

**FINDING OF NO SIGNIFICANT IMPACT**

**Shady Hills Combined Cycle Facility Project**

**Shady Hills, Pasco County, Florida**

**Rural Utilities Service**

**U.S. Department of Agriculture**

**Shady Hills Energy Center, LLC**

**Prepared by:**

**Seminole Electric Cooperative, Inc.**

**For:**

**Engineering and Environmental Staff**

**Rural Utilities Service**

## **A. INTRODUCTION**

Seminole Electric Cooperative, Inc. (Seminole) plans to apply for a loan from the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct a 573-megawatt (MW) (winter) natural gas-fired combined cycle generating facility and an associated 0.6-mile 230-kV interconnection tie-line. The Shady Hills Combined Cycle Facility (SHCCF) will be constructed, owned, and operated by Shady Hills Energy Center, LLC (SHEC), a subsidiary of Seminole. It will be located on land owned by SHEC in Pasco County, Florida.

RUS will consider this loan application. Prior to taking a federal action (i.e., approving and providing the loan), RUS is required to complete an environmental impact analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (U.S.C. § 4231 et seq.), the regulations promulgated by the Council on Environmental Quality (CEQ) for implementing NEPA (40 C.F.R. Parts 1500-1508), and Rural Development's (RD's) NEPA implementing regulations, Environmental Policies and Procedures (7 C.F.R. Part 1970). After completing an independent analysis of an environmental report prepared by Seminole, RUS concurred with its scope and content. In accordance with 7 C.F.R. § 1970.102, RUS adopted the report and issued it as the Agency's Environmental Assessment (EA) for the proposed project. RUS finds that the EA is consistent with federal regulations and meets the standards for an adequate assessment. Seminole published a newspaper notice announcing the availability of the EA for public review in accordance with 7 C.F.R. § 1970.102. In addition, RUS considers the proposed project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f), and its implementing regulations, "Protection of Historic Properties" (36 C.F.R. Part 800).

## **B. PROJECT DESCRIPTION AND PURPOSE/NEED**

The SHCCF Project involves the construction and operation of a new, state-of-the-art, natural gas-fired 573 megawatt (MW) (winter), combined cycle generating facility and associated 230-kV interconnection tie-line. The SHCCF Project is proposed for approximately 14 acres on land owned by SHEC in Shady Hills, Pasco County, Florida, approximately 30 miles north of Tampa and approximately 4.7 miles south of the Pasco/Hernando County line. The SHCCF site is located east of Pasco County's Shady Hills Wastewater Treatment Facility and south of the Pasco County Solid Waste Resource Recovery Facility. The area is currently vacant and undeveloped and was previously used as a temporary laydown and equipment storage area for the existing and adjacent Shady Hills Generating Station (SHGS). The SHCCF Project will consist of a single combined cycle combustion turbine system equipped with advanced emission control equipment and includes a new approximately 0.6-mile 230-kV interconnection tie-line and approximately 25 acres of temporary construction parking and laydown area on an adjacent property owned by Seminole. On-site associated facilities will include a natural gas metering station and lateral to be constructed, owned, and operated by Florida Gas Transmission (FGT), and reclaimed water, sanitary sewer, and potable water conveyance infrastructure. The SHCCF site will be located adjacent to and east of the existing SHGS.

The purpose of the Project is to provide Seminole with an additional 573 MW of generating capacity to meet the increasing energy demands of its Member cooperatives. Seminole's nine

Member cooperatives provide electricity to approximately 1.9 million people and businesses within 42 of Florida's 67 counties. Seminole's need for the Project has been confirmed by the Florida Public Service Commission.

## **C. ALTERNATIVES EVALUATED**

### **1. No Action**

Under the No Action Alternative, RUS would not provide a loan/financing to Seminole for the construction of the Project. Seminole is committed to the construction of the SHCCF and has entered into binding commercial agreements for the construction of the facility. As a result, Seminole will proceed with the construction and operation of the SHCCF irrespective of and even in the absence of RUS financing but at increased cost to its Member cooperatives and their customers. A "no build" scenario in which the SHCCF was not constructed would not meet the purpose and need for the Project and would result in substantial costs for Seminole as well as significant delays in adding needed generation capacity.

### **2. Preferred Alternative**

Under the Preferred Alternative, RUS will consider providing a loan/financing for the Project. The SHCCF Project will be an advanced class combustion gas turbine, one-on-one ("1x1") configuration, 573 MW (winter) combined-cycle power plant. The configuration will include one combustion turbine generator (CTG), one heat recovery steam generator (HRSG), one steam turbine generator (STG), and one generator step-up transformer (GSU). The SHCCF Project also includes one auxiliary boiler, one emergency generator, one fire pump, and one cooling tower.

The SHCCF will burn natural gas in the combined cycle combustion turbine and in the auxiliary boiler. Natural gas will be transported to the SHCCF by the pipeline lateral owned and operated by FGT, which will be connected to a new natural gas metering station. Emissions of nitrogen oxides (NOx) will be controlled using dry low NOx combustion technology and selective catalytic reduction (SCR).

The project as proposed has been approved by the Florida Department of Environmental Protection (FDEP) pursuant to the state Power Plant Siting Act. The FDEP and a number of local and state agencies concluded that, if constructed and operated in accordance with the evidence presented in the record of the Siting Act proceedings, the SHCCF will serve and protect the broad interests of the public. The FDEP Certification Order includes a number of Conditions of Certification with which SHEC will comply.

### **3. Alternatives Eliminated from Further Consideration**

Alternative sites were not evaluated. The factors leading to the elimination of alternative sites from consideration include the following: (i) SHEC owns the site of the preferred alternative, (ii) the site has already been approved by Pasco County for use for power generation through the adoption of a Special Exception, (iii) the State of Florida has already approved the construction of a power plant on the site through the issuance of a Certification Order pursuant to the Power Plant Siting Act, (iv) the site provides ready access to a reliable water source –

reclaimed water from Pasco County's Master Reuse System – which is critical for plant operations, and (v) if Seminole were to abandon the use of this site for power generation and seek an alternative site, it would lose millions of dollars and would experience substantial delays in achieving the 573 MW of additional generation capacity that the Project will provide on this site, which Seminole had expected to already be available.

Other means of generating energy at the site were considered for purposes of this EA but were eliminated from further consideration due to Seminole's power generation needs (573 MW). Solar generation requires approximately 5 acres/MW. The SHCCF site is approximately 14 acres, which is insufficient to generate the required amount of power through the use of solar panels. Wind generation is not a viable means of power generation in the state of Florida due to limited wind resources. Nuclear generation was not considered due to the limited size of the land available and the proximity of commercial and residential properties. Geothermal energy was also not considered due to the magnitude of Seminole's energy needs and limited geothermal resources.

#### **D. SUMMARY OF ENVIRONMENTAL EFFECTS**

The analyses in the EA documented that the proposed project would have no significant adverse effects on air quality, land use, floodplains, wetlands, biological resources, water resources, cultural/historic resources, aesthetics, socioeconomic and environmental justice, noise, transportation, and human health and safety. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. SHEC is responsible for implementing these measures.

##### **Air Quality**

The construction phase air emissions will be temporary and will occur only during the construction period. Due to the much smaller quantity of air emissions during construction as compared to the annual operation phase air emissions as well as the temporary nature of construction emissions, the construction phase air emissions are expected to have negligible impact on ambient air quality standards. The Project's maximum ambient air quality impacts associated with operation of the SHCCF are predicted to be below the significant impact levels established by the U.S. Environmental Protection Agency, which means that the Project's emissions are considered to be insignificant in terms of the potential to cause or contribute to violations of the National Ambient Air Quality Standards and allowable Prevention of Significant Deterioration increments. The PSD permit issued by FDEP includes a number of measures determined by the Department to constitute Best Available Control Technology that have been incorporated into the Project.

##### **Climate Change/Greenhouse Gases**

The operation of the SHCCF will result in the emission of greenhouse gases (GHGs) associated with the combustion of natural gas at the facility as well as the upstream production of that gas. These emissions will be offset to a significant extent by the reduction in GHG emissions resulting from the shutdown of a coal-fired unit at the Seminole Generating Station and the elimination of upstream emissions associated with the production of the coal for the coal-fired

unit. The proposed Project is therefore expected to contribute to lowering the intensity of GHG emissions from electric power generation in Florida, allowing Seminole to increase its power generation to meet the needs of its members and their customers while minimizing associated GHG emissions.

### **General Land Use**

The site is currently vacant and will be developed for power generation. Pasco County approved a Special Exception Use for the site, confirming that the use of the site for power generation is consistent with the County's Comprehensive Plan. There are no formally classified or important farmlands within the Project site boundary; therefore, no impacts to these resources are anticipated.

### **Floodplains**

The site is mapped by Federal Emergency Management Agency as being outside of the 500-year floodplain. No impacts to floodplains will occur.

### **Wetlands**

No wetlands are present within the Project area; therefore, no impacts to wetlands will occur.

### **Biological Resources - General Fish, Wildlife and Vegetation**

The SHCCF site primarily consists of planted pines and ground cover species. An area to the east which is to be used for temporary construction parking and laydown is dominated by improved pastures, live oaks, and planted pines. The SHCCF site and temporary construction parking and laydown area are surrounded by a mixture of industrial land uses, historically disturbed and altered vegetative communities, and areas of forested uplands. The natural topography and soils at the Project site have been previously altered due to vegetation clearing and topographic grading. The majority of natural ecosystems and wildlife habitat which may have previously been located within the site has been lost. The potential for utilization of the site by most terrestrial species for foraging, roosting, or breeding is limited due to the significant alteration of the upland habitats present, as well as surrounding uses.

No impacts to aquatic species or ecosystems are expected due to the absence of wetlands and aquatic systems located on the SHCCF site and the temporary parking and construction laydown area.

### **Biological Resources - Listed Threatened and Endangered Species**

Species listed as threatened or endangered or proposed for listing under the Endangered Species Act have not been observed on the site. Due to the previously disturbed nature of the lands on and around the SHCCF site and the temporary parking and construction laydown area, the area currently provides subpar habitat for wildlife such as birds, amphibians, and reptiles.

The USFWS has identified the potential for the eastern indigo snake to potentially be present in the region. The Service concurred with the finding that the Project may affect but is not

likely to adversely affect the eastern indigo snake. Potential impacts to the eastern indigo snake will be addressed through compliance with USFWS's Standard Protection Measures for the Eastern Indigo Snake.

The state-listed gopher tortoise occurs on site. Potential impacts to gopher tortoises will be addressed through pre-construction surveys and relocation of any gopher tortoises in accordance with Florida Fish and Wildlife Commission (FWC) requirements.

### **Biological Resources – Bald and Golden Eagles/Migratory Birds**

According to the FWC bald eagle nest location database, the closest documented bald eagle nests (nest ID #PS008 and PS031) are approximately 3 miles to the northeast and southwest, respectively, of the site. No bald eagle nests were observed within the SHCCF site or the temporary parking and construction laydown area.

### **Water Resources**

The primary water source for cooling, process, and irrigation will be reclaimed water from Pasco County's Shady Hills Wastewater Treatment Facility and the interconnected Pasco County Master Reuse System. If reclaimed water is not available at the required quality or quantity, Pasco County would supply up to 3.5 MGD of potable water as an emergency backup source. The potential use of potable water as an emergency source for cooling is expected to be infrequent. The use of emergency potable water will be limited by the County to ensure that it is able to maintain adequate pressure in its potable water system to serve other needs.

There will be no discharge of cooling or process water to surface or ground waters from the SHCCF. All produced wastewater streams will be internally recycled through the Zero Liquid Discharge system.

Surface runoff from the Project site is estimated to be zero to 6 inches per year to the surface drainage system. A comprehensive stormwater pollution prevention plan will be prepared and implemented, as required under the NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities. Due to the use of the two stormwater ponds and the high percolation rates at the site, no discharge of stormwater to surface waters during operation is anticipated.

### **Cultural Resources and Historic Properties**

Phase I cultural resource assessment surveys have been completed for the SHCCF site and the temporary construction parking and laydown area. Based on these surveys, the archeological consultant concluded that there will be no adverse impacts to properties listed or eligible for listing in the National Register of Historic Places (NRHP). The Division of Historical Resources (DHR) issued letters of concurrence dated April 12, 2018, June 7, 2018, August 27, 2018, and April 3, 2019, and agreed with the conclusion that there were no significant archaeological or historical resources recorded in the SHCCF project area listed or eligible for listing in the NRHP.

The Miccosukee Tribe of Indians and Muscogee (Creek) Nation were contacted by email on May 10, 2023 and provided electronic and hard copies by USPS mail of Cultural Resource Assessment Surveys, DHR's review of the Surveys, and high-level summaries. No responses were received. Section 106 consultation requirements have been met.

### **Aesthetics**

The addition of a power plant next to an existing power plant and close to a wastewater treatment plant and resource recovery facility as well as other similar facilities will not significantly impact the aesthetics of the area. The Project will not impact any of state, county and private land holdings that serve the purpose of environmental conservation, education, and protection in the region, since none of these areas are in close proximity to the Project site and none of these areas would be disrupted or impacted (directly or indirectly) by the construction or operation of the SHCCF.

### **Socio-Economic Impacts Assessment/Environmental Justice**

The SHCCF Project is expected to result in positive economic impacts for Pasco County and the surrounding area through economic output, employment opportunities, wages, and community employment growth. During construction, direct and indirect economic benefits will include construction jobs, purchase and rental of equipment and materials, housing and living expenses for workers, and indirect employment that will be needed to accommodate the influx of workers to the area. The operation of the SHCCF will have both direct and indirect economic benefits, including capital expenditures, operation and maintenance expenditures, employment, and property tax revenues.

There are no environmental justice communities in the vicinity of the Project site that would be subjected to disproportionate adverse impacts from the SHCCF Project.

### **Noise**

Noise impacts during construction of the Project would be short-term in duration and limited to daytime hours. The design of the SHCCF includes components that mitigate noise emitted to the surrounding environment during operations, and the orientation of the noise sources further attenuates noise. The majority of the noise sources, such as the steam turbine, gas turbine, electric generator, and compressor, are located within enclosures that mitigate sounds emitted by equipment. Noise levels during operation are expected to be in compliance with the Pasco County noise ordinance, which addresses noise levels in adjacent residential areas; there are no residential areas adjacent to the Project site.

### **Traffic and Transportation**

The additional traffic associated with construction-related activities will be temporary and is not anticipated to degrade or result in a long-term impact on the existing roadways. The operational workforce for the SHCCF is not anticipated to significantly increase traffic, and no adverse impacts to traffic are anticipated during operation. Changes to the existing roadway system are not required to meet Project needs.

## **Human Health and Safety**

There are no human health and safety concerns associated with the Project. Induced currents from electromagnetic fields (EMF) produced by the transmission interconnection tie-line are limited to FDEP requirements for electric and magnetic field magnitudes on the right-of-way and at the edge of the right-of-way. The Pasco County Order approving the Special Exception includes a determination that the proposed power plant and transmission line “is consistent with the adopted Pasco County Comprehensive Plan and would not have an adverse effect on the health, safety and welfare of the public.”

## **Tie-line Corridor**

The construction of the 0.6-mile transmission line from the SHCCF to a Duke substation will not have any impacts on air quality, water quality, or socioeconomics and community resources. The transmission line will be consistent with the County’s comprehensive plan and will be compatible with surrounding land uses, which include a wastewater treatment plant, a resource recovery facility and various utility operations. DHR concurred that the construction and operation of the transmission line will have no adverse effects on cultural resources. As a result of previous disturbances within the transmission corridor – most of which serves as a dry detention basin – it provides poor quality wildlife habitat for use by the avian species and herpetofauna which are common in disturbed upland fields and mixed hardwood-conifer habitat in central Florida. No aquatic systems exist within the transmission corridor and no aquatic or wetland dependent fauna were observed within this area. USFWS concurred that construction of the transmission line is not likely to adversely affect federally-listed species. Gopher tortoise burrows will be avoided to the extent practicable during construction. Potential impacts to gopher tortoises and eastern indigo snakes, if any, will be addressed in a manner similar to that discussed above.

## **E. PUBLIC AND AGENCY INVOLVEMENT**

A number of state agencies and representatives of Pasco County participated in the state site certification process. As part of that process, SHEC also reached out to stakeholder groups, including elected local officials, site neighbors, and county and state government agencies. SHEC directly noticed, via mail, approximately 6,500 landowners and residences located within a 3-mile radius of the SHCCF site boundary, and within 0.25-mile from the 230-kV interconnection tie-line. In addition, SHEC held public informational meetings to share detailed Project information with the local community to obtain feedback and answer questions.

In connection with the preparation of the EA, the USFWS and tribal representatives were contacted about the Project.

*A Notice of Availability* regarding the EA was published in the Tampa Bay Times on August 27 and 30 and September 3. The EA was also available for public review at the USDA Rural Development office and on its website at <https://www.rd.usda.gov/resources/environmental-studies/assessments>. The 14-day comment period ended on September 09, 2023 with no comments received to date.



## **F. FINDING OF NO SIGNIFICANT IMPACT**

Based on its EA, RUS has concluded that the Project would have no significant impacts to air quality, land use, wetlands, floodplains, biological resources, water resources, aesthetics, noise, transportation, or human health and safety. The Project will have no effects on historic properties listed or eligible for listing on the National Register of Historic Places and is not likely to adversely affect federally-listed species or designated critical habitat. The Project would not disproportionately affect minority or low-income populations.

In accordance with NEPA, CEQ's Regulations (40 C.F.R. Parts 1500-1508), and RD's Environmental Policies and Procedures (7 C.F.R. Part 1970), RUS has determined that the environmental impacts of the Project have been adequately addressed and that no significant impacts to the quality of the human environment would result from construction and operation of the Project. Any final action by RUS related to the Project will be subject to, and contingent upon, compliance with all relevant federal and state environmental laws and regulations. Because RUS's action will not result in significant impacts to the quality of the human environment, RUS will not prepare an Environmental Impact Statement associated with the Project.

## **G. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW**

This FONSI is not a decision on a loan application and therefore not an approval of the expenditure of federal funds. Issuance of the FONSI and its notices concludes RUS's environmental review process. The ultimate decision on loan approval depends upon conclusion of this environmental review process in addition to financial and engineering reviews. Issuance of the FONSI and publication of notices will allow for these reviews to proceed. The decision to provide any loan/financing also is subject to the availability of loan funds for the designated purpose in RUS's budget. There are no provisions to administratively appeal this decision (i.e., issuance of a FONSI). Legal challenges to the FONSI may be filed in Federal District Court under the Administrative Procedure Act.

## **H. APPROVAL**

This Finding of No Significant Impact is effective upon signature.

Christopher McLean  
Assistant Administrator Rural Utilities Service  
USDA Rural Development

### **Contact Person**

For additional information on this FONSI and EA, please contact Robert Deems, Environmental Protection Specialist at [Robert.Deems@usda.gov](mailto:Robert.Deems@usda.gov)