

FINDING OF NO SIGNIFICANT IMPACT

**Dresden – Heard County 500 kV Transmission Line
and Associated Facilities Modification Project
Coweta & Heard Counties, Georgia**

**RURAL UTILITIES SERVICE
U.S. Department of Agriculture**

**Georgia Transmission Corporation
Georgia 110**

**Prepared by:
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A. INTRODUCTION

The Rural Utilities Service (RUS) expects to receive a request for financial assistance from Georgia Transmission Corporation (GTC) for the proposed Dresden – Heard County 500 kilovolt (kV) Transmission Line and Associated Facilities Modification Project in Coweta and Heard Counties, Georgia (the proposed Project). 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), and all applicable federal environmental laws and regulations. RUS determined that the proposed Project would require an Environmental Assessment (EA), in accordance with RUS's Environmental Policies and Procedures, 7 CFR Part 1794. RUS conducted an independent evaluation of the EA prepared by GTC, concurred with its scope and content, and adopted it as the agency's EA, in accordance with 7 CFR § 1794.41. 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

GTC is an electric transmission cooperative established under the laws of the State of Georgia in 1996. The not-for-profit cooperative, headquartered in Tucker, Georgia, is engaged in the business of building, maintaining, and owning electric power transmission facilities (transmission lines, substations, and switching stations) to serve 39 of the 42 Georgia Electric Membership Corporations (EMCs). GTC provides transmission capacity to its members through participation in the Integrated Transmission System (ITS), the statewide transmission system jointly owned by GTC, the Georgia Power Company (GPC), the Municipal Electric Authority of Georgia, and the City of Dalton Utilities. The ITS serves as the backbone for the Georgia transmission grid, covering 17,500 miles of Georgia's 18,500 miles of transmission lines.

GTC has proposed the Project to ensure that adequate transmission capacity is available to integrate increased generation at the Hal B Wansley Plant (Plant Wansley) into the electrical grid. GPC is contractually obligated to increase generating capacity from Unit #7 of Plant Wansley (Wansley 7), a GPC-owned natural gas combined cycle generator, from 344 megawatt (MW) to 575 MW by 2014. Wansley 7's current output is limited by the existing electric grid, which can only carry up to 344 MW out of Wansley 7 under certain operating conditions. If the electric grid is subject to carrying more power than its capacity, serious outages can result for all of Georgia's electric consumers. The electric grid must therefore be upgraded to allow the increased capacity from the Wansley 7 generator to be integrated into the electrical grid in a safe and reliable manner.

C. PROPOSED ACTION

GTC has proposed the construction of a 6.29-mile 500 kV transmission line to connect the

Dresden 500/230 kV Substation to the Heard County Power 500 kV Substation; the construction of the transmission line and the necessary modifications to existing electrical infrastructure facilities collectively make up the proposed Project. Four (4) existing substations will be modified to accommodate the transmission line's construction. The Dresden 500/230 kV Substation will be expanded an additional 25-acres to accommodate the rerouting of the existing Wansley-O'Hara 500 kV transmission line and the installation of new equipment, including a new 500/230 kV transformer, autobanks, circuit breakers, and bus work. The existing Dresden – South Coweta 230 kV transmission line will also be rerouted at the Dresden 500/230 kV Substation to accommodate potential line crossings of the proposed Dresden – Heard County 500 kV transmission line. The Heard County 500 kV Substation's fence will be expanded by a 40'x 184' area to accommodate the installation of a new 500 kV breaker and the modification of the existing bus work. In addition, the existing 100' 500 kV tie line connecting the Heard County Substation and the Hawk Road Substation will be relocated to new bays on the south side of the substations. Finally, switch # 133427 will be also replaced at the Union City Substation with at least a 2000 amp (A) capacity switch on the East Point 230 kV line; no ground disturbance is associated with the Union City Substation modification.

D. ALTERNATIVES EVALUATED

Electrical Alternatives

The EA assessed numerous electrical alternatives, including the no action alternative and six (6) construction alternatives. Under the no action alternative, GTC would not construct the proposed Project and therefore RUS would not provide financial assistance to GTC. The construction alternatives include the proposed Project, a 500 kV line connecting the Dresden and Heard County Substations (Option 1), three (3) alternative 500 kV lines originating at Plant Wansley and terminating at the Villa-Rica Substation, the Union City Substation and the Yellow Dirt Substation (Options 2-4), a 230 kV line connecting the Dresden and Heard County Substations (Option 5), and a 230 kV originating at Plant Wansley and terminating at the Union City Substation (Option 6).

The proposed Project (Option 1) was selected as the preferred alternative when comparing the alternatives' required construction periods, costs, created capacity, and required disturbance. Under the no action alternative, GTC would fail to fulfill its obligations to GPC and to its consumer members by failing to ensure reliable electricity. A summary of the alternatives comparison for the construction alternatives is provided in the EA in Table 1 (page 16). The proposed Project (Option 1) was identified as the only option that meets the required construction schedule; in addition, it is the least cost alternative, and would provide greater capacity than options with the nearest cost estimates. A new 500 kV transmission line originating at Plant Wansley (Options 2, 3 and 4) was determined impractical because they would require costly modifications to the existing Wansley – O'Hare 500 kV transmission line and would not meet the required construction schedule. In addition, Options 2 and 3 would involve the construction of lengthy lines, 25 and 40 miles respectively, which contribute to the

cost and would increase the overall impact of the project. Constructing new and rebuilding existing 230 kV transmission lines (Options 5 and 6) was determined less desirable than the proposed Project because they would also require the construction of lengthy lines, approximately 40 miles of new construction, therefore having the potential for greater impacts. Though Option 5 is closest in cost to the proposed Project, it fails to meet the required construction period and does not provide as much capacity. While Option 6 provides greater capacity than the proposed project, it also fails to meet the required construction period and is three times the cost of the proposed Project.

Site Alternatives

Upon selection of the preferred electrical alternative, GTC conducted land suitability analysis utilizing their standardized GIS-based software methodology to corridors, line segments and ultimately alternative routes between the Dresden and Heard County Substations; a full description of the methodology is included in the EA under Section 5.2. GTC took into consideration land use, topography, existing and proposed development, transportation and utility corridors, parks, and electrical requirements, and then suitability values are then determined using based weights and values established through stakeholder involvement. Through this process and additional vetting by GTC's routing team, six (6) routes were identified.

Over a course of five months of annual meetings with GTC's internal Route Review board, two (2) routes, C3 and D3, were determined most suitable based on impacts to residents, environmental resources, cultural resources, costs and other factors. Route D3 was found to be the most suitable proposed route; it parallels the existing O'hara – Wansley 500 kV transmission line, thereby lowering costs and minimizing the visual impact. D3 does not cross Highway 34 and will impact fewer residences than C3. D3 also crosses fewer streams and wetland areas, and requires less forest clearing. GTC's Bulk Planning group re-analyzed this route in light of forthcoming North American Electric Reliability Council standards on extreme events regarding potential reliability issues associated with paralleling 500 kV transmission lines. The group affirmed that route D3 will meet these standards, and supported the selection of this alternative.

E. SUMMARY OF ENVIRONMENTAL IMPACTS

Construction of the proposed Project would require the disturbance of approximately 137-acres into utility easement for the transmission line, and approximately 25-acres associated with the expansions and modifications of the substations. The EA determined that the proposed Project would have no significant impact, either directly, indirectly, or cumulatively, on land use, including formally classified lands and prime farmland, floodplains, wetlands and waters of the U.S., cultural resources, threatened and endangered species, fish and wildlife, vegetation, transportation, air quality, water quality, aesthetics, transportation, noise, human health and safety, socioeconomic and community resources, and environmental justice. Biological and

cultural resources required field surveys and consultation to determine effects, the details of which are included below.

An ecological field survey was conducted in February 2012 to determine the presence of protected species and wetlands and waters of the U.S. within the proposed Project area. The results of a literature review and search of available databases documented that eight (8) federal-listed and five (5) state-listed species are known as potentially present in Coweta and Heard Counties. No designated Critical Habitat was determined to be present within or near the vicinity of the Proposed Project. No potential habitat for federally-listed species or critical habitat was identified; therefore, GTC did not engage in formal or informal consultation with the U.S. Fish and Wildlife Service. Potentially suitable habitat for the state-listed threatened bay star-vine (*Schisandra glabra*) was identified within the proposed Project area. A field survey was conducted during the Georgia Department of Natural Resources (GADNR) recommended period; however, no specimens were identified. GTC previously proposed use of hand clearing in an effort to protect the potential habitat for the bay star-vine; however, it has been determined that regardless of the methodology used for clearing the area, the potential habitat will be removed. GTC will therefore not perform hand clearing given that it will not lead to further protection of the bay star-vine. Due to the lack of records of occurrence in the GADNR database and the failure to identify any specimens during field survey, RUS has determined that the proposed project will have no effect on the state-listed bay star-vine.

Nine (9) wetlands, seventeen (17) streams, and one (1) open water body, all considered jurisdictional under Section 404, Clean Water Act, were delineated within the proposed Project area. No wetlands will be affected by the proposed Project; no wetlands are located within the boundaries of the proposed footprints of the substations or the proposed pole locations for the transmission line. Most jurisdictional waters will be aerially crossed, though a few will require the installation of vehicular crossing. When clearing of trees and other tall vegetation is required within wetlands and stream buffer areas, hand clearing techniques will be utilized to minimize impacts. In addition, GTC will acquire off right-of-way access when necessary to avoid impacts to jurisdictional wetlands and waters and to avoid steep terrain. All activities would qualify under the U.S. Army Corps of Engineer's Clean Water Act, Section 404 Nationwide Permits (NWP 3 and 12); all permits and other requirements will be acquired prior to construction.

An archeological survey was completed in October 2011 that included archival research and field survey of shovel testing. The literature survey identified one (1) previously recorded site near the Heard County Substation, but beyond the proposed Project's established area of potential effects (APE). The results of the field survey documented eleven (11) newly recorded sites and two (2) newly recorded isolated artifact occurrences within the APE. Due to lack of integrity, lack of research potential, and no known association with persons or events important in local history, the newly recorded sites were not recommended eligible for listing on the National Register of Historic Places (NRHP). A historic structure survey was completed in April 2010 as part of the preliminary environmental review of the potential alternative sites. Upon

selection of the proposed Project's route, it was determined that two (2) historic structures, the Emory Chapel Cemetery and the Sarah Cash House and Landscape, are located near the proposed Project area and were recommended eligible for listing on the NRHP. The transmission line will not be visible from either of the resources due to significant wooded buffer; therefore, RUS has determined that a finding of no adverse effect to historic properties is appropriate for the undertaking. The finding concludes RUS's responsibilities under the Section 106 of NHPA in accordance with the Programmatic Agreement (PA) executed by RUS, the Georgia State Historic Preservation Officer, the Advisory Council on Historic Preservation, and GTC in October 2001 and extended in October 2012. The PA is included as an attachment to the EA.

F. AGENCY AND PUBLIC INVOLVEMENT

The availability of the EA for public review was announced in the *Newnan Times-Herald* on 12/27/2012 and 1/3/2013 and *The News and Banner* on 12/26/2012 and 1/2/2013. The EA was made publicly available electronically on the RUS Website, <http://www.rurdev.usda.gov/UWP-EA.html>, and in hard copy at GTC's headquarters office located at 2100 E. Exchange Place, Tucker, GA 30084, and at the Central Library and Heard County Public Library Miller. The thirty (30) day public comment period concluded on January 25, 2012, 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 is not likely to affect federally listed threatened and endangered species or designated critical habitat. The proposed Project will have no adverse effect on historic properties listed or eligible for listing on the NRHP. Minority and low-income populations will not be adversely or disproportionately affected by the proposed Project.

In accordance with National Environmental Policy Act, 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 1794), RUS has determined that the environmental impacts of the proposed 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 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.

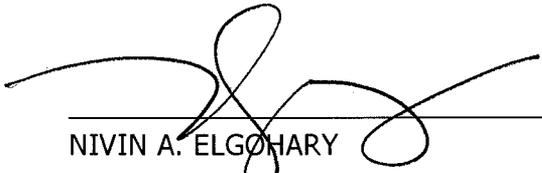
H. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW

This FONSI is not a decision on GTC'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. Final loan approval is dependent on the conclusion of the environmental review process in addition to financial and engineering review of the proposed Project. 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:



2/4/2013

NIVIN A. ELGOHARY
Assistant Administrator
Electric Programs
Rural Utilities Service

Contact Information

For additional information on this FONSI and EA, please contact Ms. Emily Orlor, Environmental Protection Specialist, at USDA, Rural Utilities Service, 1400 Independence Avenue, SW., Stop 1571, Washington DC 20250-1571, (202) 720-1414, or emily.orer@wdc.usda.gov.

