

**FINDING OF NO SIGNIFICANT IMPACT**  
**CHATTAHOOCHEE ENERGY FACILITY**  
**COMBUSTION TURBINE UPGRADES PROJECT**  
**HEARD COUNTY, GEORGIA**

**OGLETHORPE POWER CORPORATION**  
**CHATTAHOOCHEE ENERGY FACILITY**

**JANUARY 2021**

**A. INTRODUCTION**

The Rural Utilities Service (RUS) expects to receive a request for financial assistance from Oglethorpe Power Corporation (Oglethorpe) for implementation of control and mechanical changes at Oglethorpe's existing Chattahoochee Energy Facility (Facility). The Facility, on Liberty Church Road in Heard County near the city of Franklin, Georgia, is an approximately 13-acre natural gas-fired combined-cycle power generation block owned and operated by Oglethorpe. The Facility is co-located on 5,200 acres with the Plant Wansley coal-fired power plant operated by Georgia Power (a subsidiary of Southern Company) and three other natural gas generation blocks owned and operated by other entities. The Facility's Thermal Performance Upgrade Step 1 (TPU1) upgrade will increase the current generation capacity of the Facility, helping to reduce the overall cost per megawatt (MW) of power generated. Additionally, the Facility's Low Load Turndown (LLTD) upgrade will allow the Facility's gas turbines to continue to operate at reduced power during times of low demand with less frequent shutdowns and subsequent restarts once demand increases. A single Environmental Assessment (EA) for both the TPU1 upgrade and LLTD upgrade (collectively, the Project) was prepared because the Project will be implemented near in time to each other and pursuant to the same air permitting effort for the same Facility.

RUS may finance the proposed Project; thereby making it an action subject to review under the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and all applicable environmental laws and regulations. RUS determined the proposed Project would require an EA, in accordance with RUS's Environmental Policies and Procedures, 7 CFR 1970. RUS conducted an independent evaluation of the EA prepared by Oglethorpe, concurred with its scope and content, and adopted it as the agency's EA. RUS has evaluated the proposed Project's purpose and need, reasonable alternatives, and potential impacts to the environment, and has concluded that the proposed Project will not have a significant impact on the human environment.

**B. 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 4 million Georgians. Oglethorpe continues to evaluate methods for increasing the reliability and efficiency of their power generation while continuing to lower costs to their members.

The TPU1 upgrade will increase capacity at the existing Facility and allow Oglethorpe to meet system demand with the Facility operating rather than starting other units or purchasing power from others. The LLTD upgrade will lower maintenance costs, reduce start-up costs because the Facility will have to shut down less often, and improve the Facility's overall operating efficiency.

The additional capacity at lower costs will meet the need of providing more efficient and less expensive power to its members and the Georgians they serve.

### **C. PROPOSED ACTION**

The proposed action includes hardware and software upgrades to the combined-cycle Facility to improve the performance, heat rate, and capacity of the turbines, and allow them to continue to operate during periods of low demand to reduce the frequency of shutdowns.

The mechanical upgrades would be performed during one of the routine major outages at the Facility that occur after a certain number of operating hours or approximately every 8 years. During a major outage, the Facility is shut down for a longer period of time and a larger number of contractors and personnel are brought to the Facility to perform maintenance, and upgrades if applicable. The contractors performing the major outage would also perform the mechanical upgrades for the Project, and a permanent increase in personnel at the Facility is not proposed. One or two one-time shipments of mechanical equipment may also be required to install these mechanical upgrades, but no significant increases in traffic or equipment is proposed.

### **D. ALTERNATIVES EVALUATED**

Other alternative sites for increased capacity were not considered, as a new site would require the construction of a large amount of infrastructure (transmission, water intake, etc.) that currently exists at the Facility site. Increasing capacity at other existing facilities could also potentially require significant infrastructure upgrades resulting in greater environmental impacts to achieve the upgrades. Additionally, the Chattahoochee Energy Facility is typically Oglethorpe's least expensive generation source and therefore the most operated units. As such, performing these upgrades at this site will result in more use of the additional capacity than if upgrades were available and were installed at other sites.

Under the No Action Alternative, the software and mechanical upgrades associated with the TPU1 and LLTD upgrades would not be implemented, and the Facility would continue to operate in its current state. Therefore, the capacity would not increase and the price per MW of power generated would not decrease as a result of efficiency improvements from the Project. Oglethorpe may need to start other units or purchase power from others to meet the system demands. Without the LLTD upgrade, the Facility would not be able to remain online through low load periods resulting in more shutdowns and startups, and, in turn, increased wear and tear on the equipment. For these reasons, the No Action Alternative is not

preferable, nor does it provide a significant environmental advantage over the proposed action, and it is not recommended.

## **E. SUMMARY OF ENVIRONMENTAL IMPACTS**

The TPU1 and LLTD upgrades will involve software and mechanical upgrades to existing equipment within the current Facility structures. No new ground-disturbing activities or new facilities, equipment, or buildings will be constructed within or outside the current Facility footprint. As a result, the TPU1 and LLTD upgrades will have no significant impact, either directly, indirectly, or cumulatively, on aesthetics, floodplains, geology, soils, farmland, historical and cultural resources, human health and safety, land use, noise, socioeconomics, threatened and endangered species, transportation, vegetation, water resources and wetlands, and wildlife, because either the resources are not present or because no construction or land disturbance activities will occur as part of the Project. Impacts on air quality and utilities are further discussed below.

The Facility is located in an environmental justice low income area census block group. However, the Project would not have disproportionately high and adverse impacts on the environmental justice communities in the area because the Project involves only software and mechanical upgrades inside the existing Facility. There will be no new ground disturbing impacts, and there are few residents in the area surrounding the Facility.

### **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 modification of existing sources or through the construction of a new source of air pollution. In areas with good air quality, NSR ensures that the new emissions do not significantly degrade the air quality. This is achieved through the implementation of the federal Nonattainment NSR and Prevention of Significant Deterioration (PSD) permitting programs or state minor permitting programs.

The Project will result in increases in maximum heat input and expected annual emissions for all pollutants emitted as products of natural gas combustion. For certain air pollutants, this would require a modification to the Facility's current operating air quality permit. Oglethorpe applied for and received approval for a combined Title V operating permit modification and state construction permit from the Georgia Environmental Protection Division (EPD) to authorize the emission increases associated with the Project. However, the increase in air pollutants would not trigger additional evaluations under federal permitting programs, and no additional ambient air modeling of criteria pollutants or mitigation is required. The only emission increases directly resulting from the Project are related to the two existing combined cycle combustion turbines. (Refer to Table 3.2-1 of the EA).

The combined Title V operating permit modification and state construction permit application included an evaluation of annual emissions increases from the Project using the actual-to-projected applicability test defined in the federal PSD regulations. The results of this analysis demonstrated that the two upgrades will not result in emission increases greater than the PSD Significant Emission Rates (SER) for any PSD-regulated pollutant, and the Project emissions increase for NO<sub>x</sub> is less than the Nonattainment NSR SER (refer to Section 3.2 of the EA). Therefore, PSD and Nonattainment NSR permitting are not required, and no additional ambient air modeling or mitigation is required.

No ground-disturbing activities are proposed for the upgrades, and there will be no emissions associated with earth-moving construction equipment. As such, the Project would have no significant adverse impacts on air quality and would not contribute to any cumulative degradation of air quality in the area.

### **Utilities**

There will be changes to the quantity of natural gas received, although no changes to the existing gas supply line infrastructure will be required to support the Project. The air emissions impacts from the increased natural gas consumption were outlined in the preceding section. Additionally, there will be changes to the quantity of total treated surface water supplied for the cooling towers.

Georgia Power withdraws surface water from the Chattahoochee River (under State Water Quality Control Permit No. 074-1291-06) to replenish the Service Water Reservoir on Yellowdirt Creek (north of the Wansley coal-fired power plant). Georgia Power then withdraws water from the Service Water Reservoir to supply cooling tower makeup and general service water for on-site operations including the Facility's operations (under State Water Quality Control Permit No. 074-1291-07). Georgia Power chlorinates the water withdrawn from the river, and the Facility performs additional demineralization prior to use. Georgia Power is authorized to withdraw up to 116 million gallons per day (MGD) from the Chattahoochee River.

The Facility discharges cooling tower blowdown water into the Wansley Retention Pond. This is a batch process occurring approximately once per week. All discharges to the Wansley Retention Pond are monitored for pH and chlorine content. Georgia Power discharges water from the Wansley Retention Pond to the Chattahoochee River (under NPDES Permit No. GA0026778). Oglethorpe is responsible for ensuring that cooling tower blowdown water meets the applicable limits for "Unit 8" in Georgia Power's NPDES permit before discharging it to the Wansley Retention Pond and ultimately the Chattahoochee River.

Following completion of the Project, the water usage and discharge quantities will increase. Additional raw water would be drawn from the Service Water Reservoir for treatment and use in the cooling towers, and there would be additional water discharged from the Facility to the Retention Pond and ultimately to the Chattahoochee River. The estimated increase of approximately 243 thousand gallons of daily

maximum cooling tower water usage would be within the parameters of Georgia Power's withdrawal permits for Plant Wansley, which allow for 116 million gallons per day (MGD) from the Chattahoochee River. Additionally, the discharge permit does not specify an allowable discharge volume, and a permit modification would not be required. A summary of the daily wastewater usage and discharges in recent years as well as the modeled usage after TPU1 can be found in Table 3.9-4 of the EA.

Since the water composition will remain unchanged and the permit does not specify allowable discharge volumes for the Facility, no changes to Georgia Power's discharge permit is anticipated. Additionally, the increased water withdrawn will be approximately 243 thousand gallons of daily maximum cooling tower water usage and well within Georgia Power's permitted 116 MGD. Since withdrawals will remain within the limits of the existing permitted/allowable amount, no new permits or modifications are necessary; therefore, no mitigation measures are proposed. Therefore, the proposed upgrades are unlikely to contribute to an adverse cumulative impact on water utilities

## **F. PUBLIC INVOLVEMENT**

The availability of the EA for public review was announced in the *News and Banner* on November 11, 2020, and November 18, 2020. The EA was made publicly available in hard copy at RUS, 1400 Independence Avenue, SW, Washington DC 20250-3201; at the headquarters of Oglethorpe at 2100 E Exchange Pl., Tucker, GA 30084; and at the Heard County Library at 564 Main Street, Franklin, GA 30217. The fourteen (14) day public comment period concluded on November 25, 2020, during which time no public or agency comments were received.

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

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

In accordance with NEPA, as amended (42 U.S.C. § 4321 et seq.), the Council on Environmental Quality Regulations (40 CFR §§ 1500-1508), and RUS's Environmental Policies and Procedures, as amended (7 CFR Part 1970), 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 would result from completion of the proposed Project. Any final action by RUS related to the proposed 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.

## **H. 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.

## **I. APPROVAL**

This Finding of No Significant Impact is effective on signature.

Dated:

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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 202-692-49007, or [suzanne.kopich@usda.gov](mailto:suzanne.kopich@usda.gov).