

FINDING OF NO SIGNIFICANT IMPACT

Talbot Energy Facility
Dual Fuel Conversion Project

Box Springs, Georgia

RURAL UTILITIES SERVICE
United States Department of Agriculture

Oglethorpe Power Corporation

Prepared by:

Environmental and Historic Preservation Division
Rural Utilities Service

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**TALBOT ENERGY FACILITY
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BOX SPRINGS, GEORGIA**

**OGLETHORPE POWER CORPORATION
TALBOT ENERGY FACILITY**

FEBRUARY 2024

A. INTRODUCTION

Oglethorpe Power Corporation (Oglethorpe) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS), Rural Development (RD) to construct a dual fuel conversion project (Project) at Oglethorpe’s existing Talbot Energy Facility (Facility in Talbot County near the city of Box Springs, Georgia. RUS is considering this financing request. Prior to taking a federal action (i.e., providing financial assistance), RUS is required to complete an environmental analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4231–4347), the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and RD’s NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). After completing an independent analysis of an environmental report prepared by Oglethorpe and its consultant, RUS concurred with its scope and content. In accordance with 7 CFR § 1970.102, RUS will adopt the report and issue 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. Oglethorpe published a newspaper notice, announcing the availability of the EA for public review, in accordance with 7 CFR § 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 USC 470(f), and its implementing regulation, “Protection of Historic Properties” (36 CFR Part 800).

B. PROJECT DESCRIPTION

The Facility, located on 197.5 acres across a single parcel in Talbot County near the city of Box Springs, Georgia, is a natural gas-fired simple-cycle electrical power generating facility owned and operated by Oglethorpe. The proposed Project involves software and mechanical upgrades as well as the installation of two demineralized water storage tanks and two No. 2 diesel fuel oil tanks to provide dual fuel capability to four of the Facility’s existing six simple-cycle combustion turbines (CTs): CT1, CT2, CT3, and CT4. CT5 and CT6 were previously constructed to have dual fuel capacity and are not included in the scope of this Project. The Facility’s proposed dual fuel conversion will increase reliability in the event that natural gas is curtailed or cut-off during times of high demand on the grid, and No. 2 diesel fuel would serve as a backup fuel source to maintain plant operations.

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RUS has evaluated the Project's purpose and need, reasonable alternatives, and potential impacts to the environment, and has concluded that the Project will not have a significant impact on the human environment.

C. PURPOSE AND NEED

Oglethorpe is responsible for providing reliable, efficient, and low-cost power to the 38 Electric Membership Cooperative members of the not-for-profit generation cooperative who provide power to over four million Georgians.

Oglethorpe continues to evaluate methods for increasing the reliability and efficiency of its power generation while continuing to lower costs to its members. The Project will promote those goals. In recent years, the southeast has experienced unexpected cold snaps, resulting in natural gas shortages due to high demand. This pattern of cold weather and curtailed natural gas supplies prompted the need for this Project, specifically the installation of a back-up system.

The Project upgrades will increase power reliability for Oglethorpe's 38 EMC members. While the purpose of this Project is not to expand overall short-term generating capacity, the annual generation of the Facility may subsequently increase as a result of the additional fuel oil capacity, which would extend the run-time capacity during periods of natural gas curtailment or limited gas supply.

D. PROPOSED ACTION

The Project includes infrastructure, software, and mechanical upgrades to the simple-cycle Facility to increase reliability in case natural gas is curtailed or cut-off in times of high demand on the power grid. The Project includes the installation of two demineralized water storage tanks, two No. 2 diesel fuel oil tanks, the dual fuel modules for each unit and associated conversion equipment, and all supporting balance of plant infrastructure. A list of infrastructure needed for the Project is included in Section 2.1 of the EA. The Project also involves an estimated 0.85 acres of new ground disturbance that would occur in the southeastern section of the Facility. Additionally, the Project includes the removal of built up sediment within the Facility's existing storm water detention pond, replacing the liner of the pond, and designing and constructing upgrades to the existing site drainage system.

The Project's upgrades would be performed during one of the routine major outages at the Facility that occur on a regular basis after a certain number of operating hours, approximately every six years. Grading and other construction activities that would not affect the Facility's ability to function would begin in the Spring of 2024, while software and mechanical upgrades, and integration of the new infrastructure, would take place during the routine outages currently scheduled to occur in the Spring and in the Fall of 2025.

During a major outage, the Facility is shut down for a period of time and a number of contractors and personnel are brought to the Facility to perform maintenance and, if needed, upgrades. The contractors performing maintenance during the planned outages in 2025 will also perform the infrastructure, software, and mechanical upgrades for the Project. The Project will not require a permanent increase in personnel at the Facility. In connection with the Project, multiple one-time shipments of materials and equipment may be required to install the infrastructure and mechanical upgrades, but no significant increase in traffic or equipment is proposed.

E. ALTERNATIVES EVALUATED

Oglethorpe considered the following Project alternatives: construction of a new facility, use of an existing facility, use of an existing natural gas-fired facility or coal-fired facility, use of firm gas, and construction of a renewable energy resource. Oglethorpe determined the environmental and/or financial costs of those alternatives were too significant to be considered feasible alternatives to the Project, as outlined in Section 2.2 of the EA.

Under the No Action Alternative, the infrastructure, software, and mechanical upgrades associated with the Project would not be implemented, and the Facility would continue to operate in its current state. Under those conditions, the Facility would not maintain reliability during times of heavy loads and when natural gas supply is curtailed or cut off. This would result in potentially inadequate power supply to the grid and disruptions in meeting customer needs during peak demand. For these reasons, the No Action Alternative is not preferred action, as it would not provide a significant environmental advantage over the proposed action, and therefore, it is not recommended.

F. SUMMARY OF ENVIRONMENTAL IMPACTS

The Project involves software and mechanical upgrades to four (CT1, CT2, CT3, CT4) of the Facility's existing CTs and construction of new infrastructure. The Project scope also includes performing maintenance on the Facility's existing, lined storm water detention pond and conducting Facility stormwater and erosion maintenance. The Project would occur primarily within the previously disturbed, graded, and developed footprint of the current Facility with the exception of an estimated additional 0.85-acres in the southeast corner of the Facility that would require clear-cutting and grading.

The Project would have no significant impact, either directly, indirectly, or cumulatively, on aesthetics, floodplains, historic properties and cultural resources, human health and safety, land use, noise,

socioeconomics, threatened and endangered species, transportation, vegetation, water resources and wetlands, and/or wildlife. Additionally, floodplains, historical and cultural resources, water resources and wetlands, and potential habitats for threatened and endangered species are not present within the existing Facility footprint or the additional 0.85 acres included in the Project area. The Project's impacts on air quality, utilities, geology, soils, and farmland are further discussed below.

Air Quality

New Source Review (NSR) is a pre-construction permitting program designed to protect air quality when air pollutant emissions are increased either through the major modification of existing sources or through the construction of a major new source of air emissions. In areas with good air quality, NSR ensures that the new emissions do not significantly degrade the air quality through the Prevention of Significant Deterioration (PSD) permitting program.

The proposed dual fuel conversion of CT1, C2, CT3, and CT4 requires a PSD major source construction air permit along with a significant modification to the Facility's Title V Operating Permit. Oglethorpe prepared and submitted a PSD and major permit modification application to the Georgia Environmental Protection Division (GEPD) for the Project in September 2023. The Project would result in increases in projected actual annual emissions from the dual fuel conversion on the simple-cycle CTs. Annual emission increases for the four modified CTs resulting from the Project were evaluated for the PSD application submittal using the actual-to-projected actual applicability test defined in the federal PSD regulations. In the PSD analysis, each pollutant regulated under the PSD program was evaluated for potential emissions increases, and the calculated emissions increases for particulate matter (PM), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) exceeded their respective PSD Significant Emission Rates (SER). Consequently, the calculated emissions increase for these pollutants triggers PSD review. PSD review is also required for greenhouse gases because PSD permitting was otherwise triggered and the calculated emission increase of carbon dioxide equivalent (CO_{2e}) is greater than the applicable PSD SER (refer to Table 3.2-2 of the EA).

Construction activities are expected to have transient effects on air quality; therefore, no mitigation is proposed in connection with construction for the Project.

As mitigation during the operational lifetime of the Project, Oglethorpe has proposed as part of its air permit application, that the Facility would utilize air emission control measures, including dry low-NO_x combustors on the turbines during periods of natural gas combustion, water injection for NO_x emissions control during periods of fuel oil firing, and the use of low-sulfur fuels (natural gas and ultra-low sulfur diesel) for the four modified CTs, in accordance with the Facility's existing and requested air permits.

For air quality, the distance used to establish a geographic scope was derived from the EPA's cumulative modeling of large PSD sources during permitting and follows 40 CFR 51, Appendix W, Section 4.1, which references a 31-mile (50-kilometer) radius of current or proposed sources of operational emissions. Oglethorpe is unaware of any newly proposed or pending power generating facilities within that geographic scope; therefore, this Project is unlikely to contribute toward a cumulative impact on air quality.

Utilities

The Project would not result in any changes or impacts to sanitary sewers, electricity, solid waste services, and gas supply line infrastructure. The Project would result in a small increase in the water usage for the Facility's operations. Oglethorpe does not currently hold any water usage or water discharge permits for the Facility. The Facility is exempt from the requirement to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) Industrial Storm Water General Permit. The Facility receives water from Talbot County Water Works for the Facility's buildings and operations.

The Facility's current maximum water usage and current normal water usage when the evaporative coolers are in operation were calculated under the assumption that the evaporative coolers would be functioning at 100 percent and 75 percent capacity, respectively. Estimates show that the Project would increase the annual average water usage by 54 gallons per minute (gpm) under maximum usage and 7 gpm under normal usage. This minimal increase in water usage would not affect the existing water supply from Talbot County and would not require the Facility to obtain a water withdrawal permit.

The Project would not affect either the effluent composition of or the volume of the Facility's water discharge. The minimal increase in water usage as described above would largely evaporate during combustion; therefore, a significant increase in water discharge volume is not anticipated. The Facility does not hold a discharge permit because it recycles a majority of its water and sends the remaining water for disposal offsite. The Project will not require the Facility to obtain a discharge permit.

The Project would result in only minor increases in water usage and would not impact water discharge. As a result, the Project is unlikely to contribute to an adverse cumulative impact on water utilities, and no mitigation measures for the increased withdrawals or discharges are proposed.

Geology, Soils, and Farmland

Geology and Soils

The Facility's existing lined storm water detention pond has been inundated with sediment due to storm water runoff stemming from the Facility and the surrounding property. This storm water runoff has also resulted in the washout of soil and gravel into the Facility's drainage ditches and erosion around the existing fuel oil unloading area, raw water tank, existing demineralized water tanks, and storage shed. Additionally,

the foundational integrity of the existing raw water tank may be compromised by the standing water in the surrounding area.

The Project includes removing the sediment build-up within the Facility's existing, lined storm water detention pond and replacing the liner. In addition, upgrades to the existing site drainage system would be designed and constructed based on the results of a previously conducted site drainage study, which evaluated the following elements: location and quantity of water flow both onto and within the Facility, drainage modification recommendations, flow capacity of detention pond conduits, and size of the existing storm water detention pond.

The infrastructure upgrades that would occur within the existing footprint of the Facility fence line are anticipated to have no environmental consequences; however, the clear-cutting and grading of approximately 0.85 acres could result in temporary, adverse impacts to surrounding soils. Potential impacts may include the following: soil erosion, loss of soil productivity, and establishment of noxious weeds.

Oglethorpe would implement a site clearing specification plan during construction that would include, but not be limited to Best Management Practices (BMPs) for the following: temporary erosion and sedimentation control, vegetation protection and/or removal, Project site clearing and grading, and topsoil stripping. The application of soil erosion BMPs would reduce the degree of soil erosion and/or compaction caused by the Project (GSWCC, 2016 Edition).

Farmland

The existing Facility is not located within "prime farmland," however, the estimated 0.85 acres of ground disturbance to expand the Facility falls within "farmland of statewide importance" as identified utilizing online USDA Soil Survey Geographic Database (SSURGO) mapping resources. The USDA defines "prime farmland" as land with physical and chemical attributes that facilitate the production of agricultural crops. Land that has been industrialized and/or disturbed cannot be classified as prime farmland. Land that does not meet the criteria for prime or unique farmland is considered "farmland of statewide importance" for the production of food, feed, fiber forage, or oilseed crops, and is determined by the appropriate state agencies (USDA-NRCS, 2017).

The estimated 0.85 acres of land disturbance would occur on soil that is classified on the USDA Natural Resources Conservation Service (NRCS) website as farmland of statewide importance; however, this area consists of planted pine, and no impacts to active farmland is anticipated (USDA-NRCS, 2019). In addition, Burns & McDonnell corresponded with the NRCS Buena Vista District Office regarding the potential impact of the Project on farmland of statewide importance. After reviewing the proposed Project against the Farmland Protection Policy Act (FPPA), the Buena Vista NRCS determined that the Project would not convert farmland, and thus no further action with the NRCS is required.

Since no impacts on farmland are anticipated to occur as a result of the Project, no environmental consequences would occur, and no mitigation for geology, soils, or farmland is proposed.

G. PUBLIC INVOLVEMENT

The availability of the EA for public review was announced in the weekly *Talbotton New Era* newspaper on January 11, 2024, and January 18, 2024. The EA was made publicly available on the RUS project website, <https://www.rd.usda.gov/resources/environmental-studies/assessment/talbot-energy-facility-dual-fuel-conversion-project>, and at the headquarters of Oglethorpe at 2100 E Exchange Pl., Tucker, GA 30084. The fourteen (14) day public comment period concluded on January 25, 2024, during which time no public or agency comments were received.

H. FINDING OF NO SIGNIFICANT IMPACT

Based on the EA, RUS has concluded that the Project would have no significant impacts to the human environment. RUS has concluded that the Project would have no effect to federally listed threatened and endangered species or critical habitat. RUS has concluded that the Project would not disproportionately affect minority or low-income populations and that no historic properties would be affected by the proposed Project.

In accordance with NEPA, as amended, the Council on Environmental Quality Regulations and RD's Environmental Policies and Procedures, RUS has determined that the environmental impacts from the proposed Project have been adequately addressed and that no significant impacts to the quality of the human environment will result from completion of the proposed 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. RUS's action will not result in significant impacts to the quality of the human environment; therefore, an Environmental Impact Statement will not be prepared.

I. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW

This FONSI is not a decision on Oglethorpe's expected 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 in accordance with NEPA and RUS's Environmental Policies and Procedures (7 CFR Part 1970); however, engineering and financial analysis must also be concluded prior to the approval of the loan. Issuance of the FONSI and publication of notices will allow for these reviews to proceed. There are no provisions to appeal this decision; legal challenges to the FONSI may be filed in federal district court under the Administrative Procedures Act.

J. APPROVAL

This Finding of No Significant Impact is effective on signature.

Dated:

CHRISTOPHER A. McLEAN
Assistant Administrator
Electric Programs
Rural Utilities Service

Contact Information

For additional information on this FONSI and EA, please contact Ms. Suzanne Kopich, Environmental Protection Specialist, at USDA, Rural Utilities Service at: suzanne.kopich@usda.gov