



## **Jekyll Island Environmental Assessment Procedure (EAP):**

**Report summarizing the preliminary findings the EAP Committee considering the design, construction, and operation of a 1MW solar farm proposed to be sited on a portion of the old landfill off of Old Plantation Road.**

**Date of EAP Committee meeting: 1/12/2018, Report amended: 10/25/2018**

### **EAP Committee members present:**

Ben Carswell, Director of Conservation, JIA

Cliff Gawron, Director of Landscape and Planning, JIA

John Marr, General Manager, JIA/Georgia Sea Turtle Center

Yank Moore, Land Conservation Manager, JIA

Charles McMillan, Georgia Conservancy

Gene Keferl, local resident and retired biology professor, College of Coastal GA

Invited but not able to attend:

Jason Lee, Georgia DNR Nongame Conservation Section

### **Project under consideration**

Cherry Street Energy, LLC, proposes to enter into a lease agreement with the JIA under the auspices of the Georgia Power Renewable Energy Development Program (REDI) and partnering with Radiance Solar, LLC to construct and operate the facility. As proposed, Radiance will design, construct, build, operate, and maintain a one-megawatt solar power generating facility on a five to six-acre portion of the old landfill site east of Old Plantation Rd. near its intersection with Magee Avenue. The landfill site was capped with soil and closed in the early 1990's, having since gone unused for any other purposes and grown over with primarily cabbage palm trees. The land under consideration is classified as developed land and the JIA foresees no other potential uses of it, revenue generating or otherwise.

### **Assessment**

At the conceptual stage, the EAP Committee finds this that this project poses no inherent conflicts with the Jekyll Island Conservation Plan and, rather, presents an excellent opportunity to enhance the sustainability portfolio of the Jekyll Island Authority by attracting investment in renewable energy generation. Conditions of the committee's favorable review of this project follow. Note that this review does not absolve or supersede any other regulatory, permitting, or mitigation requirements imposed by the JIA, Glynn County or the State of Georgia. JIA staff stand ready to consult with the project team regarding implementation of any points presented in this report. This committee may be reconvened to provide additional guidance once the design-development phase of this project is underway.



## **Conditions of EAP-Committee Support**

### **1. Pollinator-friendly PV**

- Radiance must demonstrate a commitment to managing the landscape within the facility in a way that supports native pollinators and plants in a way that is compatible with the successful operation of the facility. The committee's expectation is that this facility would be pollinator and native-plant friendly to a degree that could be recognized as progressive or cutting-edge in the solar arena for Georgia.

### **2. Wetland-buffers and storm water management**

- Wetland features surrounding the site should be accommodated with a 50-foot "hard buffer" and an additional 50 feet of "soft buffer". No landscape modifications will be approved within the "hard buffer". Limited landscape modifications that do not call for installation of impervious surface may be approved within the "soft buffer".
- Stormwater management should be addressed, as needed, when design/development drawings are prepared for the project.

### **3. Safety and Security**

- The facility should be fenced and Radiance should provide for the installation of an electronic entry gate at the road currently known as "ditch road" that would lead to the site.
- The risk of any fire that could be ignited on the facility spreading from the facility to the neighboring forest should be mitigated.

### **5. Construction**

- During construction, any debris that escapes the boundaries of the site should be routinely cleaned up and must not remain beyond the completion of construction.
- Stormwater management and erosion control BMPs must be in place in accordance with all county and state regulatory requirements throughout the project.
- Reasonable efforts should be made to provide a beneficial use of the vegetation to be cleared from the site. JIA may be able to use approximately 50 palm trees from the site.
- JIA should be given a least a one-month notice in advance of the date when site clearing will begin.

### **6. Operation**

- Operational plans should accommodate JIA access to the site.



## **Addendum to review Landscape Management Plan: 10/25/2018**

### **Additional members invited to review:**

Joseph Colbert, Wildlife Manager, Jekyll Island Authority  
Terry Norton, Director and Veterinarian, Georgia Sea Turtle Center  
David Steen, Research Ecologist, Georgia Sea Turtle Center

### **Land Clearing**

- An on-site pre-construction meeting should occur with members of JIA, Radiance Solar, and the land clearing contractor.

### **Ground Preparation**

#### **1. Phase 1 – Initial BMP installation**

- Ensure that the filter “soxx” and silt fence protect the wetland and pond boundaries to prevent sediment and material from reaching the water bodies adjacent to the site.

#### **2. Phase 2 – Temporary grassing to hold sediment and solar in-place**

- Use annual rye or red clover for the initial seeding of the site.

#### **3. Phase 3 – Final vegetation cover establishment**

- Prior to the dispersion of any seed, the site should be lightly tilled to turn the rye or clover into green manure to feed the seed mix that will be installed and to maximize contact with the soil surface.
- From our experience, seeding of wildflowers usually has an ideal target date of Dec. 15<sup>th</sup>. Damaging freezes are rare and planting in December tends to have higher moisture levels in the soil whereas planting in the Spring months can get very hot and dry and negatively impact germination rates.
- Dispersion should be achieved by using either a seed drill or hydroseeding. Either way it is recommended that the seeds be mixed with millorganite to serve as a fertilizer, seed carrier, and more accurate way to allow for more consistent distribution of the seeds.
- For areas along the perimeter, within the fence line, that will not shade the panels; include some smaller native trees or shrubs to provide extra habitat diversity and aesthetic value throughout the year. Consider leaving a few of the natural cabbage palms on site if it works with the design of the site. JIA Conservation staff looks forward to working together with Radiance Solar and any other knowledgeable partners to develop a list of plants suitable for this purpose.



## **Plant Selection and Location**

- A recommendation of seed mixes and rates has already been communicated. They were chosen for their limited height throughout most of the year, aesthetics, and their regionally adapted ecotype.
- Use a high seed concentration of low-lying native grasses to prevent any undesirable species entering the site with perennial wildflowers providing the color and aesthetics throughout the year.
- JIA Conservation staff anticipates and looks forward to working with Radiance Solar and Cherry Street Energy to facilitate a model “pollinator-friendly” solar project. If certain species fail to germinate or seem to struggle with the conditions of the site, then introduction of additional species to increase diversity within the site should be discussed.

## **Landscape and Operations Management**

- Leave plants in their natural state whenever possible and eliminate the use of pesticides and herbicides typically used to control weed growth. If herbicide or pesticide is required, coordinate with the JIA Conservation Staff prior to any treatment.
- Weed growth should be managed through mechanical cutting, but not prior to sufficient plant establishment post-seeding. At that point, we can work together to determine ideal times to mow to sustain maximized ecological value on the site without compromising energy production.
- Mowing should not occur more than twice per year unless it is compromising the effectiveness or efficiency of the solar equipment.
- No routine, broadcast, fertilizer application is called for, but fertilizer may be used on targeted basis when establishing any new plantings.
- In the future, if it is necessary to trim vegetation on the lease property, but outside the fence boundaries of the site, consult with JIA staff to ensure cooperation with the Jekyll Island Tree Protection Ordinance.