and related facilities. Related facilities include uses directly related to the production of electricity, including but not limited to substations, collector yards, switchyards, fuel and by-product storage facilities, waste disposal areas, processing facilities, administrative offices, water storage, cooling towers, warehousing, educational and visitor centers, raw material storage and other ancillary uses related to the electrical generating facility. Agricultural uses including cropland, pastureland, orchards, groves and forestry are permitted uses within this category.
Location Standards

Lands classified as Electrical Generating Facility shall be located in rural areas of the County, where large amounts of undeveloped acreage exist. The adequacy/appropriateness of EGF project locations will be determined by the Hendry County Board of County Commissioners utilizing the following guidelines:

- The site is near other existing or planned utility uses including transmission lines, or is accessible to/by existing or planned fuel transportation facilities;
- Adequate separation or buffering from power plant production units can be provided to adjacent properties;
- The site has direct access to existing or planned arterial or collector roads of sufficient capacity to ensure that, during plant operations, there will be no degradation to the level of service below the adopted standard; an EGF restricted to solar power generation only may or may not have direct access from a public road, but must have permanent legal access to the property [italicized language: proposed amendment text submitted in the companion CPA application is inserted for discussion purposes]; and
- No nuclear, coal or gas powered electrical generating plant shall be located within two (2) miles of the Big Cypress Seminole Indian Reservation, and more specifically described within the following areas: Sections 25, 26, 35 and 36, Township 47, Range 32; Sections 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36, Township 47, Range 33; Sections 29, 30, 31, 32, 33, 34, 35 and 36, Township 47, Range 34; Sections 1, 2, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 27, 28, 33, and 34, Township 48, Range 32; Sections 5 and 9, Township 48, Range 33; and Sections 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11, Township 48, Range 34.

Residential/Density

- Residential – Not Permitted. (Caretaker unit permitted).

Non-Residential Intensity

- The power plant units and directly related facilities shall occupy no more than seventy percent (70%) of the entire site and shall be subject to a maximum impervious surface ratio of 0.70.
- A minimum of thirty percent (30%) of the entire site shall be open space. Open space may include areas with native vegetation and/or landscaped areas. Crossings in open space areas by facilities and structures such as roads, rail, transmission lines, natural gas pipelines, water and sewer pipelines and communications lines, necessary for the operation of the power plant units and related uses, may be allowed, subject to applicable permitting. These facilities will be co-located wherever practicable to mitigate impacts to environmentally sensitive areas. Open space may also include wetlands, conservation and storm water areas.
Form of Development Approval

- Approval of a Future Land Use Map amendment designating the location of the EGF;
- A comprehensive plan text amendment outlining a specific subarea policy applicable to the EGF, including, but not limited to, fuel source and estimated power generating capacity;
- A Planned Unit Development (PUD) zoning district shall be required for any development proposed within the EGF future land use category.

Special Development Requirements for Electrical Generating Facilities

The following performance standards shall be applied to a site designated as Electrical Generating Facility (EGF). The power plant units, directly associated facilities and related uses:

- Shall be located where the effects of noise can be mitigated through a combination of maintaining existing vegetation, adequate setback from property boundaries, or through physical plant design. For the purpose of permitted levels of noise or sound emission, this land use category shall be subject to Hendry County’s Noise Ordinance, in effect at the time of approval;
- Shall be located where visual impacts can be mitigated through existing topography, existing or planted vegetation, facility design and/or distance from property boundaries;
- Shall be set back and/or buffered from existing adjacent residential areas or designated residential future land use categories. Specific requirements shall be defined within the subarea policy;
- Shall utilize the best available control technology for protecting air quality consistent with State and Federal standards;
- Shall include liners and leachate controls consistent with State and Federal standards and guidelines for fuel and by-product storage facilities and waste disposal areas;
- Shall avoid, minimize or mitigate any impacts to environmentally sensitive areas, as determined by the appropriate State and Federal agencies;
- Shall provide compensatory storage for development in the 100-year floodplain consistent with local and state standards;
- Shall connect to a central sanitary sewer system, if available, or provide onsite treatment for domestic wastewater. Septic tanks shall be permitted in accordance with applicable provisions of local and state codes, guidelines and ordinances, including the Hendry County Comprehensive Plan. No industrial wastewater will be treated in the sanitary sewer septic system. Potential discharges of wastewater will be through underground injection control wells. If any discharges to the groundwater or underground occur, the same will be identified, reviewed and permitted through the PPSA and/or federal processes; and
- Shall connect to a central potable water system, if available, or provide potable onsite well(s). Onsite wells shall be permitted in accordance with applicable provisions of
local and state codes, guidelines and ordinances, including the Hendry County Comprehensive Plan.

Compliance

- For facilities subject to the PPSA, compliance with federal, state and local regulations shall be addressed through both the Florida Electrical Power Plant Siting Act (PPSA) and other required federal permitting processes, notwithstanding any of the Goals, Objectives and Policies of the Hendry County Comprehensive Plan.
- For facilities that are not subject to the PPSA, compliance with federal, state and local regulations shall be required, including the Goals, Objectives and Policies of the Hendry County Comprehensive Plan.
- All facilities shall be subject to the specific requirements of a PUD zoning.
- In the event of a conflict in the language of this land use category and other provisions within this or other elements of the Hendry County Comprehensive Plan, this land use category and its guidelines shall control.

Response:

Applicant proposes to develop the solar facility consistent with the standards and guidelines outlined in the EGF Land Use Category, as amended. As an approved EGF use, the proposed Facility on the Property demonstrates consistency with the EGF Land Use Category as follows:

Location Standards

- The Property is located in a remote, rural area of the County where large amounts of undeveloped acreage exist.
- The Facility Area is traversed by an existing, appropriately sized electrical transmission line located within a 175-foot wide corridor near the Property’s northern boundary; no fuel transportation facilities are required by solar power.
- No power plant production units are proposed. Only solar power electrical generation will be authorized. Site improvements shall be low profile (20’ height limitation for solar panels). The facility will be unmanned and will not produce emissions, odors, vibration, dust, adverse noise, light pollution, or waste products of any kind. A 50’ setback is proposed in the Facility Area from its north, east and west Property boundaries except for a 125’ setback in the northeast corner of the Facility Area as depicted on the GCP (Exhibit 20). No buffers are proposed to screen the abutting agricultural uses from proposed improvements.
- Site access is consistent with the Location Standards amendment proposed herein. Said road has adequate capacity to support the estimated traffic from the proposed electrical generating facility. Given that the proposed EGF use is limited to solar generation of electricity, there is no need for daily employees on site, only visits for facility maintenance. As such, impact on the roadway network for the proposed solar facility will be de minimis.
- The proposed Facility is restricted to solar power electricity generation and will not be powered by nuclear, coal, gas or other fossil fuel sources. The proposed Facility is not
located within two (2) miles of the Big Cypress Seminole Indian Reservation.

Residential/Density

- There are no residences associated with the proposed electrical generating facility.

Non-Residential Intensity

- This standard requires that the proposed electrical generating facility and related structures occupy no more than 70% of the entire site and shall be subject to a maximum impervious surface ratio of 0.70. The General Concept Plan (Exhibit 20) demonstrates compliance with this standard by committing to a Facility Area totaling approximately 48 percent of the property, only a portion of which will be impervious, resulting in a total impervious surface ratio well below the maximum allowable by this standard.
- This standard requires that a minimum of thirty percent (30%) of the entire site shall be designated open space. The General Concept Plan designates approximately 311 acres of the site as open space, which equates to 32 percent of the Property. The proposed open space exceeds the required minimum.

Form of Development Approval

- The Property is the subject of a proposed Comprehensive Plan Future Land Use Map amendment changing the land use designation from Agriculture to Electrical Generating Facility (EGF);
- A Comprehensive Plan Future Land Use text amendment is proposed to add subarea Policy 1.1.14.3 specific to the proposed electrical generating facility; and
- A PUD rezoning request shall be filed in compliance with the referenced standard.

Special Development Requirements for Electrical Generating Facilities

- The solar powered facility will generate no adverse noise which would necessitate mitigation. There are no sensitive noise receptors in the surrounding area.
- A 50’ setback is proposed in the Facility Area from its north, east and west Property boundaries except for a 125’ setback in the northeast corner of the Facility Area as depicted on the GCP (Exhibit 20), and a maximum 20 foot solar panel height restriction will be proposed to reduce potential visual impacts from the proposed electrical generating facility.
- The Property is surrounded by land designated Agriculture on the FLUM which is zoned Ag-2. Residential use is allowed on AG-2 land at a density of one unit per 5 acres. Currently, there are no residential development or designated residential future land use categories within one mile of the Property boundaries.
- There are no air quality impacts associated with the proposed solar power generation.
- Liners and leachate controls will not be required as there will be no fuel storage onsite; there will be no need for by-product storage facilities and/or waste disposal areas as no by-products or wastes will be produced.
• There will be minimal impacts, if any, to environmentally sensitive areas on the site which will be mitigated as necessary in accordance with review and regulations by the applicable local, state and federal agencies.

• There is no proposed development within the 100-year floodplain, therefore compensatory storage is not required.

• No industrial wastewater will be generated on site. If necessary, a sanitary sewer septic system will be utilized for domestic wastewater.

• No centralized potable water system is available to the site. Potable water, although not likely to be required, shall be by onsite well permitted in accordance with law.

Compliance

• The proposed facility will be limited to the total generation of 74.5 MW of electricity and is not subject to the Florida Electrical Power Plant Siting Act (PPSA). The Facility is subject to and will comply with other applicable federal, state and local regulations.

• The proposed Facility will comply with federal, state and local regulations including the Goals, Objectives and Policies of the Hendry County Comprehensive Plan, and shall be subject to the conditions and requirements of its PUD rezone.

• The proposed Facility will comply with the requirements of the EGF land use category and its guidelines.

OBJECTIVE 1.5 HISTORIC AND NATURAL FEATURES, FACILITIES AND SERVICES: Hendry County shall continue the coordination of future land uses with the appropriate underlying historic and natural resources, soils and topography, and the availability of facilities and services and land for utilities. The general criteria and standards for the natural features are specified in Goals, Objectives and Policies of the Conservation Element. Furthermore, Hendry County shall require the protection of historically significant structures within the unincorporated area of the County as identified by the State of Florida or the National Register of Historic Places.

Response:

The proposed Facility is consistent with this Objective as follows:

• No previously recorded cultural sites were identified through a review of the Florida Master Site File and the National Register of Historic Places FOCUS database. Applicant’s Cultural Resources Assessment Survey (Exhibit 14) identified no cultural resources within the Facility Area and concluded that no historic properties will be affected by the development of the Facility.

• If, during ground disturbing activities, any such historic resources are discovered, the Applicant will, at a minimum, suspend activities in the affected area, notify the appropriate County official and State of Florida’s Historic Preservation Office, investigate and process the discovery as required, and obtain clearance from the County and State before commencing work.

• Development will occur on disturbed land presently in agricultural use.
• Development is proposed on disturbed land currently in citrus production which requires sufficiently dry soils. Water control systems shall be properly engineered so that the area proposed for development will provide good support for development features.
• The required PUD rezone will allow for the development of a solar electrical generating facility, which will require no public facilities or services. The Facility will not require public potable water or sanitary sewer service, is likely not to require police or fire services, will not adversely impact roadways and natural aquifers, and will not impact recreational facilities.

Policy 1.5.1: Hendry County shall request the assistance of the Department of State to identify significant historic resources within the unincorporated areas which are in need of protection and develop management and restoration plans as appropriate.

Response:

Although this policy is directed as action required by the County staff, the proposed Facility is consistent with this Policy. The Applicant’s consultant, SEARCH, Inc. completed a Cultural Resources Assessment Survey (Exhibit 14). Its analysis included review of the Florida Master Site File for recorded cultural sites and fieldwork consisting of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests. No archaeological sites, resource groups, or historic buildings were identified. The Survey concluded that no historic properties will be affected by development within the Facility Area. Unexpected discoveries, if any, during ground disturbing activities in the Facility Area will be reported to the County and State, and the discovery investigated in accordance with the “Unanticipated Discoveries Statement” included in the Cultural Resources Assessment Survey (Exhibit 14, Appendix A).

Policy 1.5.2: Historically significant properties shall be identified through designation as a historic site by the State or the County.

Response:

No previously recorded cultural sites were identified through a review of the Florida Master Site File and National Register of Historic Places databases. Unexpected discoveries, if any, during ground disturbing activities in the Facility Area will be reported to the County and State, and the discovery investigated in accordance with the “Unanticipated Discoveries Statement” included in the Cultural Resources Assessment Survey (Exhibit 14, Appendix A).

Policy 1.5.4: The County shall continue to implement and refine criteria and standards in the Land Development Code that are specific enough to implement this Plan and regulate the future development of land in accordance with the provisions of this Plan, so that:

a) historic and natural resources are protected by the adoption of such provisions, as, but not limited to, identification of the actual location of such resources through references to official maps contained in this Plan, requirements for designing development projects to manage these resources, provisions for conservation easements and similar methods for permanently protecting these resources, and
provisions for production of resources through PUD or cluster development review techniques;

b) soils and topography are suitable, by the adoption of such provisions as, but not limited to, special requirements for construction and other development activities on slopes or soils which are excessively wet or unable to support large structures; and

c) facilities and services are available sufficiently to support proposed development, as indicated in this and other elements of this Plan, and specifically as provided in the Concurrency Management System.

d) The owner/developer of any site shall be responsible for the on-site management of storm water runoff at the time of development or redevelopment in a manner so that the post-development runoff rates are the same as pre-development runoff rates.

Response:

Although this Policy is a direction for the County to implement and refine criteria in the Land Development Code which specifically addresses the aforementioned development criteria, the proposed project is consistent with this Policy as follows:

a. Should any significant cultural and/or historic resources be identified, they will be protected through avoidance and minimization in facility design to the extent practicable. No such sites have been identified as discussed in the Response to Policy 1.5.1, above. Improvements have been sited through Facility design to avoid wetlands. Nevertheless, any wetland impact will be mitigated, as required, in accordance with applicable federal, state and local requirements. Wetlands and other areas are incorporated into the open space required by the EFG land use designation.

b. Development is proposed on disturbed land currently in citrus production which requires sufficiently dry soils. Water control systems shall be properly engineered so that the area proposed for development will provide good support for development features.

c. The Facility will not require any public facilities or services. The Facility’s impacts on roadways is de minimis and will therefore cause no adverse reduction in the level of service for any public roadway. The County’s adopted level of service standards for stormwater will be met by the Facility through review and approval of an Environmental Resource Permit (ERP).

d. Consistency will be demonstrated through the review and approval of the ERP. The post-development run-off rate will not exceed the pre-development rate.

Policy 1.5.5: All new development and redevelopment shall be subject to concurrency review. Final permits for any proposed developments under the development permitting jurisdiction of Hendry County shall not be issued until it is demonstrated that the Level of Service Standards are met prior to impacts on the systems from the proposed development. Final permits shall be specifically conditioned on the availability of the facilities and services necessary to serve the proposed development. The specific means for such demonstration of the ability to meet the Standards shall be specified within the procedures of the Concurrency Management System Element.
Response:

The proposed Facility is consistent with this Policy. The Facility will have no adverse impacts on public facilities and services.

Policy 1.5.7: No residential, commercial, or industrial land uses shall be permitted where septic tanks are intended as the method for sewage treatment unless use of septic tanks meets Hendry County Health Department preapproval criteria for subdivisions. Such review shall determine that native soils and other site characteristics are suitable for septic tank usage prior to the approval of each subdivision. At a minimum, the criteria for septic tanks shall be consistent with Rule 64E-6, F.A.C. and other applicable state law and regulations.

Response:

The proposed Facility is consistent with this Policy. A septic tank, if required, shall be permitted by the Hendry County Environmental Services Department, in accordance with Hendry County Health Department criteria, consistent with Rule 64E-6, F.A.C. and other applicable state law and regulations.

Policy 1.5.8: Development which requires the storage, generation, or use of hazardous materials will be regulated in the FEMA 100-year floodplain by the following criteria …

Response:

The Facility will not store, generate or use hazardous materials/waste.

Policy 1.5.9: In addition to density restrictions in other parts of the Comprehensive Plan, densities and intensities of use in the 100-year FEMA floodplains shall be restricted to the extent necessary to preserve the flood storage capacity and other hydrological functions of the floodplain, and to protect important biological and ecological functions of a floodplain. For floodplains, which drain directly into water designated as "Outstanding Florida Waters," residential densities which exceed one unit per five acres are presumed to impair the hydrological, biological, and ecological functions of the floodplain. Except within five miles from the existing city boundaries of LaBelle and Clewiston, for floodplains which drain into other waterbodies of the state, residential densities which exceed one unit per acre are presumed to impair the hydrological, biological and ecological function of a floodplain.

A landowner may overcome the presumptions created in this policy by competent and substantial scientific or engineering evidence showing that a specific use will not impair the hydrological and important biological and ecological functions of the affected floodplain, provided that the densities and intensities of use as shown on the Future Land Use Map shall not be exceeded.

Response:

The proposed Facility is consistent with this Policy. The Facility Area is located in Zone X, outside of the 100-year floodplain. There are no planned improvements in Zone A. The Facility will
comply with the intensity restrictions included within the Goals, Objectives and Policies of the County’s Comprehensive Plan.

**Policy 1.5.11: In order to distinguish between urban and rural uses, developments shall be required to provide public utilities to the extent that such utilities are available.**

Response:

The proposed Facility is consistent with this Policy. The Facility is located within the rural area of Hendry County, where public utilities are not available. The Facility will not require public utilities.

**Policy 1.5.17: The County's development regulations shall specifically encourage redevelopment, infill development, compatibility with adjacent land uses, and curtailment of uses inconsistent with the character and land uses of surrounding areas, and shall discourage urban sprawl.**

Response:

The proposed Facility is consistent with this Policy. The Property is 957 +/- acres located in a rural area of Hendry County where the surrounding land area is in agricultural land use. The proposed solar facility will have minimal, if any, adverse impact on adjacent land because: (1) the height of the solar panels will not exceed 20 feet from natural ground thereby minimizing the Facility’s visual impact; (2) the Facility will produce no emissions, light or adverse noise pollution, odor, vibration, dust or lighting impacts on adjacent land; and (3) facility access will be limited and only required for maintenance purposes. No residence is located within one mile of the Property boundary. The proposed Facility will eliminate the need for irrigation of the citrus groves which it will displace in the Facility Area. The proposed use will also displace the potential for the development of up to 191 dwelling units, as allowed by its Agriculture land use designation (Policy 1.1.1), that would likely be served by private wells and septic tanks.

**Policy 1.8.1: All new development shall be required to meet design and operation Level of Service Standards for on-site stormwater management.**

Response:

The proposed Facility is consistent with this Policy. The Facility will meet the level of service standards for on-site stormwater management through the ERP design and permitting process.

**Policy 1.8.4: Onsite open space requirements shall provide adequate light and air for adjacent developments and to enhance on-site amenities, convenience and safety.**

Response:

The EGF land use category requires a minimum of 30 percent open space. The General Concept Plan (Exhibit 20) demonstrates compliance with this Policy.
OBJECTIVE 1.9 FUTURE LAND USE MAP SERIES/CONSERVATION: The County shall provide for the conservation and appropriate use of mineral resources to reasonably ensure that water quality and quantity of wetlands, surface waters, or aquifers shall not be degraded or reduced by development, including mining, and that there will be no net loss or impairment of natural functions of wetlands or surface waters due to development activities, including mining. In addition, green building standards and water and energy conservation standards shall be developed. This objective will be accomplished through the implementation of the policies set forth below.

Response:

Although this is a directive to the County, development of the proposed Facility will be consistent with this Objective. Prior to the development of the Facility, the Applicant will secure an Environmental Resource Permit. The ERP will ensure that water quality and quantity of wetlands and surface waters will not be degraded or reduced by the proposed development. No groundwater withdrawal is proposed. Additionally, the environmental assessment requirements and permitting will ensure there will be no net loss or impairment of natural functions of wetlands or surface waters due to the proposed development.

Policy 1.9.1 Wetlands: Wetlands are areas identified by plant communities commonly associated with land inundated by water for a significant period each year. Those communities are shown on Map 3: Land Cover. This map provides general location for wetlands. Wetlands serve an important ecological function for flood control, water quality, and water management. This policy is intended to protect and conserve wetlands and shall include restrictions on the density of development within wetlands to one unit per 20 acres and shall require all uses in wetlands to meet applicable state and Federal regulations and permitting requirements.

Response:

The proposed Facility is consistent with this Policy. The Facility has been designed to avoid wetland impacts.

Policy 1.9.3: Hendry County shall work towards the establishment of mitigation areas within the County to ensure that local impacts to protect wildlife are mitigated locally.

Response:

Although this is a directive to the County, development of the proposed Facility will be consistent with this Objective. Impacts on wildlife and wildlife habitat are minimized by Facility development in the upland area of the Property, and no mitigation requirements are anticipated. The Facility Area has been significantly impacted by citrus farming. To protect the movement of wildlife, no fencing is proposed in the open space area. Any required mitigation will be onsite if possible and in coordination with regulatory agencies.

Policy 1.9.4: Groundwater Protection: The South Florida Water Management District has established limits and boundaries of public potable water wellfields, cones of influence, and
groundwater aquifer recharge areas. Map 4: Oil Well Fields and Cones of Influence is provided to illustrate areas identified as cones of influences.

Any land use proposed for development within one-half mile of any potable water well designated on Map 4: Oil Well Fields and Cones of Influence is to be reviewed as a Special Exception in order to determine impact on groundwater resources from the proposed use and specific development. Such review shall address, but is not limited to, restrictions on land uses which involve pollutants and/or restrictions on handling and storage of hazardous/toxic materials in order to minimize the opportunity for contamination. Hendry County shall continue to monitor and implement programs to protect groundwater quality and eliminate potential sources of contamination. This shall be made measurable by implementing and enforcing the following policies:

Response:

The Property is not located within one-half mile of any potable water well designated on Map 4: Oil Well Fields and Cones of Influence (Exhibit 12).

Policy 1.9.5: The County's land development regulations shall designate a protection area of 1,000 feet in radius from each public potable water well as the wellfield protection zone. The first 300 foot radius closest to the well shall be a zone of exclusion, where no development activities shall be permitted except that relate with water supply provision. Within the remainder of the zone of protection, land use shall be regulated to prohibit the following:

- Landfills;
- Activities that require the storage and use or transportation of restricted substances the Resource Conservation and Recovery Act's or the Environmental Protection Agency's hazardous wastes lists (including, but not limited to landfills, gasoline stationed, petroleum storage, and pesticide storage and handling);
- Feedlots or other commercial animal facilities;
- Wastewater treatment plants and their ancillary facilities;
- Mines; and
- Excavation of borrow pits, waterways or drainage facilities which intersect the water table.

Response:

The subject property is not within 1,000 feet of a public potable water well.

Policy 1.9.13: MINING: The removal of mineral resources, earthen materials or deposits by means of excavation, stripping, grading, or by any other process for use off-site shall constitute mining and shall require County approval. Excavation activities that do not constitute mining are excavations required for: onsite water management, onsite backfilling or grading, foundations of swimming pools, fences, walls, and small ponds not exceeding five percent of the total land area.
Response:

The proposed Facility will not include mining as defined in this Policy. Excavation may only be performed as required for onsite water management and other permitted construction activities. No excavated material shall be removed from the Property for off-site use.

Policy 1.9.20: FLOODPLAINS: The floodplains established by the Federal Emergency Management Agency (FEMA) as the 100-year floodplain on the Federal Insurance Rating Maps (FIRM) for the national flood insurance program covers a very large area of Hendry County. These areas are shown on Map 2: FEMA Flood Prone Areas map of the Future Land Use Map Series. The County has adopted the FEMA required flood hazard regulations and shall continue to maintain these regulations.

Response:

The Facility Area is not located in Flood Zone A (100-year floodplain – see Exhibit 11). Should there be any development within the 100-year floodplain, the development will be appropriately permitted and will comply with the applicable requirements of the National Flood Insurance Act of 1973.

No final permit will be issued by any agency in Hendry County until the applicant provides evidence that the requirements of the National Flood Insurance Act of 1973, as amended, have been or will be complied with by the applicant.

Response:

The applicant will comply with the applicable requirements of the National Flood Insurance Act of 1973, as amended, as required by ERP design and permitting criteria. Compliance shall be demonstrated by furnishing the County with a copy of Applicant’s ERP for the proposed Facility.

Density and intensity of development shall be based on the land use category within which the property is located. If the floodplain area is a wetland, use, density and intensity shall be established for the agriculture/conservation category.

Response:

The intensity of the proposed development is consistent with the parameters outlined in the EGF land use category. There are no wetlands in the Facility Area.

The following general development standards shall apply within a defined 100-year floodplain:

a) Development involving the storage, use, transfer, generation or disposal of hazardous materials or waste shall be prohibited or shall conform to the guidelines in Future Land Use Policy 1.3.10 (Note: Policy 1.3.10 does not exist in the current version of the County’s Comprehensive Plan).
Response:

There will be no hazardous wastes stored, used, transferred, generated, or disposed of during operation of the solar facility.

Policy 1.9.21: On parcels that contain jurisdictional wetlands, development is to be clustered or located on disturbed land or land deemed to be of the lowest quality vegetative community available according to a professional environmental assessment consistent with state and federal methodologies. Subdivisions shall also be designed to preserve jurisdictional wetland areas and create lots containing disturbed land or land of the lowest quality vegetative community available according to a professional environmental assessment consistent with state and federal methodologies. Clustering shall be in accordance with policies contained therein.

Response:

The proposed Facility is consistent with this Policy. The Facility will protect natural resources through avoidance and minimization in project design to the extent practicable by being sited on a portion of the Subject Property that is currently in agricultural use. The Facility is anticipated to have no impact on wetlands.

OBJECTIVE 1.10 WILDLIFE HABITAT OR ENDANGERED AND THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN/VEGETATIVE COMMUNITIES:

The Conservation Element Map Series includes Map 3: Land Cover, depicting vegetative (plant) communities, and Map 6: Florida Panther Habitat and Dispersal Zones. In addition to the Florida Panther, the Florida Fish and Wildlife Conservation Commission (FFWCC) indicates that 20 other listed species also have potential to occur in Hendry County. The County shall coordinate with State and Federal wildlife agencies to ensure that critical habitat for listed species is protected consistent with State and Federal agency guidance. This Objective shall be implemented by a program of activities which includes the following:

Response:

While this Objective is directed toward the County, the Applicant shall ensure that critical habitat for listed species is protected consistent with State and Federal agency guidelines.

Policy 1.10.1: State and Federal wildlife agency requirements shall be followed and evidence of compliance shall be provided with all applications for a final permit. Evidence of required mitigation and management plans must be provided prior to issuance of a final permit by Hendry County.

Response:

The proposed development is consistent with this Policy, as the Facility will follow and comply with the state and federal wildlife agency requirements and Policy 1.1.14, Future Land Use Element, which outlines standards for approval of the EGF land use category.
Policy 1.10.2: In accordance with State and Federal wildlife agency methodology, Hendry County shall require a listed species survey for proposed development sites of 20 acres or more, and on development sites with proposed wetland impacts of one acre or more. However, the Planning Director may determine a development site under these thresholds is of environmental significance due to its site conditions, surrounding site conditions, or proximity to known listed species habitat, and therefore a listed species survey may be required.

Response:

The proposed Facility is consistent with this Policy, as a Threatened and Endangered Species analysis is included in Applicant’s Environmental Assessment Report (Exhibit 13).

Policy 1.10.3: On sites where listed species are identified as likely to occur, sufficient area shall be established on the site and in conjunction with adjacent properties to maintain viable listed species. See Policy 7.2.2 for calculation of required native vegetation preserve areas. All development that proposes impact to listed species habitat must provide evidence of consultation and compliance with applicable USFWS and FFWCC requirements prior to issuance of a final permit by Hendry County.

Response:

The Facility is consistent with this Policy as the General Concept Plan designates the Facility Area over highly impacted land in citrus production and approximately one-third of the total Property is designated Open Space. The designated open space consists of wetlands and other areas suitable for listed species habitat. This is consistent with the requirement of Policy 7.2.2.

Policy 1.10.4: Proposed development sites of 20 acres or more and not falling within the Development of Regional Impact thresholds shall designate on a map or plan of the proposed development site the location of any areas of five acres or more dominated by 50% or more with native vegetation. In the course of the development of the property, a portion of such native vegetation shall be conserved and protected. The specific areas conserved or protected shall include, at a minimum, those lands appropriate for protection of habitat for listed species deemed likely to occur on the site according to a listed species survey. Such areas shall be incorporated into open space areas, that where possible, connect to off-site preserve areas and areas that provide habitat for listed species. If over 50% of the site involves such qualifying native vegetation areas, no more than one-half of the total site shall be required to be preserved. The regulations shall also provide that when such areas are found on development sites of less than 20 acres, such qualifying native vegetation areas shall be preserved in open space uses up to 25% of the total site. The removal or destruction of native vegetation prior to development, except where necessary for legitimate agricultural or silvicultural uses, shall be construed to be clearing of land as an adjunct to construction, and shall be subject to all policies governing the removal or destruction of vegetation as they apply to development. This policy is subject to the policies setting out the legal status of the Comprehensive Plan.
Table 1-1 - Preservation Standards Summary Table

<table>
<thead>
<tr>
<th>Size of Development Site</th>
<th>Area of Qualified Native Vegetation</th>
<th>Preservation standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 acres or more</td>
<td>5 acres or more occupied with 50% or more native vegetation</td>
<td>Minimum: Preserve the qualified native vegetation areas that a listed species survey indicates listed species are likely to utilize, and that connect to offsite preserves that provide habitat for listed species. Maximum: 50% of the development site.</td>
</tr>
<tr>
<td>Less than 20 acres</td>
<td>5 acres or more occupied with 50% or more native vegetation</td>
<td>Minimum: Preserve the qualified native vegetation areas that a listed species survey indicates listed species are likely to utilize, and that connects to offsite preserves that provide habitat for listed species. Maximum: 25% of the development site.</td>
</tr>
</tbody>
</table>

Response:

The proposed Facility is consistent with this Policy, as the Facility will be located on an upland area of the property which has been significantly disturbed by citrus farming. The onsite area(s) which may be affected by this Policy are designated as Open Space, as illustrated on the General Concept Plan (Exhibit 20).

Chapter 2 – Housing Element

There is no residential component to the Facility.

Chapter 3 – Recreation and Open Space Element

OBJECTIVE 4.4: OPEN SPACE. The County shall ensure the provision of open space in
developments in Hendry County. This shall be accomplished by undertaking the activities described in the policies below.

Policy 4.4.3: Open space for purposes of Policy 4.4.1 and Policy 4.4.2 shall be defined as areas of the site not covered with buildings and including at least intermittent landscaping. Preference for quality open space that includes environmentally sensitive areas as well as areas reserved or dedicated for public recreation purposes will be considered as part of the planned unit development and development order review processes.

Response:

Policies 4.4.1 and 4.4.2 are not relevant to the proposed Facility. The Facility will be consistent with the Open Space requirements of the EGF future land use element and the Facility’s proposed subarea policy (30 percent Open Space is required; 32 percent is provided). Proposed Open Space exceeds such minimum requirement.

Chapter 4 – Conservation Element

GOAL 5: The purpose of the Conservation Element is to provide for the conservation, appropriate use and protection of natural resources within Hendry County.

GOAL 6: To conserve and enhance the quality of the natural resources in Hendry County for current and future population.

Policy 6.1.2: WETLANDS: Wetlands are areas identified by plant communities commonly associated with lands inundated by water for a significant period each year. Those communities shown on Map 3: Land Cover. This map provides general location for wetlands. Wetlands serve as important ecological functions for flood control, water quality and water management. Therefore, the potential for development within wetland areas shall be regulated to limit impacts according to the following provisions:

a. Jurisdictional determinations of wetlands by the appropriate state agency shall be conducted and submitted with applications for a final permit issued by Hendry County on any property mapped as wetland on Map 3: Land Cover Map or with potential wetland characteristics.

Response:

The proposed Facility is consistent with this Policy. The FLUCFCS Map in the Environmental Assessment Report (Exhibits 13 and 17) identifies wetlands on the subject property, most of which have been included in the property’s designated Open Space and shall not be impacted by development. No impacts to wetlands are proposed. Jurisdictional determinations of wetlands, if required, will be analyzed during the ERP application process and any such jurisdictional determination will be included in the ERP. Such ERP shall be submitted to the County with any application(s) for a final permit issued by Hendry County.
b. In order to protect and conserve wetlands, impacts to jurisdictional wetlands shall be avoided to the greatest extent possible through clustering in accordance with Policy 1.8.21. On parcels that contain jurisdictional wetlands, development is to be clustered and located on disturbed land or land deemed to be of the lowest quality vegetative community available according to a professional environmental assessment consistent with state and federal methodologies. Subdivisions shall also be designed to preserve jurisdictional wetland areas and create lots containing disturbed land or land of the lowest quality vegetative community according to a professional environmental assessment consistent with state and federal methodologies. See Policy 6.2.7 for calculation of required native vegetation preserve areas.

Response:

The proposed Facility is consistent with this sub-section of this Policy. Reference is made to the Response to subsection “a” above. The Facility will protect natural resources through avoidance and minimization in project design. Facility development will be on land which has been heavily impacted by citrus farming. Land which has not been impacted is dedicated as Open Space on the General Concept Plan (Exhibit 20). Protection of these resources will be ensured through review of the Facility during the PUD rezoning process and through other applicable federal, state and local review and permitting processes.

c. If development within jurisdictional wetlands is unavoidable, development within wetlands shall be minimized to the greatest extent possible. Hendry County shall discourage incompatible uses within wetlands. Permissible uses shall be limited to single family and two-family residential dwellings. All other uses will be directed away from wetlands. Residential density within wetlands is limited to one unit per 20 acres.

Response:

The proposed Facility is consistent with this sub-section of this Policy. Facility development will be on land which has been heavily impacted by citrus farming. Impacts, if any, will be reviewed by the applicable agencies and will be mitigated as appropriate. See Responses to subsections “a” and “b” above.

d. If development within jurisdictional wetlands is unavoidable, all uses in wetlands shall meet applicable state and Federal regulations and permitting requirements.

Response:

The proposed Facility is consistent with this sub-section of this Policy. Any development proposed in wetlands will meet applicable state and federal regulations and permitting requirements.

Policy 6.1.4: Hendry County shall work towards the establishment of mitigation areas within
the County to ensure that local impacts to protect wildlife are mitigated locally.

Response:

The proposed Facility is consistent with this Policy. Mitigation areas, if any are required, will be located onsite if possible and coordinated with the appropriate regulatory agencies.

Policy 6.1.5: GROUNDWATER PROTECTION: No areas have currently been designated as Groundwater Protection for lack of appropriate locational data and information. Map 4 titled, Oil Well Fields, and Cones of Influence is provided to illustrate areas identified as cones of influence.

Any land use proposed for development within one-half mile of any potable water well designated on Map 4: Oil Well Fields, and Cones of Influence is to be reviewed as a Special Exception in order to determine impact on groundwater resources from the proposed use and specific development. Such review shall address, but not limited to: restrictions on land uses which involve pollutants and/or restrictions on handling and storage of hazardous/toxic materials in order to minimize the opportunity for contamination. In addition, the following standards shall apply to the location of certain activities within close proximity to public potable water wells: (a) septic tanks shall be prohibited within two hundred (200) feet of a well; (b) any generation, use, storage, transfer, treatment, or disposal of hazardous materials (including hazardous waste, agricultural chemicals, and petroleum products) shall be prohibited within four hundred (400) feet of a well.

Response:

The proposed Facility is not located within one-half mile of any potable water well designated on Map 4.

Policy 6.1.7: HISTORIC RESOURCES: There are many historic and archaeological places in Hendry County, including various Indian mounds, historic fort locations, and the Hendry County Courthouse, which are listed in the Florida Master File of historic and archaeological places. The locations are indicated on Map 7: Historical and Archaeological Sites.

Any development proposal which encompasses a historical and/or archaeological site which is listed on the Florida Master File or on the Map 7: Historical and Archaeological Sites, shall be reviewed for historic significance by professionals in appropriate agencies with requisite experience on the request of Hendry County staff.

Response:

A Cultural Resources Assessment Survey was prepared by SEARCH, Inc. (Exhibit 14) of the Facility Area, the “Area of Potential Effect (APE).” Its analysis included review of the Florida Master Site File for recorded cultural sites and fieldwork consisting of pedestrian inspection, metal detector survey, and the excavation of 75 shovel tests throughout the APE. No archaeological sites, resource groups, or historic buildings were identified within the APE.
OBJECTIVE 6.2 WILDLIFE HABITAT OF ENDANGERED AND THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN/VEGETATIVE COMMUNITIES:

The Conservation Element Map Series includes Map 3: Land Cover, depicting vegetative (plant) communities, and Map 6: Florida Panther Habitat and Dispersal Zones. In addition to the Florida Panther, the Florida Fish and Wildlife Conservation Commission (FFWCC) indicates that 20 other listed species also have the potential to occur in Hendry County. The County shall coordinate with State and Federal wildlife agencies to ensure that critical habitat for listed species is protected consistent with State and Federal agency guidance. This Objective shall be implemented by a program of activities which include the following:

Policy 6.2.1: It shall be the policy of Hendry County to protect habitat for threatened or endangered species or species of special concern from destruction by development.

Response:

The proposed Facility is consistent with this Objective and Policy. The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. (Exhibit 13). Based upon sound environmental planning, the Facility Area was delineated on land that has been heavily impacted by citrus farming. Approximately one-third of the Property, which includes most of the Property’s wetlands and natural communities, has not been impacted and is designated as “Open Space” on the General Concept Plan (Exhibit 20). The Open Space area has been established with a clear understanding of the habitats onsite. Applicant will initiate discussions with appropriate agencies as may be required in support of its ERP.

Policy 6.2.2: State and Federal wildlife agency requirements shall be followed and evidence of compliance shall be provided with a final permit. Evidence of required mitigation and management plans must be provided prior to issuance of a final permit by Hendry County.

Response:

The proposed development is consistent with this Policy. Development of the proposed solar power generating facility will follow and comply with state and federal wildlife agency requirements, and all data and analysis will be reviewed as provided for through the ERP approval process. A copy of such permit will be provided to the County prior to issuance of a final permit by Hendry County.

Policy 6.2.3: In accordance with State and Federal wildlife agency methodology, Hendry County shall require a listed species survey for proposed development sites of 20 acres or more, and on development sites with proposed wetland impacts of one acre or more. However, the Planning Director may determine a development site under these thresholds is of environmental significance due to its site conditions, surrounding site conditions, or proximity to known listed species habitat, and therefore a listed species survey may be required.
Response:

The proposed Facility is consistent with this Objective and Policy. The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. and reports on listed species (Exhibit 13).

Policy 6.2.4: On sites where listed species are identified as likely to occur, sufficient area shall be established on the site in conjunction with adjacent properties to maintain viable habitat for listed species. See Policy 6.2.7 for calculation of required native vegetation preserve areas. All development that proposes impact to listed species habitat must provide evidence of consultation and compliance with applicable USFWS and FFWCC requirements prior to issuance of a final permit by Hendry County.

Response:

The proposed Facility is consistent with this Objective and Policy. The Environmental Assessment Report analyzing potential impacts to wetlands and wildlife was prepared by Environmental Consulting & Technology, Inc. (Exhibit 13). Based upon sound environmental planning, the Facility Area was delineated on land that has been heavily impacted by citrus farming. Approximately one-third of the Property, which includes most of the Property’s wetlands and natural communities, is designated as “Open Space” on the General Concept Plan (Exhibit 20). The Open Space area has been established with a clear understanding of the habitats onsite. Applicant has initiated discussions with appropriate agencies as may be required in support of its ERP.

Policy 6.2.5: The County shall seek consultation from the USFWS and FFWCC, as well as stakeholders, in consideration of species-specific habitat protection policy and criteria.

Response:

The proposed Facility is consistent with this Policy. Listed species management plans and required mitigation for threatened and endangered species, if any, will be coordinated with the FFWCC and USFWS, if required, during the ERP approval process and prior to the Hendry County final development order. The County will receive stakeholders’ comments, if any, during the public hearing process for the PUD rezoning request.

Policy 6.2.7: Proposed developments sites of 20 acres or more and not falling within the Development of Regional Impact thresholds shall designate on a map or plan of the proposed development site the locations of any areas of five acres or more dominated by 50% or more with native vegetation. In the course of the development of the property, a portion of such native vegetation shall be conserved and protected. The specific areas conserved or protected shall include, at a minimum, those lands appropriate for protection of habitat for listed species deemed likely to occur on the site according to a listed species survey. Such areas shall be incorporated into open space areas that, where possible, connect to off-site preserve areas and areas that provide habitat for listed species. If over 50% of the site involves such qualifying native vegetation areas, no more than one-half of the total site shall be required to be preserved. The regulations shall also provide that when such areas are found on
development sites of less than 20 acres, such qualifying native vegetation areas shall be preserved in open space uses up to 25 percent of the total site. The removal or destruction of native vegetation prior to development, except where necessary for legitimate agricultural or silvicultural uses, shall be construed to be clearing of land as an adjunct to construction and shall be subject to all policies governing the removal or destruction of vegetation as they apply to development. This policy is subject to the policies setting out the legal status of the Comprehensive Plan.

| Table 6-1 - Preservation Standards Summary Table |
|-----------------------------|-----------------------------|-----------------------------|
| Size of Development Site   | Area of Qualified Native Vegetation | Preservation standard |
| 20 acres or more            | 5 acres or more occupied with 50% or more native vegetation | Minimum: Preserve the qualified native vegetation areas that a listed species survey indicates listed species are likely to utilize, and that connect to offsite preserves that provide habitat for listed species. Maximum: 50% of the development site. |
| Less than 20 acres          | 5 acres or more occupied with 50% or more native vegetation | Minimum: Preserve the qualified native vegetation areas that a listed species survey indicates listed species are likely to utilize, and that connect to offsite preserves that provide habitat for listed species. Maximum: 25% of the development site. |

Response:

The proposed facility is consistent with this Policy, as approximately one-third of the Property is designated Open Space in accordance with the requirements of the EGF future land use element. The proposed Open Space contains most of the native habitat on the Property. The Facility Area designated for development is proposed on significantly disturbed upland areas of the property.
Policy 6.2.8: The land development regulations adopted by the County shall continue to state that no final permit will be issued by any agency of Hendry County until the applicant provides evidence that the requirements of state and federal law as set forth in policies under Objectives 6.1 and 6.2 have been or will be complied with by the applicant and that the natural functions of designated or otherwise known environmentally sensitive lands will not be adversely affected by the use for which the application is sought. Wetlands, aquifer recharge areas, native vegetation communities, wildlife habitat, and potable water well cones of influence shall be regulated in accordance with the applicable Comprehensive Plan policies for these resources.

Response:

Although this is a Policy relating to land development regulations adopted by the County, the proposed Facility is consistent with the intent of this Policy. The Facility will be analyzed in accordance with state, federal and local review processes pursuant to Future Land Use Element Policies 1.1.14, which created the EGF future land use category, and proposed subarea Policy 1.1.14.3, which specifies additional planning standards for the Property. Objectives 6.1 and 6.2 will be analyzed for the Facility’s compliance with the Comprehensive Plan. The development of the proposed Facility will comply with the applicable Comprehensive Plan policies and relevant sections of the County’s Land Development Code which regulate wetlands, aquifer recharge areas, native vegetation communities, wildlife habitat and potable water well cones of influence.

Chapter 5 – Infrastructure Element

No public sewage treatment, potable water, or solid waste service is required by the development of the proposed Facility.

GOAL 7.D: STORMWATER MANAGEMENT To ensure the control of current and future impacts to natural drainage patterns which may increase uncontrolled storm water run-off to unacceptable levels, and to protect water quality and water supply, as well as the quality and function of existing wetlands.

The proposed Facility is consistent with this Goal. The Facility will comply with all local, regional and state regulations and design criteria related to stormwater management through the ERP permitting process.

OBJECTIVE 7.D.1: The County shall continue to implement the level of service standards for stormwater management consistent with the South Florida Water Management District.

Policy 7.D.1.1: For agricultural uses, the Level of Service Standard shall be the requirement of the South Florida Water Management District and the standards for the local water management district in which the proposed agricultural use is located.
Compliance with this Objective and Policy is assured through the ERP approval process.

**Policy 7.D.1.2:** For all applications for a final permit for commercial, residential, and mixed use projects, stormwater management systems shall be designed to meet the Level of Service Standard to accommodate a 25-year, 24-hour storm, and detention shall be such that post-development runoff rates mimic pre-development runoff rates. Stormwater management systems for applications for final permits in all other areas shall be designed to either retain on-site the runoff generated by a 5-year, 24-hour storm; or detain and discharge the runoff from a 5-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates. Water quality standards shall be established by the State Water Policy as set forth in Rule 62, F.A.C. Individual residential lots shall not be required to conform to a specific standard if the development in which the lot is located meets the applicable standard.

Stormwater management systems shall also be required to meet the design and performance standards established in Chapter 62, with onsite treatment of the first inch of runoff to meet water quality standards required by Chapter 62. Stormwater discharge facilities must be designed so as to not degrade the receiving water body below the minimum conditions necessary to assure the suitability of water for the designated use of its classification as established in Chapter 62, F.A.C. The Land Development Code shall provide that all water quality and discharge standards cited in this Policy shall be applied to all development and redevelopment activities which are subject to the cited regulations.

Response:

The proposed Facility is consistent with this Policy. As required, the proposed Facility will be designed with adequate stormwater detention such that post-development runoff rates discharging from the site do not exceed pre-development rates in accordance with ERP design and permitting criteria. Stormwater management facilities will also be designed to meet ERP criteria for water quality and any additional water standards specific to the receiving water body that may be established.

**Policy 7.D.2.3:** The County shall coordinate land use and development decisions with the plans, studies and policies of the SFWMD and the U.S. Army Corps of Engineers, including the Caloosahatchee Water Management Plan, to ensure that the natural drainage patterns are not disrupted more than necessary.

Response:

Although this Policy is directed toward Hendry County, the proposed Facility is consistent with this Policy. Stormwater treatment and attenuation will comply with the ERP Basis of Review and the provisions of the Comprehensive Plan during the applicable review process, to ensure that post development drainage conditions function in a manner similar to pre-development hydrologic patterns.

**OBJECTIVE 7.D.4:** Maximize use of and protect existing drainage facilities and natural
drainage features. This shall be accomplished by undertaking the following activities.

Policy 7.D.4.3: The County shall continue to monitor stormwater drainage patterns to ensure that urban development will be designed to maintain pre-development flow characteristics, and that local flooding conditions will be corrected. Where stormwater runs off to a natural drainage feature (such as a lake, stream or wetland), regulations shall provide for retention/detention as necessary to improve water quality and flow. These standards shall be based on applicable SFWMD standards. These regulations shall include provisions to ensure that natural drainage features are not modified or destroyed, except that modifications which do not adversely affect overall drainage functions may be permitted when necessary for the stormwater management system to meet the Level of Service Standards outlined in Policy 7.D.1.2.

Response:

The proposed Facility is consistent with Objective 7.D.4 and Policy 7.D.4.3. Compliance with this and all other stormwater management policies adopted by Hendry County shall be demonstrated by the approval of the Facility’s ERP permit.

Policy 7.D.4.4: Buffers shall be required between development sites and environmentally sensitive areas, include wetlands and other surface waters. The purpose of the buffer is to protect natural resources from the activities and impacts of development. The buffers shall function to:

a) Provide protection to the natural resources from intrusive activities and impacts of development such as trespass, pets, visual impacts, vehicles, noise, lights, and stormwater. The negative impacts of the uses upon the natural resources must be minimized or, preferably, eliminated by the buffer such that the long-term existence and viability of the natural resources, including listed species populations, are not threatened by such impacts and activities. In other words, incompatibility between the uses is eliminated or minimized and the uses may be considered compatible (which means a condition in which land uses or conditions can co-exist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition)

b) Types of buffers: The buffers may be landscaped natural barrier, a natural barrier, or a landscaped or natural barrier supplemented with fencing or other man-made barriers, so long as the function of the buffer and the intent of the policy is fulfilled.

Response:

No perimeter buffer is proposed because the Facility Area does not abut an offsite natural resource. Ample setback has been provided between onsite natural resources in the Open Space Area and the Facility Area. Additionally, given the nature and location of proposed improvements impacts on natural resources are minimal. No fencing is proposed in the Open Space area to provide for the movement of wildlife in that area of the Property which has not been impacted.

GOAL 7.E: NATURAL GROUNDWATER AQUIFER RECHARGE SUBELEMENT
provide for the protection and conservation of Hendry County's groundwater aquifer recharge areas.

**OBJECTIVE 7.E.1** The County shall coordinate land use and development decisions with the plans, studies and policies of the SFWMD and COE, including the LWC Water Supply Plan and the Caloosahatchee Water Management Plan, in order to meet water demands in a manner that is not detrimental to Hendry County.

Response:

Although this Objective is directed at the County, the proposed Facility is consistent with the intent of this Policy. There will be no additional consumption of groundwater as a result of construction and operation of the Facility.

**Policy 7.E.2.2** Land development which affects the recharge functions, discharges into groundwater or injects materials directly underground will be restricted in accordance with applicable regulations of the Florida Department of Environmental Protection and South Florida Water Management District. The following guidelines shall apply to land development in order to ensure adequate recharge and to prevent contamination:

- a) Except within two miles of the existing city limits of LaBelle or Clewiston, or within areas identified pursuant to paragraph (b) below as natural aquifer recharge areas, impervious area for non-residential developments over five acres shall be limited to 30%; development under five acres shall be limited to 80%;

Response:

The Property is not within two (2) miles of the existing city limits of LaBelle or Clewiston. The proposed Facility is consistent with the Non-Residential Intensity and Compliance standards of the EGF future land use element (Policy 1.1.14), and will not develop impervious areas greater than the maximum impervious surface ratio of 0.70.

- c) The impervious area restrictions shall be used in conjunction with stormwater retention requirements in order to ensure that development within natural aquifer recharge areas does not reduce aquifer recharge quality or quantity (both volumes and rates) below pre-development conditions, and that subsurface storage and flows simulate pre-development conditions.

Response:

The proposed Facility is consistent with this section of Policy 7.E.2.2. Site specific design of the surface water management system will consider the location of existing wetlands and other features that contribute to aquifer recharge in the pre-developed condition. The proposed Facility will be designed with adequate stormwater detention such that post-development runoff rates discharging from the site do not exceed pre-development rates in accordance with the ERP permit. Stormwater management facilities will also be designed to meet ERP criteria for water quality and any additional water standards specific to the receiving water body that may be established by other Federal, State, and local agencies.
Chapter 6 – Traffic Circulation Element

GOAL 8: To achieve and maintain a coordinated, balanced traffic circulation system within Hendry County for the convenient, safe, effective and efficient movement of people and goods.

OBJECTIVE 8.2: Maintain acceptable levels of service for County roads within Hendry County in order to continue to provide a safe, convenient, effective and efficient traffic circulation system.

Policy 8.4.1: A TIS (Traffic Impact Statement) shall be submitted for all proposed subdivisions, Rezoning applications, Comprehensive Plan Amendments, Site Development Plans, and Special Exceptions that conform to the methodology specified by the Hendry County Engineer. This requirement shall not apply to agricultural developments, or to projects that, in the determination of the County Engineer, will not have an impact to County Roads or State Roads.

Response:

The proposed Facility is consistent with this Policy. A TIS is provided in Exhibit 10.

Policy 8.4.2: All proposed development, rezone applications, Site Development Plans, and Comprehensive Plan Amendments shall submit a TIS that estimates the project’s trip generation on a daily and peak hour basis. TIS will show roadway impacts based on the trip distribution from the traffic methodology as approved by the County Engineer.

Response:

The proposed Facility is consistent with this Policy. A TIS is provided in Exhibit 10 which includes the criteria described.

Policy 8.9.1: The County shall enforce off-street (on-site) vehicle parking requirements through the Land Development Code to ensure that needed parking for proposed new and expanded commercial, industrial, and multiple family residential developments are contained on-site through adequate numbers of usable parking spaces.

Response:

The proposed Facility is consistent with this Policy. There will be no need for onsite parking for Facility operations.

Chapter 7 – Concurrency Management Element

OBJECTIVE 9.1: The County, through its staff members, will continue to review all development plans of concurrency as a means to ensure that proposed land development including building construction does not impose unacceptable demands on the existing and planned infrastructure of the County such that established levels of service standards are exceeded.
Response:

As described in Applicant’s TIS (Exhibit 10), facility impact on public roadways is de minimus; there will be no adverse Facility impact on other public facilities.

Policy 9.1.2 Stormwater Management:

Policy 9.1.2: The public facility level of service standards are listed below. The levels of service standards pertain to unincorporated Hendry County only unless otherwise specified....

Response:

The proposed Facility is consistent with the Roadways, Recreation and Parks, Solid Waste, Potable Water and Sanitary Sewer sections of this Policy. The proposed Facility will not require any public infrastructure improvements and will not require connection to public facilities (other than use of public roadways). The Facility’s impact on area roadways is de minimis. Other sections of this Policy are discussed as follows:

Stormwater Management

a. For agricultural uses, the LOS Standard shall be the requirements of the South Florida Water Management District and the standards of the local water management district in which the proposed agricultural use is located.

Response:

The proposed Facility is consistent with this sub-section of this Policy. For any continued agricultural uses on the Subject Property, applicant shall operate within the applicable LOS Standards of the ERP permit and local water management district.

b. Conveyance Systems - All drainage swales and ditches shall be designed to convey the runoff generated from a 25-year, 24-hour storm event. On collector roads, culverts and cross-drains shall convey the runoff from a 10-year, 24-hour storm. On local roads and internal subdivision roads, culverts and cross-drains shall be designed to convey the runoff from a 10-year, 24-hour storm.

Response:

The proposed Facility is consistent with this sub-section of this Policy. Consistency with this subsection will be assured through the ERP approval process.

c. Stormwater Management - for development in commercial, urban, residential, mixed-use urban land uses districts....
Response:

This subsection is not applicable as the proposed Facility is not within a commercial, urban, residential, mixed-use urban land uses district.

d. Stormwater Management Systems - for development in all other land use districts. Stormwater management systems shall be designed to either retain on-site the runoff generated by a 5-year, 24-hour storm or detain and discharge the runoff from a 5-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates.

Response:

The proposed Facility is consistent with this sub-section of Policy 9.1.2. Please see the Response to Policy 7D.1.2.

e. Water Quality – Water quality treatment shall be provided for runoff from the first one-inch of rainfall; or as an option, for projects or project sub-units with drainage areas of less than 100 acres, from the first one-half inch of runoff consistent with Chapters 62, F.A.C., and shall be used as the basis for determining the availability of capacity and demand generated by a proposed development project.

Response:

The proposed Facility is consistent with this sub-section of the Policy. Please see the response to Policy 7D.1.2.

Policy 9.1.3: All development activities shall be undertaken in a manner consistent with the adopted level of service standards.

Response:

The proposed Facility is consistent with this Policy. The Application for PUD Rezone will include a concurrency analysis which demonstrates that the Facility is consistent with the adopted level of service standards.

Policy 9.1.4: The County shall issue final permits only when there is enough capacity from all the facilities to serve the project at the adopted level of service standards.

Response:

The proposed Facility is consistent with this Policy. The Application for PUD Rezone will include a concurrency analysis which demonstrates that the Facility is consistent with the adopted level of service standards.

OBJECTIVE 9.2: Hendry County shall coordinate land use decisions with its financial
capability to meet level of service standards, manage the land development process so that facility needs created by permitted development do not exceed the financial ability of the County, and identify the extent to which future development will be required to contribute to its proportional cost of facilities necessary to meet LOS standards through the accomplishment of the following policies:

Response:

The proposed Facility is consistent with this Objective as there will be no adverse demands on the County’s facilities nor any financial demands upon the County for the Facility to meet level of service standards.

Policy 9.2.3: The Land Development Regulations and Concurrency Management System shall require that any proposed developments requiring public facilities not available concurrent with the impacts from the development, or which impacts would cause performance of a facility to fall below the Level of Service Standards, shall not be permitted unless facilities meeting the Level of Service Standards are provided by the developer.

Response:

The proposed Facility is consistent with the intent of this Policy, as the proposed development will not create any impacts that would cause a reduction in level of service standards for public facilities.

Chapter 8 – Capital Improvements Element

OBJECTIVE 10.2: The county shall coordinate land use decisions with its financial capability to meet level of service standards, manage the land development process so that facility needs created by permitted development do not exceed the financial ability of the county, and identify the extent to which future development will be required to contribute to its proportional cost of facilities necessary to meet LOS standards through the accomplishment of the following policies.

Response

The proposed Facility will not require public sanitary sewer service or public potable water service. Solid waste will not be generated as a result of the operation of the Facility. The roadway network will not be adversely impacted by the trips generated by the Facility. There is no residential component to the Facility, so there will no impact to recreational facilities or the need for additional amenities. The potential need for Law Enforcement and Emergency Management Services is minimal.

OBJECTIVE 10.2(e): Stormwater Management

1. For agricultural uses, the LOS Standard shall be the requirements of the South
Florida Water Management District and the standards of the local water management district in which the proposed agricultural use is located.

Response:

The proposed Facility is consistent with this subsection. For agricultural uses on the subject property, the LOS Standards are the requirements of the ERP and the local water management district.

2. Conveyance Systems – All drainage swales and ditches shall be designed to convey the runoff generated from a 25-year, 24 hour storm event.

Response:

The proposed Facility is consistent with this subsection of this Objective. The need for and the design of any stormwater management system will be reviewed during the ERP permitting process.

4. Stormwater Management Systems – for development in all other land use districts. Stormwater management systems shall be designed to either retain on-site the runoff generated by a 5-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates.

Response:

The proposed Facility is consistent with this subsection of this Objective. The proposed Facility will be designed such that post-development discharge rates match those of pre-development rates.

5. Water Quality – Water quality treatment shall be provided for runoff from the first one-inch of rainfall; or as an option, for projects or project sub-units with drainage areas less than 100 acres, from the first one-half inch of runoff consistent with Chapters 62, FAC.

Response:

The proposed Facility will be consistent with this subsection, as the need for and design of stormwater management will be reviewed in accordance with the ERP design and permitting criteria.

Policy 10.2.4: The County shall adhere to the timing in the Schedule of the Capital Improvements, and any proposed developments requiring the facilities programmed in the Schedule, prior to completion of the projects therein, will not be permitted unless the facilities included in the Schedule are provided by the developer.

Response:

The proposed Facility is consistent with this Policy. The Facility will not require the extension, expansion or upgrading of any public facilities.
Chapter 10 – Economic Development Element

GOAL 12: HENDRY COUNTY WILL STRIVE TO ACHIEVE AND MAINTAIN A DIVERSIFIED AND STABLE ECONOMY BY PROVIDING A POSITIVE BUSINESS CLIMATE THAT ASSURES MAXIMUM EMPLOYMENT OPPORTUNITIES WHILE MAINTAINING A HIGH QUALITY OF LIFE.

OBJECTIVE 12.1: Hendry County will promote the conservation and enhancement of natural, cultural, and social resources that represent the County's agriculture, retirement, recreation, and tourist-oriented economy.

Response:

This Objective is directed toward Hendry County. The Facility is consistent with Goal 12 and Objective 12.1. The Facility proposes the designation of Open Space containing natural resources. Only a portion of the property’s agricultural use will be replaced with solar power generation.

Policy 12.1.3: Hendry County will encourage the preservation of sensitive natural resources, including wetlands, estuaries, clean air and water, historic resources, scenic vistas, and other unique natural resources.

Response:

The proposed Facility is consistent with Policy 12.1.3, as the components of this Policy applicable to the Property, which include natural resources, wetlands, clean air and water, will be protected through the County review of the PUD rezoning application and other applicable federal, state and local review and permitting processes.

OBJECTIVE 12.3: Hendry County will support public and private programs, and initiatives which are designed to promote and encourage the recruitment of new industry and job creation as well as expansion or retention of existing industries in order to diversify the County's economic base.

Policy 12.3.1: Hendry County will continue to support efforts of the Economic Development Council in promoting the expansion and diversification of the County’s economic base.

Response:

This Policy is directed toward Hendry County. The proposed Facility is consistent with Objective 12.3 and Policy 12.3.1. The proposed Facility supports expansion of electrical power generation in Hendry County and promotes the expansion and diversification of the County’s economic base.

Policy 12.3.2: Hendry County, in coordination with appropriate entities, will continue programs that encourage and assist in the location of new companies that build on the traditional economic base.
Response:

This Policy is directed toward Hendry County. The proposed Facility is consistent with this Policy. The proposed Facility supports expansion of electrical power generation in Hendry County.
FIGURE 3
LAND USE/LAND COVER
FPL HAMMOCK SOLAR ENERGY CENTER
HENDRY COUNTY, FL


LEGEND
- Subject Property (957.3621 ac.)
- Land Use/Land Cover
  - 221 - Citrus Groves (623.2659 ac.)
  - 320 - Upland Scrub/Brush (43.9375 ac.)
  - 512 - Ditch/Canal (74.4954 ac.)
  - 630 - Wetland Forested Mixed (8.6111 ac.)
  - 641 - Freshwater Marsh (206.6793 ac.)
  - 814 - Roads (0.3728 ac.)
FUTURE LAND USE: Agriculture
EXISTING ZONING: A-2
EXISTING USE: Agriculture

FACILITY AREA
SOLAR
456 ± acres

OPEN SPACE
AREA 1
303 ± acres

AGRICULTURE
190 ± acres

OPEN SPACE
AREA 2
7 ± acres

OPEN SPACE
AREA 3
1 ± acre

Hammock
SOLAR ENERGY CENTER

Hendry County, Florida

APPLICANT / PROPERTY OWNER:
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FPL Development
700 Universe Blvd.
Juno Beach, FL 33408

CONSULTANT:
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Notes:
1. Accessory or support uses that are ancillary to the principal use may be located within the facility area.
2. "Open Space" includes water management, wetlands, uplands, levees and roads.
3. The site’s legal access from the eastern terminus of Sears Road.
4. The north 600' along the east boundary shall provide a 125' setback.

See Note #4

Site Data

Total Site Area
1,057.37 ± Ac.

Existing Zoning
A-2

Existing Future Land Use
Agriculture

Proposed Future Land Use
Electrical Generating Facility

Max. Solar Panel Height
20 Feet

Setback unless noted otherwise (See Note # 4)
50 Feet

Development Area

Facility Area
456 ± Ac.

Agriculture
190 ± Ac.

Open Space
311 ± Ac.

TOTAL
957 ± Ac.

Legend

Transmission Lines
Site Boundary
Section Corner
Section Line
125' Setback (See Note # 4)