

Environmental Assessment
Thomson-Warthen 500 kV Transmission Line

prepared for
Rural Utilities Services



May 2008

prepared by
Georgia Transmission Corporation

EXECUTIVE SUMMARY
of the
Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

I. PROPOSAL

The Rural Utility Service (RUS), an agency delivering the United States Department of Agriculture (USDA) Rural Development Programs, hereinafter referred to as Rural Development and/or the Agency, has prepared an Environmental Assessment (EA) related to possible financial assistance to Georgia Transmission Corporation (GTC) for the construction of approximately 38.7-miles of 500 kilovolt (kV) transmission line that would connect Georgia Power Company's existing Thomson Primary 500/230/115/46 kV Substation to Georgia Power Company's Existing Warthen 500 kV Switching Station. GTC is requesting Rural Development provide financial assistance for the proposed project located in McDuffie, Warthen, Glascock and Washington Counties, Georgia.

The EA will serve as a detailed written record of the environmental analysis completed for the proposed project and will be used to determine whether preparation of an Environmental Impact Statement is necessary.

Georgia Transmission Corporation (GTC) proposes to construct an approximately 38.7-mile 500 kV transmission line from Georgia Power Company's (GPC) Thomson Primary 500/230/115/46 kV Substation in McDuffie County, Georgia to GPC's Warthen 500 kV Switching Station in Washington County, Georgia. The purpose of the proposed transmission line is to distribute power to the Augusta, Georgia area.

The Thomson Primary 500/230/115/46 kV Substation is located at the intersection of Randall Hunt Road and Hampton-Davis Road in Thomson, GA. The Warthen Switching Station is located at 1600 Mills Lindsey School Road, Warthen, GA. (Refer to the Study Area Map on Page 3)

The preferred Thomson-Warthen 500 kV Transmission Line route exits the Thomson Primary Substation, turns southwest and parallels the Thomson-Thiele Kaolin 46 kV Transmission Line for about one mile. Then it turns in a westerly direction for 1 mile crossing a railroad and the Ellington Airline Road approximately 1 mile south of the Boneville Historic District. It turns southwest and parallels the eastern side of Sweetwater Creek for 3.5 miles.

Traveling west for approximately 4 miles, the preferred route crosses Sweetwater Creek, Old Wrens Road, Whites Creek, Fred Reeves Road, and Rabun Road. West of Rabin Road the route leaves McDuffie County and enters Warren County. Then it crosses approximately 4 miles of Warren County including Country Road 111, Highway 80 and a railroad. One mile west of the intersection of Highway 80 and County Line Road, the Preferred Route leaves Warren County and enters Glascock County. Now it crosses Gin Branch Creek, Highway 17, GPC's Warrenton Primary-Gibson 46 kV Transmission Line, Rocky Comfort Creek, Beale Springs Road, Mill

Creek Church Road, Blume Road, Joe's Creek, Country Road 12, Sandhill Road, Highway 12 and leaves Glascock County. As the Preferred Route enters Washington County, it crosses GPC's Branch-Goshen 230 kV Transmission Line, the Little Ogeechee River and turns northwest until it is 400 feet east of Cowpen Creek. There it turns southwest for 5 miles, crossing the Sparta Davisboro Road, Williamson Swamp Creek and Highway 15. Finally, it connects to the Warthen Switching Station.

The preferred route would occupy a 150 foot right-of-way. The towers would range in height from 80 to 150 feet out-of-ground. The Preferred Cross-Country Route is the route with the least impact to the environment and communities in the area. The environmental studies and results provided in this Environmental Assessment support the location and construction of the Thomson-Warthen 500 kV Transmission Line.

II. JUSTIFICATION FOR PROPOSED CONSTRUCTION

The Augusta Area is a dense pocket of industrial, commercial and residential load. In 2005, the area was projected to have approximately 1,500 MW of peak demand that will grow to just over 1,800 MW in 2013. This represents a 2.3 percent annual growth rate.

In addition to the transmission needs in the Augusta Area, there is a stability issue associated with the operation of the Southeastern Power Administration's Plant Russell pumped storage hydro plant that is northwest of Augusta. A full discussion of the area voltage needs and stability issues are contained in this report.

The proposed substation and transmission line siting follows careful analysis and balancing of multiple factors including existing and proposed land uses, environmental regulations, engineering requirements, and the specific needs of the electric system.

This Environmental Assessment concludes that the proposed Thomson-Warthen 500 kV Transmission Line would not have a significant impact on the human, cultural or natural environment.

Rather, the Assessment finds that the proposed construction represents the most balanced and cost effective option for addressing the electric needs within the area with measures designed to mitigate the environmental effects of the proposed action to a level of insignificance.

III. FINDINGS OF ENVIRONMENTAL ASSESSMENT

In short, this Environmental Assessment concludes that the Thomson-Warthen 500 kV Transmission Line construction will:

- not impact threatened or endangered species
- not adversely effect historic resources
- not impact floodplains
- not impact vegetation or streams
- not adversely effect prime farmland soils

- not impact any area protected by the Coastal Barrier Resource Act
- not effect Wild and Scenic Rivers
- not effect any National Forest System lands
- not effect any state or federal park land
- not adversely effect the reception signals for radio, television, or any other electronic advice
- not produce any disproportionately high or adverse environmental or human health effects for minority and/or low-income communities
- not adversely effect the natural, cultural, social, or economic environment

IV. CONCLUSION

The “no action alternative” is not practical or practicable given the circumstances and the energy needs in the area. The Thomson-Warthen 500 kV Transmission Line construction is the best alternative available to sustain reliable electric service and to conserve important cultural, social, economic and natural resources.

~~This proposal marks an effort to confront the power distribution requirements with foresight and care for local residents’ views and concerns. It reflects GTC’s commitment to protecting and sustaining the renewable and nonrenewable resources of the project area. The proposed action demonstrates the benefits of strong collaborations between a private corporation and the federal government.~~

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INTRODUCTION

Georgia Transmission Corporation (GTC) proposes to construct a approximately 38.7-mile 500 kV transmission line from Georgia Power Company's (GPC) Thomson Primary 500/230/115/46 kV Substation in McDuffie County, Georgia to GPC's Warthen 500 kV Switching Station in Washington County, Georgia. The purpose of the proposed transmission line is to distribute power to the Augusta, Georgia area.

The Thomson Primary 500/230/115/46 kV Substation is located at the intersection of Randall Hunt Road and Hampton-Davis Road in Thomson, Georgia. The Warthen Switching Station is located at 1600 Mills Lindsey School Road, Warthen, Georgia. (Refer to the Study Area Map on Page 3).

The purpose of this Environmental Assessment (EA) is to evaluate the significance of environmental impacts that may arise as a result of constructing the proposed Thomson-Warthen 500 kV Transmission Line in McDuffie, Warren, Glascock and Washington Counties, Georgia.

Georgia Transmission Corporation anticipates that the Rural Utilities Service (RUS) may take Federal action related to this project. The RUS action would involve providing financial assistance to GTC to cover the cost of construction of the project. This action must be in compliance with 7 CFR Part 1974, RUS' Environmental Policies and Procedures, and 40 CFR Parts 1500-1508, the regulations promulgated by the Council on Environmental Quality for implementing the National Environmental Policy Act (NEPA).

This EA will also address other laws, regulations, executive orders, and guidelines promulgated to protect and enhance environmental quality, such as the Endangered Species Act, the National Historic Preservation Act, the Farmland Protection Policy Act, the Clean Water Act, and executive orders governing floodplain management, protection of wetlands and environmental justice.

The proposed construction by GTC represents a significant and necessary private investment and a worthwhile vehicle for RUS underwriting. A "no action alternative" is not feasible given the increasing overloads and stability problems in the Augusta area. The proposed Thomson-Warthen 500 kV Transmission Line construction represents the best alternative available to sustain reliable electric service.

This proposal marks an effort to confront the necessary power distribution improvements with foresight and conscientiousness toward residents' wishes and the desire to protect and sustain the surrounding environment. The proposal exemplifies a strong collaboration between a private corporation and the federal government.

PROJECT PARTICIPANTS

Georgia Transmission Corporation 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

(substations, switching stations and transmission lines) to serve 39 Electric Membership Cooperatives (EMCs).

The 39 EMCs members are local, consumer-owned electric distribution cooperatives that provide retail electric service on a not-for-profit basis. The memberships of the EMCs consist of residential, commercial, and industrial power consumers, generally within specific geographic areas. The 39 EMCs serve more than 1.4 million members.

As of second quarter of 2007, GTC owns and maintains approximately 2,872 miles of transmission line and 611 transmission and distribution stations of various voltages. Georgia Transmission Corporation provides transmission capacity to the 39 EMCs through participation in the Georgia Integrated Transmission System (ITS) facilities owned jointly by the City of Dalton Utilities (Dalton Utilities), Georgia Power Company (GPC), Georgia Transmission Corporation (GTC), and MEAG Power (MEAG). Parity in ownership of the ITS depends on the load served by each of the owners and varies slightly from year to year requiring periodic financial adjustment.

PROJECT DESCRIPTION

There are four Phases in the Thomson-Warthen 500 kV Transmission Line Project. A brief description of each phase follows:

Phase I – Electric Alternative Evaluation Study

Phase I tasks include a thorough analysis of the transmission system. This analysis includes identifying the resulting transmission system overloads or operational issues and proposing solutions to these problems. The various solutions become the electric alternatives considered for development and implementation.

Phase II – Alternative Corridor Selection Process

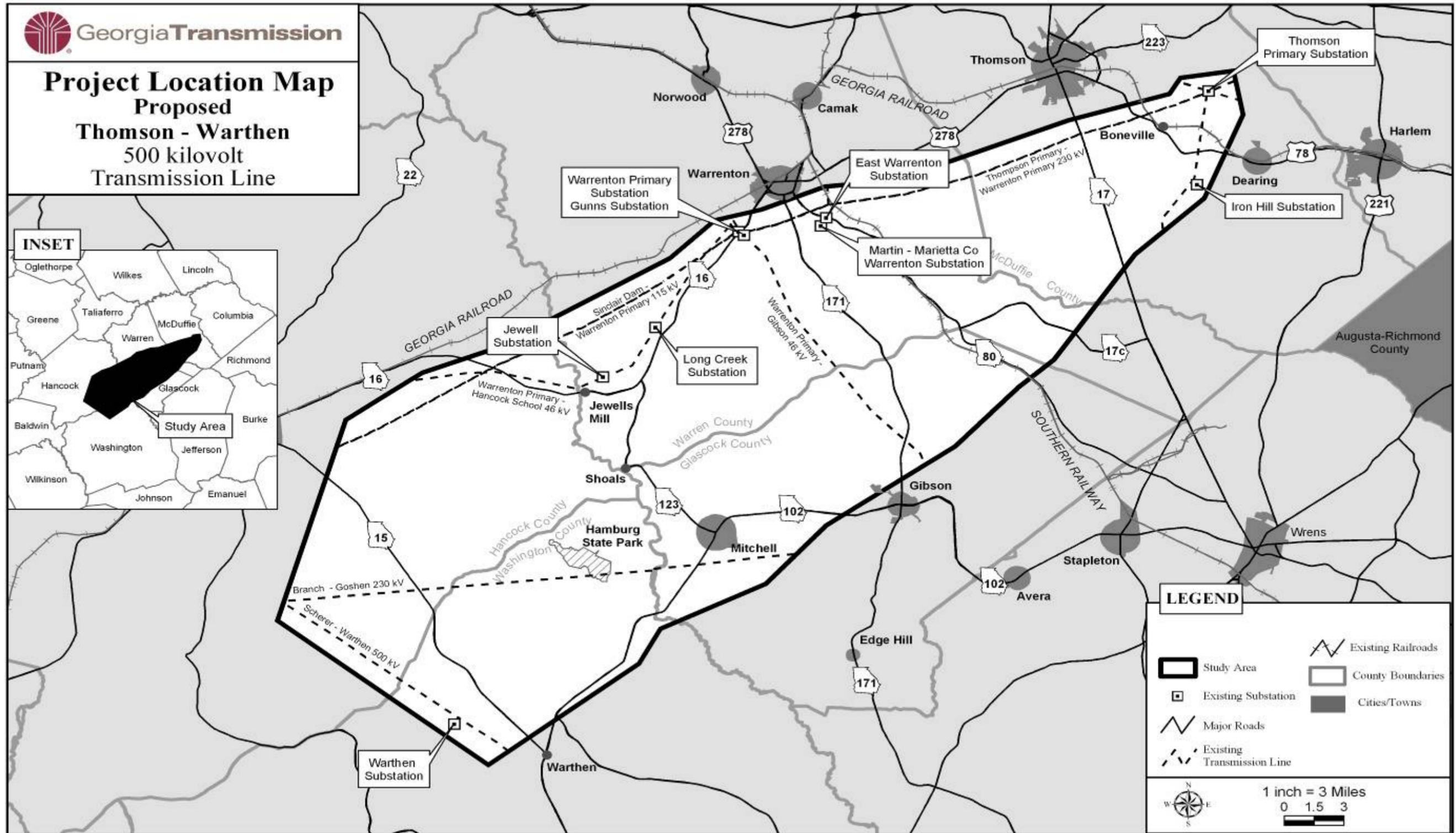
Phase II tasks include generation of Macro Corridors, definition of the study area, identification and evaluation of alternative corridors, selection of the preferred route, preparation of the Electric Alternative Evaluation and Macro Corridor Study Report and the Environmental Assessment. The study area defined allows for the development of all feasible routing possibilities and provides adequate opportunities to minimize significant environmental impacts.

Phase III – Survey and Right-of-Way Acquisition

Phase III tasks include acquiring permission to survey and acquisition of the easement for the approximate 38.7-miles, 150 foot wide right-of-way that will be needed to construct the proposed Thomson-Warthen 500 kV Transmission Line.

Phase IV – Design and Construction

Phase IV tasks are the design and construction of the 500 kV transmission line from GPC's Thomson Primary 500/230/115/46 kV Substation to GPC's Warthen 500 kV Switching Station. Georgia Transmission Corporation anticipates that lattice steel structures ranging in height from 80 feet to 150 feet will be used for this project.



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PHASE I ELECTRIC ALTERNATIVE EVALUATION STUDY

Project Justification/Need

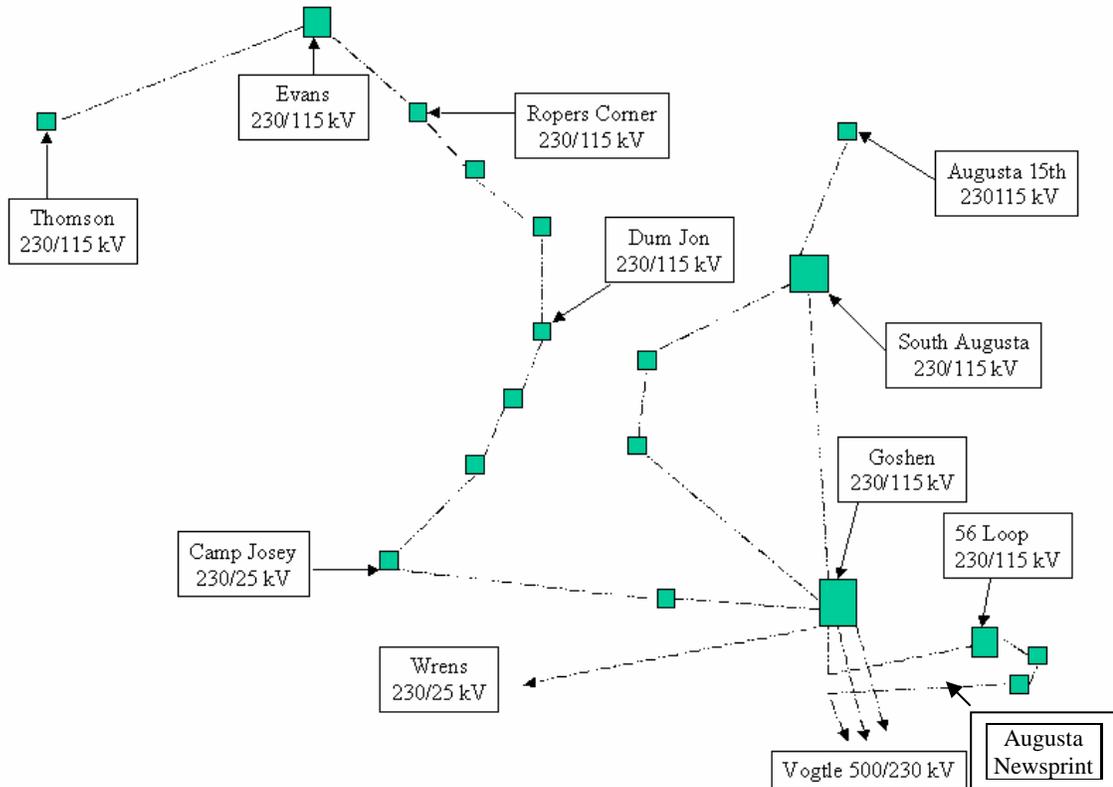
Augusta Area Study

The Augusta Area Study is initiated as part of Georgia Transmission Corporation's (GTC) ongoing effort to identify and address transmission system performance issues. This effort in conjunction with Bulk Planning's initiative to increase project lead-times enhances GTC's capability to provide cost-effective, reliable service to its Member Systems.

The Augusta Area is a dense pocket of industrial, commercial and residential load. In 2005, the area is projected to have approximately 1,500 MW of peak demand that will grow to just over 1,800 MW in 2013. This represents a 2.3 percent annual growth rate.

Currently the area is served by a network of 230 kV and 115 kV transmission lines with a 500/230 kV supply at Plant Vogtle and a 230 kV supply at Plant Branch. Three 230 kV transmission lines transverse the Augusta Area and a fourth 230 kV line serves the industrial area of Augusta Newsprint, International Paper and 56 Loop. A drawing of the 230 kV system in Augusta is shown in Figure 1 below: (Refer to the Integrated System Map on Page 4).

Figure 1: Augusta Area 230 kV Network



Including Thomson and Evans there are eight (8) 230/115 kV Substations in the Augusta Area that supply 2,341 MW of transformer capacity. As can be seen from the diagram, all of the 230 kV lines in the Augusta Area have at least one connection to the Goshen 230/115 kV Substation, and two of these lines are supplied only through connections to Goshen. Therefore, if the Goshen 230/115 kV Substation is lost completely, only a radial 230 kV line from Plant Branch (through Wrens) and an assortment of 115 kV lines support electric service to the Augusta Metro Area. A radial circuit from Plant Vogtle in this scenario will supply the industrial sector in the Southwest Corner of the Augusta transmission system. This problem is intensified because both 230 kV buses at the Goshen Substation are constructed with a straight bus design. That is, if one breaker fails to operate under a contingency event, then the whole 230 kV bus is lost.

One additional severe contingency condition exists in the Augusta Area. The loss of the corridor between Plant Vogtle and Goshen would cause the simultaneous outage of both Vogtle to Goshen 230 kV Lines and the Vogtle to Augusta Newsprint 230 kV Line. The problems that are caused by this contingency and the effectiveness of the options to address Augusta Area problems are assessed herein.

In addition to the transmission needs in the Augusta Area, there is a stability issue associated with the operation of the Southeastern Power Administration's Plant Russell pumped storage hydro plant that is northwest of Augusta. A full discussion of the stability issue is contained in this report. A consideration of this study is to understand if any of the recommendations made by the ITS Interface Working Group will affect the outcome of the Augusta Area Study.

Transmission improvements needed before 2010

This study analyzes system performance at the time of the system peaks for years 2005-2010. As a result of the analysis contained herein, a number of projects are identified for completion before 2010. These projects are common to all long-range options for serving the Augusta Area.

The following facilities will exceed their ratings by 2006:

- Goshen – South Augusta 230-kV White line (shoulder case, branch #4 off):
Loads to 103% of 497 MVA rating for a Goshen 230-kV #1 bus outage.
- Dum Jon – West Augusta 115-kV line (shoulder case, branch #4 off)
Loads to 113% of 249 MVA rating for Goshen – Peach Orchard 230-kV outage.
- Evans – Fifteenth Street 115-kV line (shoulder case, branch #4 off)
Loads to 101% of 104 MVA rating for Goshen – Peach Orchard 230-kV outage.

The following facilities will exceed their ratings by 2007:

- Goshen – Vogtle 230-kV Black and White lines (shoulder case, branch #4 off)
White line loads to 100% of 828 MVA rating for a Goshen 230 kV #1 bus outage.
Black line loads to 91% of 828 MVA rating for a Goshen 230 kV #2 bus outage
- Goshen 230/115 kV #2 transformer (shoulder case, branch #4 off)
Loads to 106% of 298 MVA rating for a Goshen 230 kV bus #1 outage

The following transmission improvements are needed to address the problems

stated above:

2005

- Install a second 230-kV bus-tie breaker in series with the existing 230-kV bus-tie breaker in the Goshen substation (GTC).
- Increase the rating of the Goshen – South Augusta 230-kV White line by replacing the 1,200 amp line traps with 2,000 amp line traps at Goshen (GTC) and South Augusta (GPC). The new line rating will be 570/596 MVA with the 1590 AAC jumpers being the limiting element. The 1351 ACSR conductor rating is 580/602 MVA.

2006

- Ropers Corner – Jones Creek – Alexander Drive 115-kV Project. The project reduces the Dum Jon – West Augusta 115-kV line loading to 99% in 2007 and 101% in 2009. Bringing up hydro generation at Thurmond Dam will reduce the line loading further (GPC).

2007

- Increase the rating of the Goshen – Vogtle 230-kV Black and White lines by replacing the 2,000 amp line traps at Goshen (GTC) and Vogtle (GPC) with 2,500 amp line traps. Also replace the 2,000 amp breakers at Goshen (GTC) with 2,500 amp breakers. The new line ratings will be 834/866 MVA with the 2-795 ACSR conductor being the limiting element.
- Increase the Goshen 230/115-kV #2 transformer rating to a minimum of 320 MVA from the present rating of 298 MVA. The 298 MVA rating is based on low-side equipment. GTC should verify the bonus rating for the Goshen 230/115-kV #2 transformer and upgrade the low-side equipment and 115-kV bus #2 to a minimum of 320 MVA or 1600 amps. (GTC).

Transmission improvements needed in 2010

By the summer of 2010, the contingency loading on the area transmission facilities is projected to reach a level that can not be addressed through switching operations or limited capital improvements:

The following facilities will exceed their ratings by 2010

(assuming all 2005-2007 recommended upgrades are constructed):

- Dum Jon – West Augusta 115 kV line
Loads to 111% of its 249 MVA rating (108% of the 255 MVA 1033 ACSR conductor rating) for the loss of the Goshen – Peach Orchard section of the Dum Jon – Goshen 115 kV line (shoulder case, Branch #4 off).
- Evans – Fifteenth Street 115 kV line
Loads to 100% of its 104 MVA rating for the loss of the Goshen – Peach Orchard section of the Dum Jon – Goshen 115 kV line (shoulder case, Branch #4 off).
- Goshen – Vogtle 230 kV (black) line
Loads to 104% of its 866 MVA conductor rating for the loss of the Goshen 230 kV bus #1 (shoulder case, Branch #4 off).

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- Goshen – Waynesboro 115 kV line
Loads to 113% of its 104 MVA rating for the loss of the Goshen 230 kV bus #1 (shoulder case, Branch #4 off).
- Goshen 230/115 kV #2 transformer
Loads to 118% of its 280 MVA nameplate rating for the loss of the Goshen 230 kV bus #1 (shoulder case, Branch #4 off).
- South Augusta 230/115 kV transformer
Loads to 102.9% of its 280 MVA rating for the loss of Goshen 230 kV bus #1 (H-BR 4), and to 101.6% for the loss of the Goshen – Peach Orchard section of the Dum Jon – Goshen 115 kV line (shoulder case, Branch #4 off).

Because of the loading on these facilities, five Options were identified and evaluated to satisfy the long-range transmission needs in the Augusta Area as follows:

- Option 1: Reconfigure the 230 kV System to remove facilities out of the Goshen 230/115 kV Substation, install a ring bus or breaker-and-a-half scheme at the Goshen 230/115 kV Substation or duplicate the Goshen 230/115 kV Substation.
- Option 2: Install a 500/230 kV Transformer at the Warthen 500 kV Switching Station. Construct 50 Miles of 230 kV transmission line from Warthen to the Thomson 230/115 kV Substation. Upgrade the 230/115 kV transformer capacity at Thomson and construct 20 miles of 230 kV transmission line from Thomson to the Dum Jon 230/115 kV Substation.
- Option 3: Construct the Thomson Project including a 500 kV breaker position at the Warthen Substation, 35 miles of 500 kV line from the Warthen Switching Station to the Thomson Substation, a 500/230 kV transformation at the Thomson 230/115 kV Substation, increase 230/115 kV transformer capacity at Thomson and Evans Substations, and construct the 230 kV line from Thomson to Dum Jon or Ropers Corner (20 miles). As an alternative to building the 230 kV to Dum Jon or Ropers Corner, the – Evans 230 kV line (16 miles) and Evans – Fifteenth St 230 kV line (15 miles) may be constructed.
- Option 4: Construct the Anthony Shoals – Evans 230 kV Line. This line consists of 40 miles of 230 kV construction and 230 kV breakers installed at the Evans Substation and the Anthony Shoals Substation.
- Option 5: Construct the South Augusta – Plant Urquhart 230 kV Line. This line consists of 4 miles of 230 kV construction and 230 kV breakers installed at the South Augusta Substation and the Plant Urquhart 230 kV Switchyard.

Option 1 has been previously explored by GTC and Georgia Power Company and was evaluated again. Option 1 is not considered a viable alternative for the following reasons:

- It is impossible to reconfigure the 230 kV System to eliminate or reduce the risk imposed by the loss of the Goshen Substation.

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- It is impossible to take a sustained outage of either Goshen 230 kV bus to accomplish the redesign and construction necessary to change the protection scheme at the substation.
- A duplicate 230 kV Switching Station south of the Goshen Substation is costly and the line flows and voltages in the Augusta Area will not be significantly improved by such a solution. In addition, several 230/115 kV transformers, 230 kV lines and 115 kV lines will need to be upgraded under this scenario and real power losses will be much higher.

Option 2, the Thomson 230 kV Project, was dismissed as a viable alternative for the following reasons:

- The only capital savings between a 230 kV alternative and a 500 kV alternative is the difference in transformation costs between two locations and the difference in the cost per mile of 500 kV construction versus 230 kV construction.
- Transmitting power 50 miles at 230 kV versus 500 kV increases demand losses on the transmission system by 10 MW in the 2011 shoulder peak case.
- Normal power flow with the 230 kV option in the 2011 shoulder peak base case is 376 MW compared with 602 MVA for the 500 kV Option. Therefore, more of the power flow in the Augusta Area is coming from Goshen in the 230 kV option versus the 500 kV option and line flows from Vogtle to Goshen will be higher.

With a source as strong as Plant Vogtle, there are only a limited number of options to redirect the power and reconfigure the system.

Option 3, the Thomson 500/230 kV Project, introduces a strong source of power on the north side of the Augusta Metro Area that balances the flows from Plant Vogtle on the south side. In addition to providing another source for the Augusta Area, The Thomson-Warthen 500 kV Transmission Line has the potential to be part of a future south - north 500 kV line on the east side of the state to better distribute flows from existing and future generation resources. Such a line has been discussed as a long-range need for the Georgia ITS. While Option 3 does not address the Russell stability issue, it does allow for further improvements to survive a Vogtle – Goshen corridor outage and it does not adversely affect interface transfer capability with other Control Areas.

Option 3 was found to be a successful long-range solution to the loading problems in the Augusta Area.

Option 4, the construction of the Anthony Shoals – Evans 230 kV Line, is another alternative that would provide a source on the north side of the Augusta Metro Area. In the 2010 evaluation of this option, additional facilities were identified that would be needed coincident with the construction of the line as follows:

- A second 230/115 kV, 280 MVA transformer at the South Augusta 230/115 kV Substation.
- The Evans – Augusta 15th Street 230 kV Line, and

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- The Evans – Augusta 15th Street construction would force a normal open point on the Evans – Augusta 15th Street 115 kV Line between the Furys Ferry Tap and Stevens Creek 115 kV Substations.

The Anthony Shoals – Evans 230 kV Project is a viable near-term solution to the problems in the Augusta Area, but it is not a long-range solution unless much more generation locates north of Anthony Shoals. Plant Vogtle is such a strong source of generation that it dwarfs all non-500 kV attempts to provide power to the north side of the metro area. There is enough difference in the power angles between Anthony Shoals and Evans (26 degrees with Plant Russell on-line) to generate enough flow to mitigate Vogtle – Goshen 230 kV Line flows and allows Option 4 to be a viable solution to address the problems in the Augusta Area. However, because of the heavy 230 kV line loading caused by the loss of either of the Vogtle – Goshen 230 kV Lines and the Goshen 230 kV Bus, capital improvements will eventually be needed to alleviate problems. These improvements would include implementing one of the other Options listed herein or rebuilding lines and adding transformers to alleviate facility loadings.

In addition to being a viable near-term solution for the Augusta Area, Option 4 provides a solution to the Plant Russell stability issue. There are impacts to interface transfer capability associated with Option 4 that would require the concurrence of other utilities prior to construction. Option 4 does not address the problems associated with the Plant Vogtle – Goshen corridor outage. The cost associated with the Option 4 including the Evans – Augusta 15th Street 230 kV Line and the second South Augusta 230/115 kV Transformer is estimated at \$53,000,000.

Option 5, the construction of the South Augusta – Plant Urquhart successfully provides another 230 kV path into South Augusta that does not involve the Goshen 230/115 kV Substation. In 2013, several loading problems in the Augusta Area were identified as follows:

It mitigates contingency loading in the Augusta Area and is by far the cheapest alternative at \$28,000,000 including a second South Augusta 230/115 kV Transformer and an Evans – Augusta 15th Street 230 kV Line. The cost is reduced because the 230 kV line would be constructed on an existing 115 kV transmission line right-of-way.

Negative considerations for Option 5 include the following:

- It does not address the stability issue at Plant Russell.
- The connections at the South Augusta Substation will need to be engineered carefully. Like the Goshen Substation, the South Augusta Substation is a straight bus design and the lines should be connected such that a single bus outage will not adversely impact transmission service to the Augusta Area.
- It has an adverse impact on the South Carolina Electric & Gas import capability. This impact would have to be reviewed and approved by SCE&G or they will not perform the construction work on the South Carolina side of the tie line.
- The corridor outage also impacts SCE&G adversely. This outage overloads the Plant Urquhart – Savannah River Site 230 kV Line. Again SCE&G would have to concur that this is an acceptable risk on their system.

Based on the analysis and evaluation performed in this study, Option 3 is the recommended solution to address the transmission needs in the Augusta Area and the future development of the Georgia ITS.

The following list of improvements in addition to the transmission and substation projects listed above become the capital project plan to meet the needs in the Augusta Area:

2010 Recommended Improvements

- Warthen 500 kV Substation – Add 500 kV Breaker
- ⇒ **Construct the Warthen – Thomson 500 kV Line (40 miles)**
- Construct the Thomson 500/230 kV Substation
- Replace the existing Thomson 230/115 kV, 140 MVA Transformer with a 300 MVA bank.
- Replace the exiting Evans 230/115 kV, 125 MVA Transformer with a 300 MVA bank.
- Construct the 230 kV line from Thomson to Dum Jon or Ropers Corner (20 miles).
Alternatively, construct the Thomson – Evans 230 kV line (16 miles) and the Evans – Fifteenth St 230 kV line (15 miles).

Option 3 is the best technical solution for the Augusta Area. It solves all the thermal and voltage problems in the Augusta Area and provides a first step for a south - north 500 kV line on the east side of the Georgia ITS. It does not address the Plant Russell stability issue; however, it does not cause adverse consequences on neighboring utilities. Additional modifications are required if the Vogtle – Goshen corridor outage is to be addressed by Option 3.

If the Anthony Shoals – Evans 230 kV Line is required to solve stability issue at Plant Russell, it is recommended here that Option 3 still be constructed in its entirety. This combination of alternatives addresses all problems with the exception of the corridor outage. The corridor outage can then be addressed with switching operations, line upgrades and a 100 MVar SVC.

Even with the Anthony Shoals – Evans 230 kV Line in place, additional support in the Augusta Area is required as specified in the discussion of Option 4. In addition, with Option 4, several operating procedures have to be evaluated, approved and implemented to survive a number of contingencies on the system. By constructing the Warthen – Thomson 500 kV Line and the Thomson 500/230 kV Substation, the need to have these operating procedures is alleviated.

The recommendations above should be acted on as soon as possible to provide the best opportunity to:

- Prepare for and eliminate system performance problems
- Provide project lead times that allow for the cost effective implementation of solutions
- Fully communicate project intent and explore all valid alternatives.

PHASE II: ALTERNATIVE CORRIDOR SELECTION PROCESS

A brief description of the siting tasks, including study area delineation, data collection, land suitability analysis, Macro Corridor delineation, selection of a network of alternative corridors, evaluation of alternative corridors and selection of the preferred corridor, follows:

TASK 1.0: IDENTIFY MACRO CORRIDORS

Macro Corridor Generation uses existing digital data layers that allow for the quick identification of the most suitable locations for transmission lines in the project area. Development of Macro Corridors is based on satellite imagery, derived land cover/land use classification and other off-the-shelf digital data.

The GIS Siting Model, that is called Corridor Analyst, identifies corridors for the transmission lines that minimize impacts to the built and the natural environment. In many cases, paralleling existing transmission lines or roads rights-of-way can minimize impacts to these resources. Corridor Analyst eliminates those areas where there is no viable option for building a transmission line. The Macro Corridors define the area where orthophotography and detailed data collection and analysis will occur in future tasks.

1.1 Macro Corridor Scenarios and Weights

To locate the Macro Corridors in the most suitable areas, the project team identified two Macro Corridor GIS Siting Model scenarios:

- Rebuilding or paralleling existing transmission lines, and,
- Crossing undeveloped or less developed land (cross-country)

Next, a weighting system was designed to identify areas where overhead electric transmission line development is most or least suitable. A suitability value is assigned to each GIS feature in the Macro Corridor GIS database. The assigned values range from 1 – 9 reflecting the suitability of each grid cell. A value of 1 identifies an area of greatest suitability and 9 an area of least suitability. A feature is suitable if a transmission corridor through it is feasible with little impact, for example, undeveloped land. A feature is considered unsuitable if a transmission line going through it would have some adverse consequences, such as densely populated areas. Numbers between 1 and 9 are used to represent intermediate degrees of suitability.

1.2 Description of Suitability Values

The assigned 1 to 9 values reflect the degree of suitability each data set presents for the location of a transmission line. Descriptions of the suitability categories follow:

High Suitability for an Overhead Electric Transmission Line (suitability ranking of 1, 2, 3):

These are areas that do not contain known sensitive resources or physical constraints, and therefore should be considered as suitable areas for the development of Macro Corridors. Examples might include undeveloped land, pasture, or rebuilding an existing transmission line.

Moderate Suitability for an Overhead Electric Transmission Line (suitability ranking of 4, 5, 6):

These are areas that contain resources or land uses that are moderately sensitive to disturbance or that present a moderate physical constraint to overhead electric transmission line construction

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and operation. Resource conflicts or physical constraints in these areas can generally be reduced or avoided by using standard mitigation measures. Examples might include primary road crossings.

Low Suitability for an Overhead Electric Transmission Line (suitability ranking of 7, 8, 9): These are areas that contain resources or land uses that present a potential for significant impacts that cannot be readily mitigated. Locating a transmission line in these areas would require careful siting or special design measures. Examples might include forested wetlands or dense urban areas. Note that these areas can be crossed but it is not desirable to do so if other alternatives are available.

Avoidance Areas

These are areas that contain resources or land uses protected by legislation or administrative policy, or that present a severe physical constraint to transmission line construction and operation. As a result, it would be very difficult to locate a transmission line in these areas. If possible, they should be avoided in the development of alternative corridors.

2004 LAND COVER CLASSIFICATION	SOURCE	X-COUNTRY	ROADS	T/Ls
Open Water	LANDSAT	7	7	7
Secondary Roads	LANDSAT	5	1	5
Other Utility Corridors	LANDSAT	5	5	5
Urban	LANDSAT	9	9	9
Undeveloped Land	LANDSAT	1	2	2
Surface Mining/ Rock Outcrop	LANDSAT	9	9	9
Forest	LANDSAT	1	2	2
Agriculture	LANDSAT	1	2	2
Wetland	LANDSAT	9	9	9
Transmission Corridors	ITS*	5	5	1
Primary Roads	GDT**	5	1	5
Interstate	GDT	9	9	9
Slopes > 30 degrees	USGS	9	9	9
Avoidance Features				
Airports	GDT			
Military Facilities	GDT			
NRHP Listed Historic Structures	NPS			
NRHP Listed Historic Districts	NPS			
NRHP Listed Archaeology Sites	NPS			
NRHP Listed Archaeology Districts	NPS			
State and National Park Interiors	NPS			
Non-spannable Water Bodies	USGS			
Wildlife Refuges	GA DNR			
USFS Wilderness Areas	GA DNR			
EPA Superfund Site	EPA			
Mines and Quarries	LANDSAT			

The data, listed above, was entered into the Corridor Analyst GIS database. The GIS system provides geographically referenced digital information for analysis of the study area. GIS technology enables the display of multiple layers of information allowing simultaneous consideration of various factors during the corridor selection process. The database will continue to be used throughout the project.

1.3 Macro Corridor Composite Suitability Surface

Once all the data for the project area are collected, entered into the Macro Corridor GIS database, and numeric values assigned to each feature, a composite suitability surface is created for the entire study area. The purpose of the composite suitability surface is to provide an overview of the study area. Each grid cell in the composite suitability surface is assigned the ranking associated with its underlying land cover type.

A separate suitability surface is developed for each of the two types of routes:

- Rebuilding or paralleling existing transmission lines
- Crossing undeveloped or less developed land (cross-country)

The Macro Corridor GIS Siting Model uses a “Least Cost Path” (LCP) algorithm to work its way across each of the composite suitability surfaces. The Least Cost Path Calculation Diagram below illustrates the operation of the LCP algorithm. If the transmission line must go from Point A to Point B, the LCP algorithm will find the path across the accumulated surface (represented by suitability values in the grid cells) that minimizes the sum of the values along that corridor. Any other path will result in a larger suitability sum and therefore be less optimal. For example, the “optimal” route, indicated in green, has a suitability sum of 21 (3+1+6+1+7+3) compared to a sum of 35 (3+1+20+8+3) for the most direct route. The lower sum indicates higher overall suitability of the green route

4	5		6	3
14	20	10	1	2
8	4	20	6	9
6	8	1	12	10
3	7	8	2	4

Macro Corridor Generation
Least Cost Path Calculation Diagram

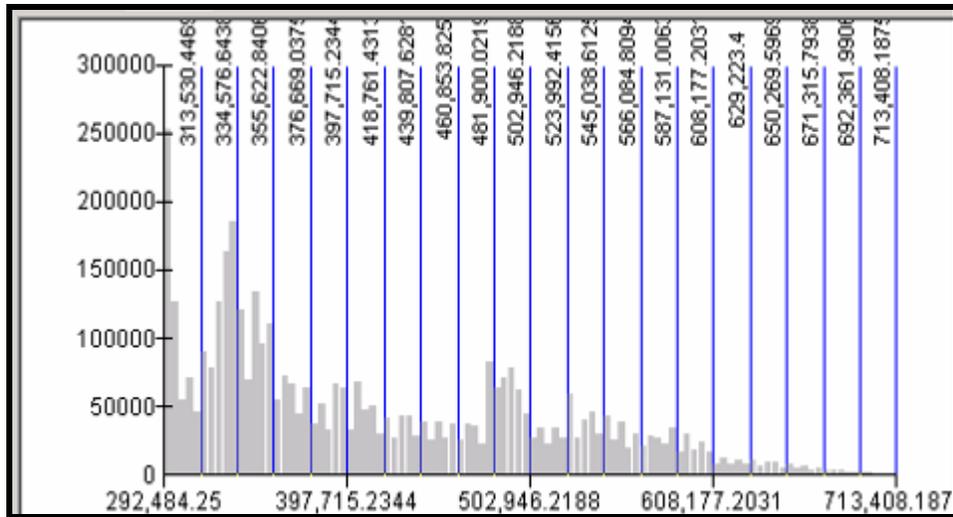
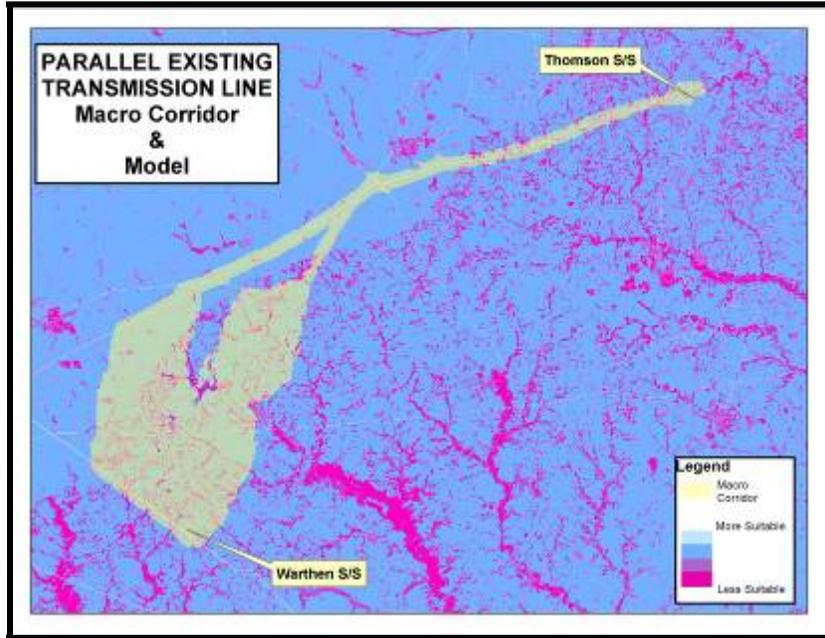
The sum of the LCP calculation is a function of the number of cells crossed (distance) and the values in the individual cells. The path will turn to avoid less preferred or Avoidance Areas (high “cost” cells), but still follow the most direct path possible. Note that, if all the cells have the same score, the resulting path between the two points would be a straight line.

1.4 Generating Macro Corridors from the Composite Suitability Surface

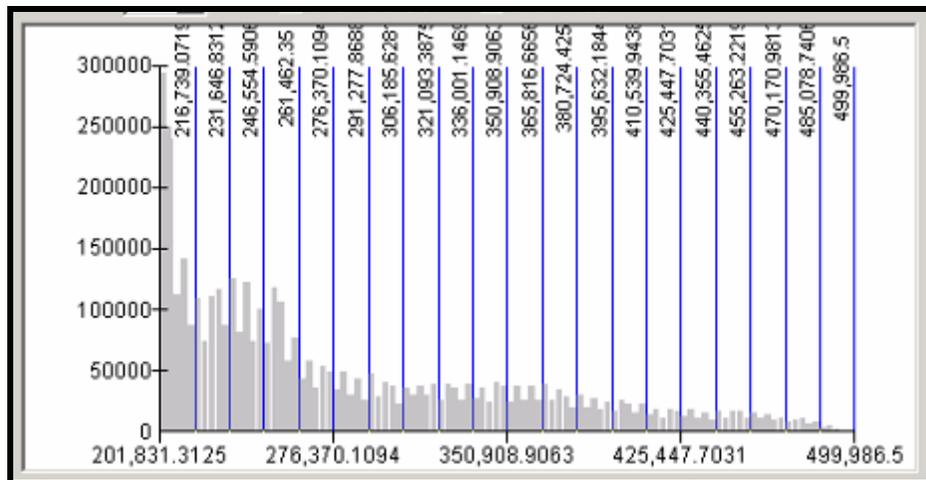
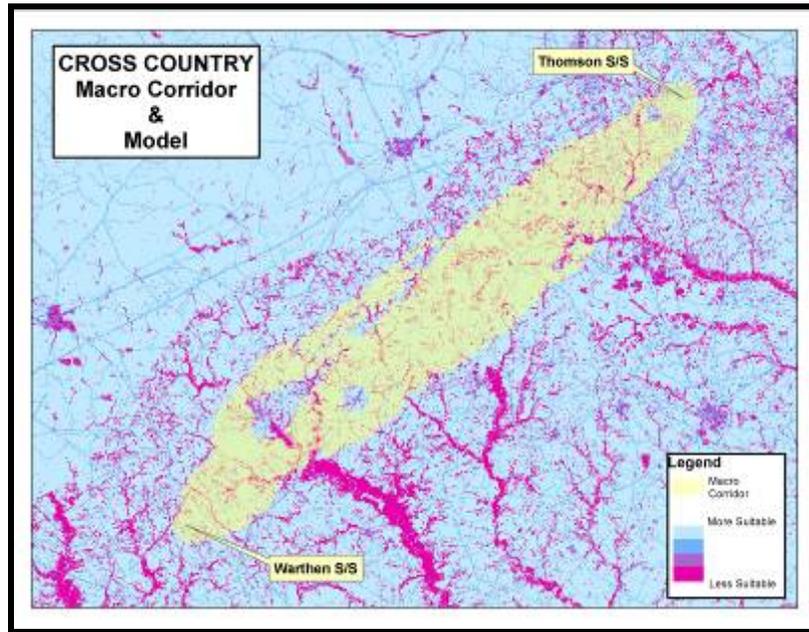
After the Composite Suitability Surfaces are generated, a histogram is developed for each surface. This histogram shows the cumulative value of each of the grid cells within the project study area. It is used to identify the most suitable areas for each of the Macro Corridors scenarios: rebuilding or paralleling existing transmission lines, and, crossing undeveloped or least developed lands (cross-country). Refer to the Existing Transmission Line Macro Corridor and Cross Country Macro Corridor Maps and Histograms below.

In each scenario, the Macro Corridor boundary is determined by the first statistical break in its histogram. A statistical break occurs when the grid cell value, as shown on the X-axis of the histogram, abruptly decreases.

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In the Existing Transmission Line Macro Corridor Histogram and the Cross Country Macro Corridor Histogram, the X-axis represents “grid cell values” and the Y-axis represents the “number of grid cells” These figures show that a statistical break occurs after two percent on the X-axis, the grid cells values. This two percent area is the area of greatest suitability for Macro Corridor Generation. The variable-width Macro Corridors may have a width of as much as a mile or greater for segments that have substantial length through areas of high suitability, while still allowing enough width in the low suitability areas for the right-of-way requirements of the project.

1.5 Description of Macro Corridors

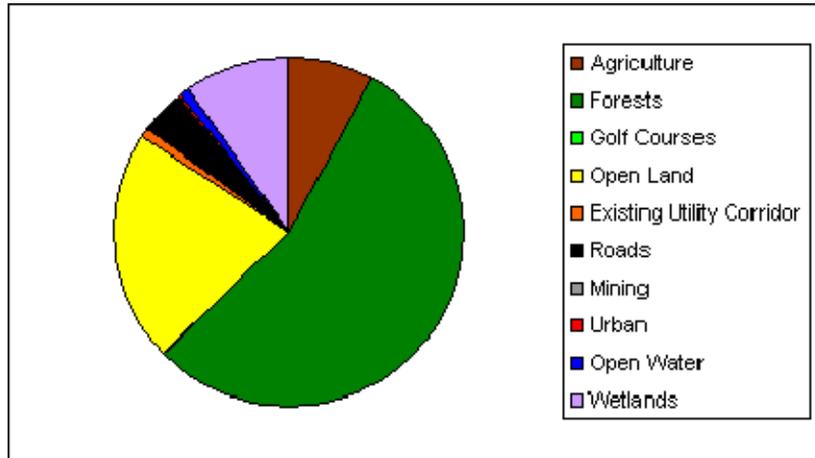
The Macro Corridors were developed based on the areas of greatest opportunity in the suitability grid. The suitability grid maximizes use of the most suitable areas for a transmission line and minimizes potential impacts to land use, land cover, environmental and cultural resources.

Macro Corridor Land Use/Land Cover Statistics

The satellite imagery was used to generate the land use and land cover for the Macro Corridor areas. The majority of the study area, 84.27% or 1328.37 acres, consists of established rural land uses including 54.40% forest, 8.11% agriculture and 21.76% undeveloped land. Rural residential development exists throughout the Macro Corridor area.

**MACRO CORRIDOR LAND USE-LAND COVER
STATISTICS**

Land Use/ Land Cover		Acres	Percent
Agriculture	56559	127.82	8.11%
Forests	379451	857.56	54.40%
Golf Courses	180	0.41	0.03%
Undeveloped Land	151766	342.99	21.76%
Existing Utility Corridor	4423	10.00	0.63%
Roads	28760	65.00	4.12%
Mining	491	1.11	0.07%
Urban	1648	3.72	0.24%
Open Water	6488	14.66	0.93%
Wetlands	67804	153.24	9.72%



The Macro Corridors are described by geographic location as three corridors, the Northern Macro Corridor, North-Central Macro Corridor and Southern Macro Corridor.

Northern Macro Corridor

The Northern Macro Corridor starts at the Thomson Primary Substation and follows the Thomson-Warrenton Primary 115 kV and 230 kV Transmission Lines for approximately 17-miles to the Warrenton Primary Substation. Then it follows the Thomson-Warrenton Primary 230 kV and the Sinclair Dam-Warrenton Primary 115 kV Transmission Lines 15-miles to the vicinity of Highway 15. At Highway 15 the

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corridor turns south and runs for about 11-miles until it reaches the Warthen Switching Station.

The Northern Macro Corridor is approximately 43-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below.

Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Whites Creek
Brier Creek
Golden's Creek
Rocky Comfort Creek
Long Creek
Sandy Run Creek
Floodplains
Gin Branch
Golden's Creek
Rocky Comfort Creek
Long Creek
Ogeechee River
Little Ogeechee River
Sandy Run Creek
Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 80
SR171
SR 16
SR 15
Railroads
Georgia Railroad
Southern Railway
Recreation
Sweetwater Park (City of Thomson)
Ogeechee Wildlife Management Area

North-Central Macro Corridor

The North-Central Macro Corridor follows the same path as the Northern Macro Corridor from the Thomson Primary Substation to the Warrenton Primary Substation. At the Warrenton Primary Substation, it turns southwest following the Warrenton Primary-Hancock School 46 kV Transmission Line for approximately 6-miles to the proximity of the Jewell Substation. Then it passes on the south side of the Ogeechee Wildlife Management Area, crosses the Ogeechee River and Little Ogeechee River, and continues in a southwestern direction until it reaches the Warthen Switching Station.

The Northern-Central Macro Corridor is approximately 38-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below.

Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Whites Creek
Brier Creek
Golden's Creek
Rocky Comfort Creek
Short Creek
Floodplains
Gin Branch
Golden's Creek
Rocky Comfort Creek
Short Creek
Ogeechee River
Little Ogeechee River

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 80
SR171
SR 16
SR 15
Railroads
Georgia Railroad
Southern Railway

Recreation
Sweetwater Park (City of Thomson)
Ogeechee Wildlife Management Area
Hamburg State Park in close proximity

Southern Macro Corridor

The Southern Macro Corridor exits the Thomson Primary Substation and turns southwest paralleling the Thomson-Thiele Kaolin 46 kV Transmission Line for approximately 1-mile. The Thomson-Thiele Kaolin 46 kV Transmission Line is south of the Boneville Historic District. Then the Macro Corridor turns west and runs cross-country for 34-miles until it reaches the Warthen Switching Station. It located south of the Hamburg State Park.

The Southern Macro Corridor is approximately 35-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below.

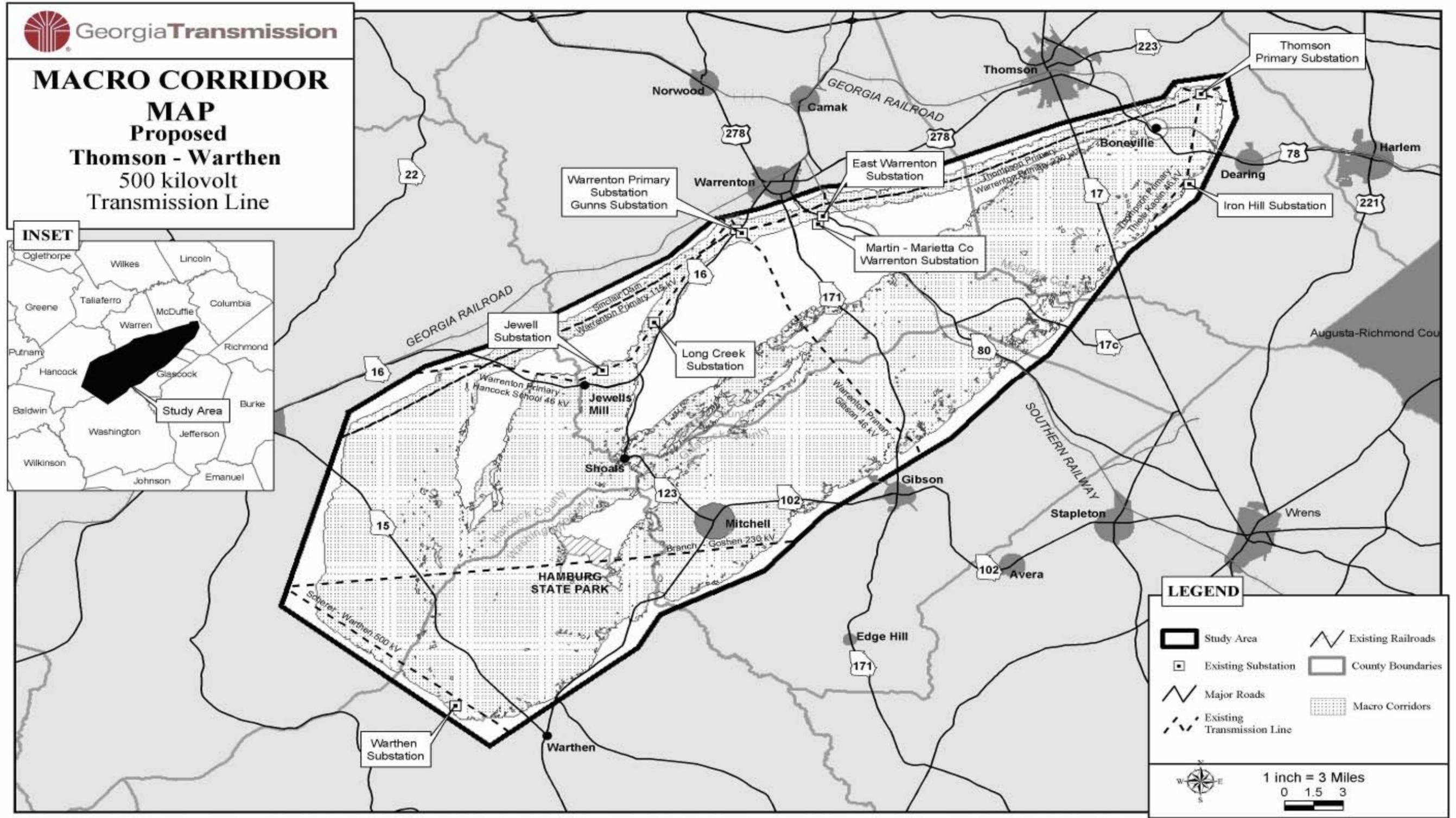
Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Brier Creek
Little Brier Creek
Rocky Comfort Creek
Joes Creek
Cowpen Creek
Floodplains
Sweetwater Creek
Brier Creek
Little Brier Creek
Rocky Comfort Creek
Joes Creek
Ogeechee River
Little Ogeechee River
Cowpen Creek
Little Cowpen Creek

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 17C
SR 80

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SR171
SR 123
SR 15
Railroads
Georgia Railroad
Southern Railway
Recreation
Hamburg State Park in close proximity

Refer to the Macro Corridor map on the next page.



TASK 2.0: STUDY AREA DESCRIPTION

This section provides a description of the physical features of the study area. It also comments briefly on other considerations, such as, socioeconomic and community benefits that are important but not included in the GIS database.

The study area is defined by the outer boundaries of the Macro Corridors. The study area allows for the development of all feasible corridors, provides adequate opportunities to minimize significant environmental impacts and focuses the study efforts to an area necessary to accomplish the selection of a network of alternate corridors and a preferred route. The study area for the Thomson-Warthen 500 kV Transmission Line includes portions of McDuffie, Warren, Glascock, Hancock and Washington Counties, Georgia.

The definition of the study area began with the generation of Macro Corridors between GPC's existing Thomson Primary 500/230/115/46 kV Substation and the Warthen 500 kV Switching Station. The Thomson Primary Substation is located on Hampton-Davis Road, 4 miles east of Thomson, Georgia and 2 miles northeast of Boneville, Georgia. The Warthen Switching Station is located approximately 40 miles southwest of the Thomson Primary Substation at 1600 Mills Lindsey School Road. It is 8 miles northwest of Warthen, Georgia and 1.5 miles southwest of State Highway 15. It is near the Scherer-Warthen 500 kV Transmission Line.

The boundaries of the study area are the Thomson Primary Substation on the northeast, the Sinclair Dam-Warrenton 115 kV Transmission Line on the northwest, the Scherer-Warrenton 500 kV on the southwest and the southern boundary is approximately 5 miles south of the Glascock and Washington county lines. The study area is approximately 347 square miles (222,190 acres) within a perimeter of 87 miles.

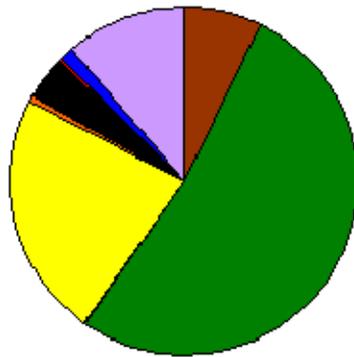
2.1 Land Use/Land Cover

The satellite imagery was used to generate the land use and land cover for the study area. The majority of the study area, 84.27% or 1328.37 acres, consists of established rural land uses including 52.49% forest, 7.23% agriculture, 22.77% undeveloped land and wetlands 11.12% and rural residential development exists throughout the study area. (Refer to the Land Use-Land Cover Statistics Chart on Page 26.)

The population centers are Thomson, Warrenton and Boneville to the north and Dearing, Gibson, Mitchell and Warthen to the south of the study area.

**STUDY AREA LAND USE-LAND COVER
STATISTICS**

Land Use/ Land Cover		Acres	Percent
Agriculture	72226	163.23	7.23%
Forests	524479	1185.32	52.49%
Golf Courses	353	0.80	0.04%
Undeveloped Land	227526	514.21	22.77%
Existing Utility Corridor	5405	12.22	0.54%
Roads	41866	94.62	4.19%
Mining	885	2.00	0.09%
Urban	2550	5.76	0.26%
Open Water	12733	28.78	1.27%
Wetlands	111123	251.14	11.12%



2.2 Transportation

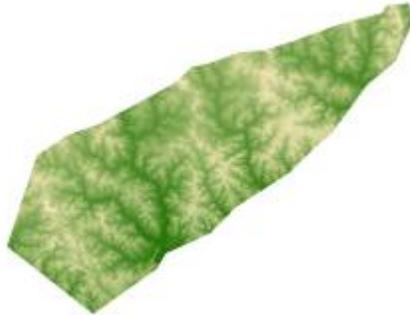
Transportation in the study area includes highways, railroads and airports listed in the chart below.

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 17C
SR 80
SR171
SR 123
SR 16
SR 15
SR 102
Railroads
Georgia Railroad
Southern Railway
Airports
Thomson-McDuffie County Airport
Georgia Barkfield Airport
Kaolin Field airport

The major impact to the existing transportation system in the Thomson-Warthen, Georgia area would be where the proposed transmission line crosses roads. Transportation of equipment to the job site could temporarily affect traffic during loading and unloading.

2.3 Terrain

The study area terrain is rolling with a low elevation of 286 feet and high of 599 feet.



2.4 Hydrology

The Ogeechee River and Little Ogeechee River both cross the study area in a northwest-southeast direction. Neither river is navigable.

Streams with > 5 cfs Flow Rates

Georgia Transmission Corporation collected data and mapped streams in the project area with a greater than (>) 5 cubic feet per second (cfs) flow rate because those streams are more difficult to cross during construction and maintenance. Digital Elevation Models (DEMs) were obtained from the Georgia GIS Data Clearinghouse and used in Corridor Analyst to delineate watersheds from various points along the project area streams. The methodology was used to determine land areas needed to generate 5-cfs stream flows is described in the next paragraph.

A mean annual runoff of 0.9 cfs/mi² for streams in this basin was used to determine the land area of a basin that will be drained before the water reaches a flow of 5 cfs. This measure was obtained from the USGS Map of Georgia Showing Average Annual Runoff. It was determined that the land area required to generate such a flow in this basin is approximately 5.56 mi². Drainage basins were delineated to find those with total land areas at this limit. Streams below the lower boundary of each basin and subsequent downstream reaches were selected as those with flows of greater than 5 cfs.

The study area streams with a > 5-cfs flow are listed in the chart below.

Streams with > 5-cfs
Brier Creek
Cowpen Creek
Dry Creek
Fords Creek
Golden's Creek
Joes Creek
Little Brier Creek

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Little Ogeechee River
Long Creek
Ogeechee River
Rocky Comfort Creek
Sandy Run Creek
Short Creek
Storm Branch
Sweetwater Creek
Taylor's Creek
Whites Creek

Floodplains

Executive Order 11988 directs Federal Agencies to avoid to the greatest extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The location of floodplains and other flood hazard areas is identified using Insurance Rate Maps produced by the Federal Emergency Management Agency (FEMA).

Only McDuffie County participates in the Federal Emergency Management Agency's National Flood Insurance Program. Floodplains in the other four counties in the study area were interpreted from United States Geological Survey (USGS) 7.5 minute Quadrangles. The study corridor encounters floodplains associated with the streams listed below.

Floodplains Crossed
Brier Creek*
Cowpen Creek
Dry Creek
Fords Creek
Gin Branch*
Golden's Creek
Joes Creek
Little Brier Creek
Little Cowpen Creek
Little Ogeechee River
Long Creek
Mill Creek
Mott Creek
Ogeechee River
Reynolds Branch
Rocky Comfort Creek
Sandy Run Creek
Short Creek
Storm Branch

Sweetwater Creek*
Taylor's Creek
Turkey Creek
Whites Creek*
* Streams in McDuffie County

Wetlands

Section 404 of the Clean Water Act charges the U.S. Army Corp of Engineers with the regulation of discharges of “dredged or fill” material into waters of the United States, including wetlands and other special aquatic sites.

United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Maps were used to identify wetland areas during Macro Corridor identification activities. When the preferred corridor is selected, GTC will contract with qualified consultants to conduct a wetland delineation of all wetland resources within that corridor.

2.5 Sensitive Areas

There are two National Forests in Georgia, the Chattahoochee National Forest and the Oconee National Forest. The proposed project is not located in or near either of these National Forests.

There are three National Wildlife Refuges (NWR) managed by the U.S. Fish and Wildlife Service in Georgia, the Okefenokee National Wildlife Refuge, Piedmont National Wildlife Refuge and the Savannah National Wildlife Refuge. The proposed project is not located in or near any of these National Wildlife Refuges.

Throughout Georgia, the Parks, Recreation and Historic Sites Division of the Georgia Department of Natural Resources operate 44 State parks and 14 Historic Sites. The Hamburg State Park is located on the Little Ogeechee River. The existing Branch-Goshen 230 kV Transmission Line passes through southwestern area of the park where it crosses the Little Ogeechee River and its floodplain.

The National Park Service (NPS) of the United States Department of the Interior (USDI) operates 10 units in the State of Georgia, including facilities such as National Battlefield Parks, National Historic Sites and National Monuments. There are no NPS managed properties in or near the study area.

2.6 Recreation Resources

Recreation Resources in the study area include Hamburg State Park and Sweetwater Park that is located in the City of Thomson.

2.7 Archaeology and Historic Structures

Section 106 of the National Historic Preservation Act (NHPA) requires that any Federal agency review the impact of any undertaking (construction, loan guarantees, contract approvals, permit approvals, etc.) on historic properties. Historic properties, for the purposes of Section 106 review, are those properties listed in or eligible for listing in the National

Register of Historic Places. The Section 106 review process is administered by the Advisory Council on Historic Preservation that in turn delegated this responsibility to the Historic Preservation Division of the Georgia Department of Natural Resources (GADNR). The GADNR is responsible for implementing 36 CFR Part 800, the Protection of Historic Properties.

Brockington & Associates, Inc. and Historic Preservation Consulting provided information on existing National Register of Historic Places historic and prehistoric cultural resources located within the project boundary. This information was identified through background research at the State Site Files Database maintained by the Department of Anthropology, University of Georgia, and, the Historic Preservation Division of the Georgia Department of Natural Resources.

There are two NRHP listed historic districts, Boneville and Jewell, and no NRHP listed archaeology sites in the study area.

TASK 3.0: RUS SCOPING MEETINGS

The Rural Utility Service (RUS) conducted two open house public meetings for the Thomson-Warthen 500 kV Transmission Line on Tuesday, May 24, 2005. The first meeting was held at the Warthen Community Center from 1:00 – 3:00 P.M. There were 10 attendees including representatives from the Georgia Department of Transportation, Hamburg State Park and the McDuffie County Chamber of Commerce, Senator Johnnie Grant and Mr. Charles Tarbutton also attended. The second meeting was held at Thomson High School from 5:00 – 7:00 P.M. There were 3 attendees from the general public. They were Charlie Newton, Chairman, McDuffie County Commissioners, Mr. Billie Faulk and Mr. Wilcher.

The meetings were advertised in the Federal Register and local newspapers. Copies of the proposed Thomson-Warthen 500 kV Transmission Line Electric Alternative Evaluation Study and Macro-Corridor Study Report were distributed to the local libraries for interested parties to review.

A comment was received from Gus Cooper, District Utilities Engineer, Department of Transportation (DOT), Tennille, GA 31089. Mr. Cooper wanted to be sure that GTC would coordinate highway and bypass crossings with DOT. GTC will coordinate and permit all road crossings with county, state and federal DOTs as appropriate.

Ms. Marcia Ray expressed great concern that the transmission line current would interfere with her pacemaker. Her physician, Abdulla M Abdulla, M.D. and her technician from St. Jude Medical Hospital wrote letters commenting on the possibility of a problem with her pacemaker. GTC realigned the route approximately 450-feet away from the original route alignment.

Five attendees wanted the transmission line route off their property. Another attendee wanted to know when the company would let him know what GTC was going to pay for the land use loss.

Copies of Mrs. Jeannine Rispin are meeting summary, sign-in sheets and RUS Scoping Meeting Comment Sheets are located in Appendix A.

TASK 4.0: GENERATE ALTERNATIVE CORRIDORS

In Phase II the outer limits of the Macro Corridor Composite Suitability Surface were used to define the project study area boundaries and to generate a final Macro Corridor Composite Surface. During Task 4, three Alternative Corridors were generated within the Macro Corridor boundaries. With input from stakeholders, the project team decided to standardize the alternatives for transmission line corridor selection by the following.

- Protecting people and places and cultural resources (Built Environment Perspective)
- Protecting water resources, plants and animals (Natural Environment Perspective)
- Minimizing costs and schedule delays (Engineering Requirements Perspective) and,
- A composite of the built, Natural and Engineering alternative (Simple Combined Perspective)

4.1 Alternative Corridor Data Collection

Following Macro Corridor Generation, additional data are collected to produce Alternative Corridors within the Macro Corridors. Data are collected or derived from several sources. Some Data Layers are gathered from existing off-the-self data warehouses, while others are created specifically for each project based on aerial photo interpretation. For example, data on roads, interstates and railways are purchased from a data provider that updates these Features every year. Some datasets are created and maintained by GTC and the Integrated Transmission System (ITS) companies. For example, USGS Digital Elevation Models (DEMs) are acquired as off-the-self data, but slope must be derived from the DEMs to be included in the model.

The Land Use/Land Cover Map used in the Macro Corridor Phase is not detailed or accurate enough to define Alternative Corridors. Instead, more detailed datasets are developed for Land Use/Land Cover and Intensive Agriculture from digital orthophotography. This orthophotography is used to “derive” data for the building dataset. Although buildings are identified in the orthophotography, the buildings themselves are not used in Alternative Corridor Phase of the GIS Siting Model. Instead, building density, building proximity and building buffers are derived from the building dataset using standard functionality commonly available in GIS software. Then, the derived datasets are inserted into the GIS Siting Model.

4.2 Alternative Corridor Database

The GIS database for the Alternative Corridor Phase can be thought of on three levels (Refer to Page 33: GIS Siting Model Data Tiers). At the lowest level is Tier 1, which consists of Features that are important in siting a transmission line, e.g., slope, building density and wetlands. The Tier 1 Features contain grid cells that are assigned a value ranging from 1 to 9 and cover the entire study area. Tier 1 Features include distinct categories, such as overhead electric transmission lines, roads and railroads. They also include numerical ranges for Features like building density.

In the second level (Tier 2), similar Features are grouped into Data Layers, e.g., land cover that contains managed pine forests, row crops, undeveloped land and developed land. At the highest level, Tier 3, Data Layers are grouped into three Perspectives: Built Environment, Natural Environment and Engineering Requirements. Each perspective reflects distinct stakeholder viewpoints on critical siting issues.

**EPRI/GTC Tailored Colaboration
Transmission Line Siting Model**

Last Revised: 02/23/04

Engineering	Natural Environment	Built Environment	AVOIDANCE AREAS
Linear Infrastructure	Floodplain	Proximity to Buildings	Listed Archaeology Sites
Rebuild Existing Transmission Lines	Background	Background	Listed NRHP Districts and Buildings
Parallel Existing Transmission Lines	100 Year Floodplain	900-1200	Eligible NRHP Districts
Parallel Roads ROW	Streams/Wetlands	600-900	Airports
Parallel Gas Pipelines	Background	300-600	EPA Superfund Sites
Parallel Railway ROW	Streams < 5cfs+ Regulatory Buffer	0-300	Non-Spannable Waterbodies
Background	Non-forested Non-Coastal Wetlands a+ 30' Buffer	Eligible NRHP Historic Structures	State and National Parks
Future GDOT Plans	Rivers/Streams > 5cfs+ Regulatory Buffer	Background	Military Facilities
Parallel Interstates ROW	Non-forested Coastal Wetlands + 30' Buffer	0 - 1500	City and County Parks
Road ROW	Trout Streams (50' Buffer)	Building Density	Mines and Quarries
Scenic Highways ROW	Forested Wetlands + 30' Buffer	0 - 0.05 Buildings/Acre	Day Care Parcels
Slope	Public Lands	0.05 - 0.2 Buildings/Acre	Cemetery Parcel s
Slope 0-15%	Background	0.2 - 1 Buildings/Acre	School Parcels (K-12)
Slope 15-30%	WMA - Non-State Owned	1 - 4 Buildings/Acre	Church Parcels
Slope >30%	Other Conservation Land	4 - 25 Buildings/Acre	USFS Wilderness Area
Intensive Agriculture	USFS	Proposed Development	Wild/Scenic Rivers
Background	WMA - State Owned	Background	Areas of Ritual Importance
Fruit Orchards	Land Cover	Proposed Development	Wildlife Refuge
Pecan Orchards	Open Land (Pastures, Scrub/Shrub, etc...)	Spannable Lakes and Ponds	Buildings + Buffer
Center Pivot Agriculture	Managed Pine Plantations	Background	
	Row Crops and Horticulture	Spannable Lakes and Ponds	
	Developed Land	Major Property Lines	
	Hardwood/Mixed/Natural Coniferous Forests	Edge of field	
	Wildlife Habitat	Landlots	
	Background	Background	
	Species of Concern Habitat	Land Use	
	Natural Areas	Undeveloped	
		Non-Residential	
		Residential	

AVOIDANCE AREAS
TIER 3 – PERSPECTIVES
TIER 2 - DATA LAYERS
TIER 1 – FEATURES

Avoidance Areas

The first step in Alternative Corridor Generation is to remove all Avoidance Areas from the Alternative Corridor database. Removing these sensitive areas from consideration means they will not be used in the Alternative Corridor selection process.

As stated in the Macro Corridor Phase, Avoidance Areas are not suitable for locating overhead electric transmission lines. The GIS Siting Model will avoid these areas except in specific situations. An exception, for example, is where a road right-of-way is adjacent to a military base. The existence of the road “trumps” the military base as an Avoidance Area by weighting the roadside edge grid cells as suitable for a transmission line corridor. Internal and external stakeholder groups identified Avoidance Areas as shown in the Diagram on Page 33:

Built Environment Perspective

In the Built Environment Perspective, building locations are a critical component of this perspective. All buildings are buffered and treated as Avoidance Areas. In the Built Environment Layer Group, additional protection is provided to building avoidance areas by adding 300-foot proximity zones. As one approaches a building Avoidance Area, each 300 – foot proximity zone becomes increasingly less suitable.

The Built Environment perspective also considers clusters of buildings, such as subdivisions or urban neighborhoods by assigning a higher weight that makes the area less preferable for a transmission line. Therefore, it is difficult for the line to go through a densely populated urban area, even if it skirts individual, isolated buildings. Listed Nation Landmark sites, National Register Sites, traditional cultural sites and eligible historic districts and their properties are treated as “Avoidance Areas”, providing maximum protection. In Georgia, a 1,500-foot Adverse Potential Effect (APE) buffer is created around listed and eligible NRHP Structures.

Taken together, these layers capture the salient features of the Built Environment Perspective. Alternative Corridors for the Built Environment Perspective will avoid developed areas whenever possible.

Natural Environment Perspective

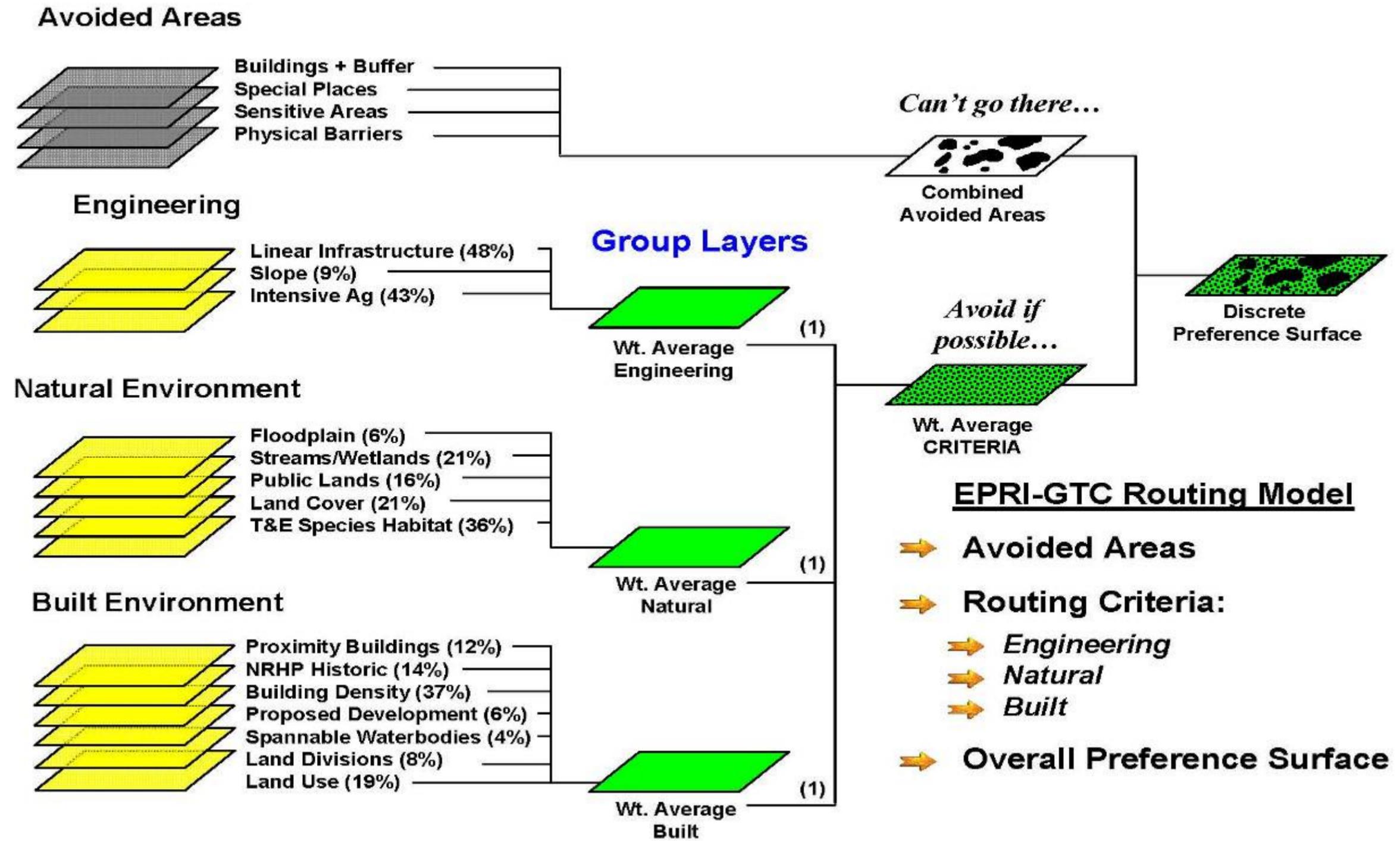
The Natural Environment Perspective seeks to minimize the effects of construction and maintenance of overhead electric transmission lines on sensitive natural resources. Federal and state environmental regulations require the identification and protection of environmentally sensitive areas. At the federal level, environmental regulations cover wetland protection under the Clean Water Act and protection of endangered animal and plant species under the Endangered Species Act. State regulations protect riparian buffer through the state of Georgia’s Erosion and Sediment Control Act and the Metropolitan River Protection Act. In addition, the Georgia Department of Natural Resources monitors a number of listed endangered plant and animal species. This list includes state candidate species that require additional concern beyond those listed under federal law. Environmental Permits are required from many federal, state and local government agencies.

Because of their span length and the small footprint for transmission line structure placement, overhead electric transmission line construction and maintenance activities generally have minor impacts on the natural environment.

Engineering Requirements Perspective

The criteria in this perspective focused on the engineering requirements for routing, construction and maintaining overhead transmission lines. Categories in the Linear Infrastructure Data Layer include rebuilding existing transmission lines or paralleling (co-locating) with other linear features.

The most cost-effective solution with the least adverse impact to the natural and cultural resources is rebuilding an existing transmission line in its existing right-of-way. Paralleling (co-locating) with other linear facilities is ranked as “the second most suitable place” mainly due to lower construction and maintenance access costs. Use of an existing transmission line or road right-of-way decreases the acreage needed for a new right-of-way, significantly reducing land acquisition costs. Access for construction and maintenance is improved since there are existing transmission line rights-of-way access roads. Paralleling existing linear features place new transmission lines in areas where natural resources are already disturbed. Paralleling also reduces the amount of land clearing needed for a new transmission line corridor.



Alternative Corridor GIS Data Layers

Simple Average Corridor

In addition to the corridors generated for each perspective, a simple average preference surface is used to establish a consistent base line for all three perspectives. Alternative Corridors are combined to identify the optimal “decision space” for locating an overhead electric transmission line, considering the different siting perspectives. A proposed route venturing outside the combined Alternative Corridors is sub-optimal from all three perspectives and would need to be justified by extenuating circumstances not included in the model’s set of map criteria.

TASK 5.0: DEVELOP ALTERNATIVE ROUTES WITHIN ALTERNATIVE CORRIDORS

Alternative Routes developed within the Alternative Corridors are described below:

5.1 Route A – Northern Parallel Alternative Route

The Northern Parallel Alternative Route exits the proposed Thomson Primary 500/230/115/46 kV Substation and parallels the north side of GPC’s existing Thomson-Warrenton Primary 115 kV and 230 kV Transmission Line rights-of-way for approximately 17-miles to the Warrenton Substation. Then it follows the Thomson-Warrenton Primary 230 kV and the Sinclair Dam-Warrenton Primary 115 kV Transmission Line right-of-way 15 miles to the vicinity of Highway 15. At Highway 15 the route turns south and runs for about 11 miles until it reaches the Warthen Switching Station.

The Northern Parallel Alternative Route is approximately 40.6-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below. The Northern Parallel Alternative Route would require the relocation of 8 houses and 15 other structures, such as barns or sheds. There are 93 houses within 300 feet of the proposed right-of-way. (Refer to the Alternative Route Statistics Chart on Pages 41-42).

Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Whites Creek
Brier Creek
Golden’s Creek
Rocky Comfort Creek
Long Creek
Floodplains
Gin Branch
Golden’s Creek
Rocky Comfort Creek
Long Creek

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Ogeechee River
Little Ogeechee River

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 80
SR171
SR 16
SR 15
Railroads
Georgia Railroad
Southern Railway

Recreation
Sweetwater Park (City of Thomson)
Ogeechee Wildlife Management Area

5.2 Route B – Southern Parallel Alternative Route

The Southern Parallel Alternative Route exits the proposed Thomson Primary 500/230/115/46 kV Substation and parallels the south side of GPC’s existing Thomson-Warrenton Primary 115 kV and 230 kV Transmission Lines right-of-way for approximately 17-miles to the Warrenton Substation. Then it follows the Thomson-Warrenton Primary 230 kV and the Sinclair Dam-Warrenton Primary 115 kV Transmission Line right-of-way 15 miles to the vicinity of Highway 15. At Highway 15 the route turns south and runs for about 11 miles until it reaches the Warthen Switching Station.

The Southern Parallel Alternative Route is approximately 40.4-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below. The Southern Parallel Alternative Route would require the relocation of 9 houses and 16 other relocations, such as barns or sheds. There are 102 houses within 300 feet of the proposed right-of-way. (Refer to the Alternative Route Statistics Chart on Pages 40-41).

Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Whites Creek
Brier Creek
Golden’s Creek

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Rocky Comfort Creek
Long Creek
Floodplains
Gin Branch
Golden's Creek
Rocky Comfort Creek
Long Creek
Ogeechee River
Little Ogeechee River

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 80
SR171
SR 16
SR 15
Railroads
Georgia Railroad
Southern Railway

Recreation
Sweetwater Park (City of Thomson)
Ogeechee Wildlife Management Area

5.3 Route C – Southern Cross Country Alternative Route

The Southern Cross Country Alternative Route exits the Thomson-Primary 500/230/115/46 kV Substation to the southwest. It parallels GPC's existing Thomson-Thiele Kaolin 46 kV Transmission Line right-of-way for approximately one mile. It turns in a westerly direction for 1 mile crossing the Ellington Airline road approximately 1 mile south of the Boneville Historic District. It turns southwest and parallels the eastern side of Sweetwater Creek for 3.5 miles.

Then the route travels west for approximately 33 miles across the predominately rural counties of McDuffie, Glascock, Warren and Washington. Finally it connects to the Warthen 500 kV Switching Station.

The Southern Cross Country Alternative Route is approximately 38.7-miles long. It crosses the hydrology, transportation and recreation resources listed in the chart below. The Southern Cross Country Alternative Route would not relocate any houses or other structures. There are 27 houses within 300 feet of the proposed right-of-way. This route is within 300 feet of the least number of homes. (Refer to the Alternative Route Statistics Chart on Pages 41-42).

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Hydrology
Rivers
Ogeechee River
Little Ogeechee River
Streams > 5-cfs
Sweetwater Creek
Joes Creek
Brier Creek
Rocky Comfort Creek
Little Brier Creek
Floodplains
Sweetwater Creek
Joes Creek
Brier Creek
Rocky Comfort Creek
Little Comfort Creek
Cowpen Creek
Ogeechee River
Little Ogeechee River

Transportation
State Routes
US 78/ US 278/ SR 10
SR 17
SR 80
SR171
SR 123
SR 15
Railroads
Georgia Railroad
Southern Railway

5.4 North Central Macro Corridor

A North-Central Alternative Corridor was not identified in the North Central Marco-Corridor because it would require crossing the Ogeechee Wildlife Management Area, the Little Ogeechee River and the Hamburg State Park. Many believe that the area between Jewell’s Historic District and Shoals, Georgia is the most scenic in the area.

The Table on Pages 41-42 shows the comparative statistics for each of the Alternative Routes and was used in analyzing the alternative routes. The Alternative Route Map on Page 43 shows the location of the routes described in Task 5.

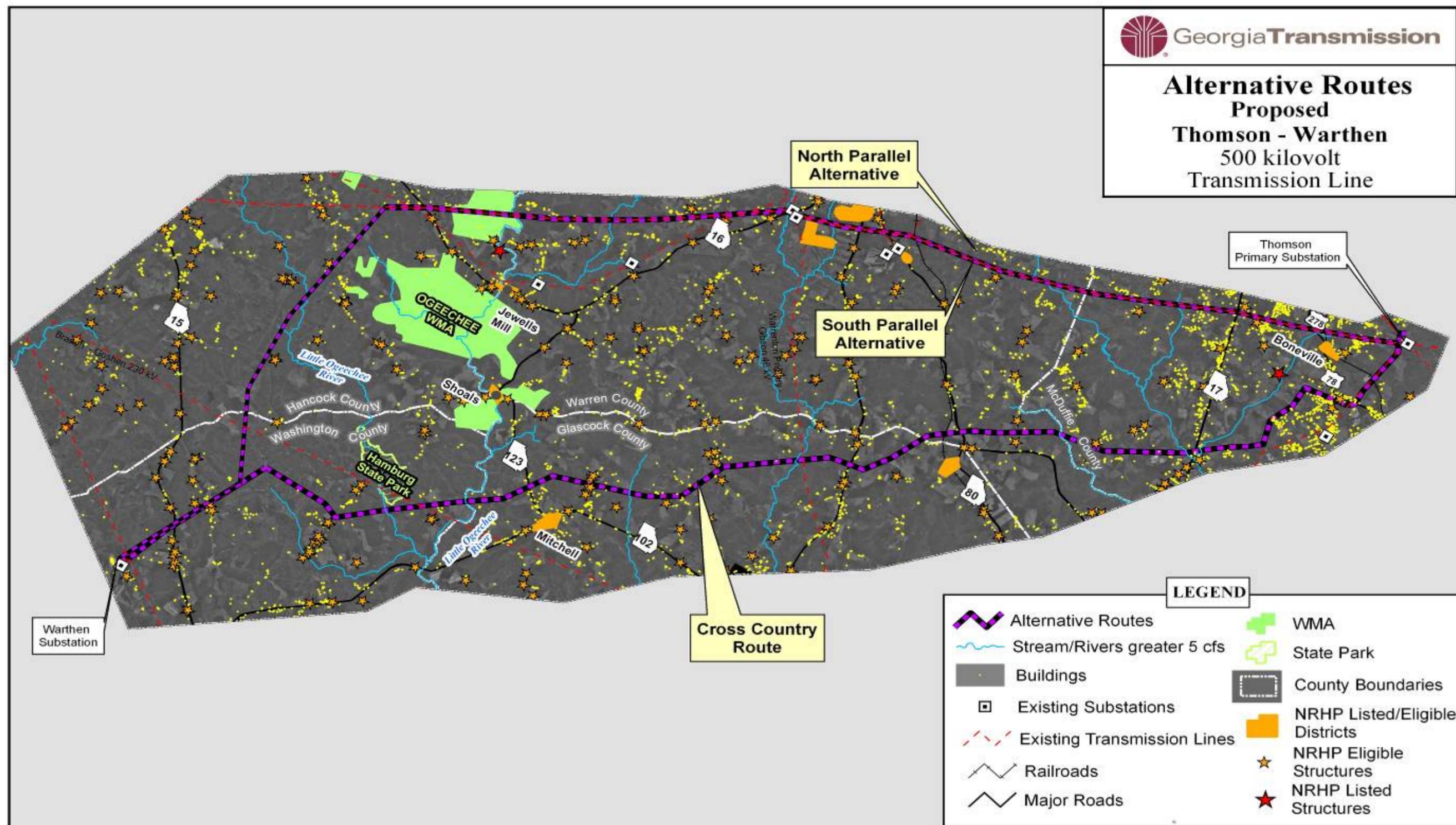
Thomson-Warthen 500 kV Transmission Line Project
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THOMSON - WARTHEN
Alternative Route Statistics - 6/14/07

		CROSS COUNTRY			NORTH PARALLEL			SOUTH PARALLEL		
Route Length	Miles	38.7			40.6			40.4		
Length Parallel To Existing T/Ls	Miles	0.0			27.4			27.4		
Approx. New Easement Area (acres)	Acres	704.2			621.0			617.7		
Number of Home Relocations										
	Number	0			8			9		
Number of Other Relocations										
	Number	0			15			16		
*Buildings within 300' of Proposed ROW										
	Number	27			93			102		
*Buildings within 1000' of Proposed ROW										
	Number	246			362			356		
NRHP Eligible Structures within 300' of Proposed ROW										
	Number	0			0			0		
NRHP Eligible Districts within 300' of Proposed ROW										
	Number	0			1			1		
NRHP Eligible Structures within 1500' of Proposed ROW										
	Number	17			12			14		
NRHP Eligible Districts within 1500' of Proposed ROW										
	Number	0			2			4		
					Percent of Easement			Percent of Easement		Percent of Easement
Stream Crossings less than 5cfs	Number	46			48			59		
Stream Crossings greater than 5 cfs	Number	7			9			9		
National Wetland Inventory	Number/Acres	38	33.7	4.8%	46	36.3	5.8%	52	39.4	6.4%
**Floodplain	Number/Acres	3	17.3	2.5%	1	14.7	2.4%	1	14.3	2.3%
County Road Crossings										
	Number	32			46			36		
State Highway Crossings										
	Number	6			4			7		
Railroad Crossings										
	Number	3			2			4		
46 kV Crossings										
	Number	3			5			5		
115 kV Crossings										
	Number	2			5			4		
230 kV Crossings										
	Number	2			4			3		
500 kV Crossings										
	Number	1			1			1		
Counties Crossed										
	Number	4			4			4		
					Percent of Easement			Percent of Easement		Percent of Easement
Planted Pine	Acres		222.5	32%		196.3	27%		188.4	26%
Forested	Acres		300.9	43%		247.4	34%		279.4	38%
Agriculture	Acres		93.1	13%		83.9	11%		86.7	12%

Thomson-Warthen 500 kV Transmission Line Project
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Open Land	Acres		33.8	5%		40.9	6%		49.6	7%
Clear Cut	Acres		21.8	3%		21.1	3%		19.6	3%
Subtotal of Undeveloped Areas				95%			80%			85%
Hydrograph	Acres		9.8	1%		11.6	2%		12.2	2%
Road ROW	Acres		4.9	1%		7.0	1%		6.7	1%
Utility R/W	Acres		11.2	2%		106.7	14%		65.8	9%
Transportation	Acres		3.2	0%		4.6	1%		4.2	1%
Residential	Acres		1.2	0%		10.9	1%		17.8	2%
Orchard	Acres		1.1	0%		2.0	0%		2.0	0%
Institutional	Acres		0.0	0%		0.0	0%		0.0	0%
Recreational	Acres		0.0	0%		6.5	1%		5.3	1%
* Includes all buildings including Occupied Houses, Outbuildings, Commercial Buildings, etc...										
**Floodplain based on interpretation USGS 7.5 min Quadrangles for all counties except McDuffie. McDuffie County based on FEMA 100 year Floodplain										



TASK 6.0: PREFERRED ROUTE SELECTION

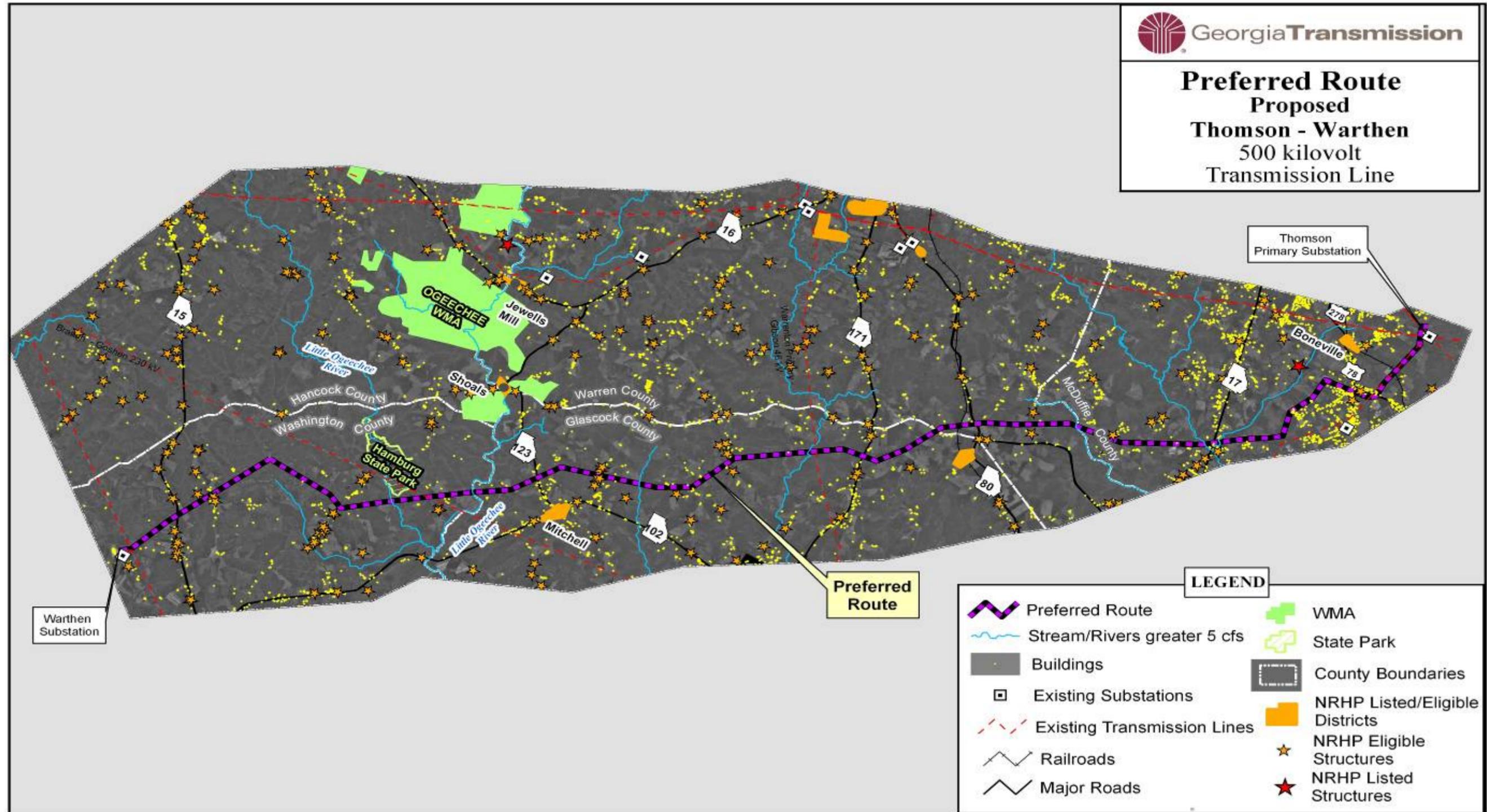
The preferred Thomson-Warthen 500 kV Transmission Line route exits the Thomson Primary 115/46 kV Substation, turns southwest and follows the Thomson-Thiele Kaolin 46 kV Transmission Line for about one mile. Then it turns in a westerly direction for 1 mile crossing a railroad and the Ellington Airline Road approximately 1 mile south of the Boneville Historic District. It turns southwest and parallels the eastern side of Sweetwater Creek for 3.5 miles.

Traveling west for approximately 4 miles, the preferred route crosses Sweetwater Creek, Old Wrens Road, Whites Creek, Fred Reeves Road, and Rabun Road. West of Rabin Road the route leaves McDuffie County and enters Warren County. Then it crosses approximately 4 miles of Warren County including Country Road 111, Highway 80 and a railroad. One mile west of the intersection of Highway 80 and County Line Road, the Preferred Route leaves Warren County and enters Glascock County. Now it crosses Gin Branch Creek, Highway 17, GPC's Warrenton Primary-Gibson 46 kV Transmission Line, Rocky Comfort Creek, Beale Springs Road, Mill Creek Church Road, Blume Road, Joe's Creek, Country Road 12, Sandhill Road, Highway 12 and leaves Glascock County. As the Preferred Route enters Washington County, it crosses GPC's Branch-Goshen 230 kV Transmission Line, the Little Ogeechee River and turns northwest until it is 400 feet east of Cowpen Creek. There it turns southwest for 5 miles, crossing the Sparta Davisboro Road, Williamson Swamp Creek and Highway 15. Finally, it connects to the Warthen Switching Station.

The preferred route would occupy a 150 foot right-of-way. The towers would range in height from 80 to 150 feet out-of-ground. The Preferred Cross-Country Route is the route with the least impact to the environment and communities in the area. The environmental studies and results provided in this Environmental Assessment support the location and construction of the Thomson-Warthen 500 kV Transmission Line. (Refer to Preferred Route Map on Page 45.)

The Southern Cross-Country route was selected as the preferred route for the following reasons:

- The majority of the preferred 38.7-mile route crosses rural portions of McDuffie, Glascock, Hancock and Washington Counties.
- The preferred route is the shortest route
- The preferred route is in the vicinity of the least houses
- The preferred route would not require the relocation of any families or other structures, such as barns or sheds
- The preferred route would cause No Adverse Effects to Cultural Resources
- The preferred route has the least environmental and community impacts



TASK 7.0: TITLE 22 COMPLIANCE

“Chapter 3 of Title 22 of the Official Code of Georgia Annotated, relating to exercise of the power of eminent domain for special purposes, is amended by adding at the end of said chapter a new Article 8 to read as follows:”

Article 8

23-3-160

(a) “Before exercising the right of eminent domain for purposes of construction or expanding an electric transmission line with a design operating voltage of 115 kilovolts or greater and a length of one mile or more, a person, corporation, or other entity that generates, transmits, distributes, supplies, or sells electricity for public or private use in this state or generates electricity in this state for transmission or distribution outside the state (hereinafter in this article referred to a utility) shall schedule and hold one or more public meetings with an opportunity for comment by members of the public.”

(b) “Prior to the public meeting or meetings required by this Code section, the utility shall provide adequate public notice of the public meeting or meetings related to the electric transmission line as follows:”

(1) “By publishing adequate public notice of said public meeting or meetings in a newspaper of general circulation in each county in which any portion of the electric transmission line is to be constructed or expanded.”

(2) “By providing written notice of the public meeting or meetings, by means of certified mail, to each owner of property, as indicated in the tax records of the county in which such property is located.....”

(c) “At least one public meeting shall be held in each county in which the electric transmission line would be located. In any county in which the electric transmission line would require acquisition of property rights from more than 50 property owners, two or more public meetings shall be held. The public meetings shall be held in an accessible location and shall be open to members of the public. At least one of the public meetings shall commence between 6:00 PM and 7:00 PM, inclusive, on a business weekday.”

The purpose of the meetings is to inform the public about the project and the siting process. Invitations to residents living within and near the proposed route are sent notices in advance of the meetings, including a map of the proposed transmission line route. At the meetings, GTC provides displays on technical information related to the electrical need for the project, the transmission line corridor selection process, real estate acquisition, and health, safety and environmental information. Project specialists answer questions from attendees and listen to and note the attendees’ comments on the corridor. A Court Reporter is available to record transcripts

As part of the siting process, GTC held Title 22 compliance public meetings in an open house workshop format for each of the four counties that the Thomson-Warthen Transmission Line right-of-way crosses.

The Warren County meeting was held on Monday July 10, 2006 from 6:00 PM-8:00 PM in the Warrenton Community Building, Warrenton, Georgia. Ten people attended the meeting

Two meetings were required for each of the following counties, Washington County, McDuffie and Glascock County.

The Washington County meetings were held on Tuesday, July 11, 2006 from 2:00 PM-4:00 PM and 6:00 PM-8:00 PM at the Warthen Community Center, Warthen, Georgia. Thirty-seven people attended the afternoon meeting and five people attended the evening meeting.

The McDuffie County meetings were held on Monday, September 11, 2006 from 2:00 PM-4:00 PM and 6:00PM-8:00 PM at the Best Western, White Columns Inn, Thomson, Georgia. Twenty-seven people from the area attended the afternoon meeting. Approximately 13 people visited the meeting that started at 6:00 PM.

The Glascock County meetings were held Tuesday, September 12, 2006 from 2:00 PM-4:00 PM and 6:00-8:00 PM at the Glascock County Board of Education Board Room, Gibson, Georgia. Approximately thirty people attended the afternoon meeting and 36 attended the evening meeting.

GTC also held briefings for local and state officials to inform these public officials about the project and the siting process as well as the advantages and limitations of the transmission line corridor alternatives within their constituents' areas.

For details on each of the individually recorded comments, please refer to Appendix B: Title 22 Public Meetings, Thomson-Warthen 500 kV Transmission Line, Brown Reporting, Inc.

TASK 8.0 DESCRIPTION of the EXISTING ENVIRONMENT

The project study area is located within the Sand Hills and Coastal Plain Red Uplands. The Sand Hills of Georgia form a narrow, rolling to hilly, highly dissected coastal plain belt stretching across the state from Augusta to Columbus. The region is composed primarily of Cretaceous and some Eocene-age marine sands and clays deposited over the crystalline and metamorphic rocks of the Piedmont. Many of the droughty, low-nutrient soils formed in thick beds of sand, although soils in some areas contain more loamy and clayey horizons. On the drier sites, turkey oak (*Quercus laevis*) and longleaf pine (*Pinus palustris*) are dominant, while shortleaf-loblolly (*Pinus taeda*) pine forests and other oak-pine forests are common throughout the region (Griffith *et al.* 2001). Coastal Plain Red Uplands formed on reddish Eocene sand and clay formations. Soils are mostly well-drained with a brown or reddish brown loamy or sandy surface layer and red subsoils.

The majority of the study area, 82.49% is composed of 52.49% forests, 22.77% undeveloped land, and 7.23% agriculture.

8.1 Vegetative Communities

To determine the potential impacts of this project on significant ecological resources, Georgia Transmission contracted with Jordan, Jones & Goulding, Inc. (JJG) to conduct a protected species habitat survey of the proposed transmission line right-of-way. JJG

conducted the surveys in Fall, Winter, and Spring 2006-2007.

The vegetation communities' survey focused on identifying jurisdictional features (streams and wetlands) and habitats that may be suitable for protected species known from the project vicinity. The transmission line corridor is composed of agricultural, ruderal, early successional, secondary successional hardwood and pine, planted pine, and hardwood communities. Forested, emergent, and scrub-shrub wetland communities are also located within the transmission line corridor.

8.2 Threatened and Endangered Species

Section 7 of the Endangered Species Act requires every Federal agency, including RUS, to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action it authorizes is not likely to jeopardize the continued existence of any federally "listed species" (threatened or endangered plants or animals) or result in the destruction or adverse modification of designated critical habitat. The Fish and Wildlife Service Interagency Cooperation regulations (50 CFR Part 402) require that the agency (RUS) or the applicant (Georgia Transmission) request the list of threatened and endangered species that might occur within the study area of the project. The normal practice is for Georgia Transmission's consulting biologist, on behalf of Georgia Transmission, to consult the latest list from USFWS. The consultant then conducts a protected species survey of the proposed project area to determine if any listed species may be affected. If no listed species or critical habitat is found, RUS is notified in this section.

For the purposes of better understanding the distribution of flora and fauna of the State, the Georgia legislature passed the Wildflower Preservation Act of 1973 and the Endangered Wildlife Act of 1973. The Nongame Conservation Section of the Georgia Department of Natural Resources (GADNR-NCS) administers these two Acts. This program and the previously mentioned Acts have two purposes. The first is to inventory the diverse flora and fauna of the State. The second purpose of these Acts is to protect "State listed" species of plants and wildlife. Plants listed by the State are protected on public lands such as State property, Federal property, and on any other land that is not held by a "person" which means a private individual, firm, corporation, partnership, proprietorship, or other legal entity. Animals listed by the State are protected from capture, killing, or sale of species wherever they may occur. Their habitats are protected on public land.

The latest list from USFWS protected species website (www.fws.gov 2004) indicates that eight protected species are known to occur in Glascock, McDuffie, Warren, and Washington Counties. These comprise three federally protected species (including species of management concern and candidate species) and five state protected species. Of the eight species, four are faunal, and four are floral. In addition, GADNR-NCS was requested to conduct a database search for known protected species within the area. The GADNR-NCS database listed three additional species that are tracked by GADNR-NCS and known to occur in the area. Typically, GADNR-NCS tracks species not otherwise federally or state listed if that species is rare to all or some areas of Georgia or is commonly poached. In total, there are 11 species that are federally, state, or GADNR-NCS listed. Correspondence from GADNR-NCS states that three tracked species have been identified within three miles of the project corridor. The identified species are: spotted turtle (*Clemmys guttata*), Simpson rain lily (*Zephyranthes*

simpsonii), and whitefin shiner (*Cyprinella nivea*). None of these species is federally or state listed. A copy of the correspondence with the GADNR-NCS is located in Appendix C.

The entire proposed transmission line right-of-way was traversed on foot to determine the presence of protected species or protected species habitat. However, aquatic surveys were not conducted. Habitat requirements and distinguishing characteristics were noted for each species likely to occur along or in close proximity to the project area. The list of likely occurring species served as the primary reference guide during the field survey.

There were no protected species observed during the field survey along the transmission line right-of-way, however, there is suitable habitat for 10 of the listed species within the transmission line corridor. Three of the protected species with potential habitat in the project area are federally protected: the threatened bald eagle (in the delisting process), the endangered red-cockaded woodpecker, and the federal candidate Georgia aster. In addition to these three species, there are three additional terrestrial species, and four aquatic species that have potential habitat within the project area. GTC will implement the stringent use of Best Management Practices (BMPs), application of stream buffers, hand clearing within stream buffers to maintain water quality and minimize erosion and sedimentation. Existing stream habitat is not anticipated to be affected by construction or maintenance of the proposed project; therefore, this project is not likely to affect aquatic species or their overall habitat. Due to the linear nature of this project, impacts to potential terrestrial species habitat will be limited to clearing of a 150-foot right-of-way. Existing, adjacent habitat will be left undisturbed. Unique habitat areas such as granite outcrops will be fenced during construction and avoided. Therefore, due to available surrounding habitat and these protective measures, this project is not likely to affect terrestrial species or their overall habitat. The Summary Table of Protected and GADNR NCS Tracked Species for Glascock, McDuffie, Warren, and Washington Counties on Pages 50-51 provides a summary listing of these species, their protection status, and their typical habitat.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Summary Table of Protected and GADNR-NCS-Tracked Species for Glascock, McDuffie, Warren, and Washington Counties, Georgia

Species	Vernacular Name	Federal Rank	State Rank	GADNR-NCS Tracked	Preferred Habitat	Habitat Present
Faunal						
<i>Clemmys guttata</i>	spotted turtle	NA	NA/S3	Yes	marshy meadows, wet woodlands, boggy areas, beaver ponds, and shallow streams with mud substrate	Yes
<i>Cyprinella nivea</i>	whitefin shiner	NA	NA/S3-S4	Yes	small to medium rivers and reservoirs; in rivers, usually in and around riffles or swift runs in the main channel	Yes
<i>Fusconaia masoni</i>	Atlantic pigtoe mussel	NA	SE/S1	NA	unpolluted, fast flowing water in coarse sand/gravel substrate	Yes
<i>Haliaeetus leucocephalus</i>	bald eagle	T	SE/S2	NA	inland waterways and estuarine areas in Georgia	Yes
<i>Moxostoma robustum</i>	robust redhorse	NA	SE/S1	NA	medium to large rivers with shallow to deep and moderately flowing swift water	Yes
<i>Picoides borealis</i>	red-cockaded woodpecker	E	SE/S2	NA	mature pine and pine hardwood forests (>30 years of age, preferably >10" dbh) with low understory vegetation	Yes
Floral						
<i>Schisandra glabra</i>	bay star-vine	NA	ST/S2	NA	subcanopy or understory trees/shrubs in rich alluvial woods	Yes
<i>Sedum pusillum</i>	granite rock stonecrop	NA	ST/S3	NA	granite outcrops among mosses in partial shade under eastern red cedar trees	Yes
<i>Symphotrichum georgianum</i>	Georgia aster	C	NA/S2	NA	dry open woods, roadsides, and other openings	Yes
<i>Zephyranthes simpsonii</i>	Simpson rain lily	NA	NA/S1	Yes	black, highly organic sands of wet pine flatwoods, meadows, pastures, roadsides, and glade borders	Yes

E= endangered, T= threatened, C= candidate, SE= state endangered, ST= state threatened, SU= state unusual, S1= demonstrably imperiled, S2= imperiled, S3= rare or uncommon, S4= apparently secure, NA= not applicable

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Table X
Summary of Protected and GADNR-NCS-Tracked Species for Glascock, McDuffie, Warren, and Washington Counties, Georgia

Species	Vernacular Name	Federal Rank	State Rank	GADNR-NCS Tracked	Preferred Habitat	Habitat Present
Faunal						
<i>Clemmys guttata</i>	spotted turtle	NA	NA/S3	Yes	marshy meadows, wet woodlands, boggy areas, beaver ponds, and shallow streams with mud substrate	Yes
<i>Cyprinella nivea</i>	whitefin shiner	NA	NA/S3-S4	Yes	small to medium rivers and reservoirs; in rivers, usually in and around riffles or swift runs in the main channel	Yes
<i>Fusconaia masoni</i>	Atlantic pigtoe mussel	NA	SE/S1	NA	unpolluted, fast flowing water in coarse sand/gravel substrate	Yes
<i>Haliaeetus leucocephalus</i>	bald eagle	T	SE/S2	NA	inland waterways and estuarine areas in Georgia	Yes
<i>Moxostoma robustum</i>	robust redhorse	NA	SE/S1	NA	medium to large rivers with shallow to deep and moderately flowing swift water	Yes
<i>Picoides borealis</i>	red-cockaded woodpecker	E	SE/S2	NA	mature pine and pine hardwood forests (>30 years of age, preferably >10" dbh) with low under story vegetation	Yes
Floral						
<i>Schisandra glabra</i>	bay star-vine	NA	ST/S2	NA	subcanopy or understory trees/shrubs in rich alluvial woods	Yes
<i>Sedum pusillum</i>	granite rock stonecrop	NA	ST/S3	NA	granite outcrops among mosses in partial shade under eastern red cedar trees	Yes
<i>Symphotrichum georgianum</i>	Georgia aster	C	NA/S2	NA	dry open woods, roadsides, and other openings	Yes
<i>Zephyranthes simpsonii</i>	Simpson rain lily	NA	NA/S1	Yes	black, highly organic sands of wet pine flatwoods, meadows, pastures, roadsides, and glade borders	Yes

E= endangered, T= threatened, C= candidate, SE= state endangered, ST= state threatened, SU= state unusual, S1= demonstrably imperiled, S2= imperiled, S3= rare or uncommon, S4= apparently secure, NA= not applicable

Based on field surveys and documented correspondence, proposed transmission line construction is not likely to affect any of these protected species or habitat for these species.

8.3 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) requires that any federal agency, which includes RUS, review the impact of any undertaking (construction, loan guarantees, contract approvals, etc.) on historic properties. Historic properties, for the purposes of Section 106 review, are those properties listed in or eligible for listing in the National Register of Historic Places. The Office of Historic Preservation of the Georgia Department of Natural Resources administers the Section 106 review process. The Office of Historic Preservation is responsible for implementing 36 CFR Part 800, the Protection of Historic Properties.

To assist in complying with the NHPA and its implementing regulation, Georgia Transmission engages consultants to identify historic properties, as defined by a Programmatic Agreement with the RUS, Georgia State Historic Preservation Officer, the Advisory Council on Historic Preservation, and Georgia Transmission executed on October 11, 2001. Contracting firms are responsible for consulting with the Office of Historic Preservation and reviewing the Georgia State Files to determine if there are any known historic properties (archaeological sites and/or historic structures) within the Area of Potential Effect of the project. The consulting firm also conducts field surveys for historic properties.

This Programmatic Agreement facilitates compliance under Section 106 and 110 of the National Historic Preservation Act [16 U.S.C. §470(f)] as authorized by the Advisory Council's regulations in 36 CFR §800.14 for construction, modification and relocation of transmission facilities by Georgia Transmission. Survey reports will be distributed to the State Historic Preservation Office, Georgia State University, the University of Georgia, the local Regional Development Center, and local historical society.

If a transmission project is determined to have an adverse effect on a National Historic Landmark, a National Register listed historic property, a traditional cultural property, or an eligible historic district Georgia Transmission will initiate consultation with the Georgia State Historic Preservation Office (SHPO). Georgia Transmission and the SHPO will agree on a plan of resolution.

8.3.1 Archaeological Resources

Historic properties in or eligible for listing in the National Register of Historic Places (NRHP) include significant historic and prehistoric archaeological resources. To determine the possible existence of archaeological sites eligible for listing in the National Register of Historic Places, Georgia Transmission contracted with Brockington and Associates, Inc. (Brockington) to survey the transmission line corridor for archaeological resources.

The project tract, as detailed on the concept plans, encompasses a transmission line corridor right-of-way. The transmission line corridor originates at the Thomson Primary Substation and proceeds west for approximately 38.7 miles until it meets the Warthen 500 kV Switching Station. Much of the transmission line corridor has undergone considerable disturbance in the past, with agriculture and silviculture being the main disturbing activities. As a result of these activities there is a variety of vegetation communities throughout the project tract including forests, pastures, and some early successional growth

in areas recently timbered. Soils typically consisted of a shallow layer of yellowish brown or reddish brown loam overlaying red clay. Much of the area was eroded with subsoils visible on the surface.

Field methods consisted of subsurface shovel testing for archaeological deposits and pedestrian reconnaissance to identify archaeological resources visible on the surface. In the transmission line shovel tests were excavated on two transects every 30 meters. Disturbed areas or highly eroded areas were visually inspected. The depth of shovel tests varied from 15 to 100 centimeters. Twelve archaeological sites (Sites 9GL16 through 9GL20; 9WG168 through 9WG173; and 9MF502 [previously recorded]) and two isolated finds (IF#1 and IF#2) were identified in the field.

Site 9GL16 is a twentieth century house or barn site located along Hadden Ranch Road. The site was identified through eight Phase I shovel tests containing both historic materials and a single chert preform. A walkover of the project corridor in this area also identified a nearby well and the remains of a scattered wooden foundation and several piles of modern refuse. The northern extent of the site has been impacted by grading and paving of the road. The surface to the south of the site is also heavily disturbed, possibly in an attempt to improve drainage away from the former structure. Shovel testing indicated further human impacts to the natural soil horizons throughout most of the site. Most artifacts recovered at the site primarily originated in the mixed and redeposited remains of a plowzone (A) and subsoil (B) indicating that most artifacts, particularly the isolated prehistoric find, have been transposed from their original position. Historic artifacts are generally non-diagnostic and with the compromised stratigraphy, are unable to be distinguished from refuse discarded during later dumping and construction impacts to the site. The lack of intact cultural strata due to heavy repeated usage of the area, the absence of diagnostic materials, and the light density of artifacts, strongly suggests that this locale has very low research potential. Consequently, we recommend that Site 9GL16 be considered not eligible for inclusion on the NRHP.

Site 9GL17 is located along a sand access road that runs west from CR 140 along a ridge top and ridge slope above Joe's Creek. It was initially identified as a surface scatter of both nineteenth century historic ceramics and prehistoric lithic debitage and one projectile point. During Phase I Survey, two shovel tests excavated near the site were positive for historic and prehistoric material. Four individual fragments of iron, brick, glass, and ironstone, and a single quartz flake fragment, were recovered from these shovel tests. The rest of the assemblage was recovered through surface collection of the dirt road. The prehistoric artifact assemblage itself consists entirely of lithic material; primarily quartz and chert debitage. The historic material recovered contains scant amounts of building debris (brick, flat glass) but is largely comprised of ceramic sherds of stoneware, pearlware, whiteware, and ironstone. There is no subplowzone cultural context and reconnaissance suggests that both the prehistoric and historic materials have been transposed through sheet wash erosion or grading along the road from their original context further up the ridge slope. This small scatter is not likely to produce information about prehistoric or historic lifeways in the region beyond that recovered to date. As a result, we recommend that Site 9GL17 be considered not eligible for inclusion on the NRHP.

Site 9GL18 is a prehistoric artifact scatter located on terraces on both sides of Gin Branch at its confluence with Rocky Comfort Creek. The site was identified through 25 positive shovel tests during Phase I Survey. A total of 136 artifacts were recovered. Artifacts were evenly distributed through both the A and B horizons and up to a depth of 80 cm below the ground surface, suggesting evidence of intact cultural deposits and possible cultural features. The artifact assemblage itself consists almost entirely of lithic material and is indicative of tool making debris. Ceramic sherds are poorly represented in the collection; however, the deepest recovered material from the site includes a refitted punctated vessel rim. Given the nature and extent of the artifact assemblage and the site's location on the rocky banks at the confluence of two creeks, we recommend that Site 9GL18 be considered potentially eligible for inclusion on the NRHP. Plans for the Thomson-Warthen transmission line should be altered to avoid impacting Site 9GL18, until further evaluation of its NRHP eligibility can be made.

Site 9GL19 is a small site located on a very small, wooded terrace above an unnamed tributary of Gin Branch. The site includes a single positive shovel test containing nine chert and quartz flakes and shatter recovered during Phase I Survey. The scant nature of the assemblage, the absence of ceramics, its location adjacent to a small drainage and the light density of artifacts strongly suggest that this locale was probably never intensely exploited. Shovel testing has determined the maximum diameter of the site to be less than 30 m based on the confines of the surrounding wetland. Therefore, we recommend that Site 9GL19 be considered not eligible for inclusion on the NRHP.

Site 9GL20 is located on a southwestern facing wooded ridge slope near an unnamed tributary to Gin Branch. It is closely bound by wetlands to the south and west. The site was identified via six positive shovel tests during Phase I Survey. A total of 29 artifacts were recovered, consisting largely of quartz debitage. However, four pieces of chert debitage and five sherds of prehistoric pottery were also identified. The pottery is sand tempered and one sherd exhibits an indiscernible stamped pattern. All artifacts were recovered from the plowzone and there is no evidence for any subsoil deposits. The non-diagnostic nature of this artifact assemblage and its small site area suggest that this locale was probably never intensely exploited. We recommend that Site 9GL20 be considered not eligible for inclusion on the NRHP.

Site 9WG168 is located on a graded bluff top above the western bank of the Ogeechee River. It was identified through two positive shovel tests and a small surface collection during the Phase I survey. The surface finds were restricted to a push pile along the edge of the bluff. However, only one chert flake fragment and three plain-bodied, sand tempered pottery fragments were identified from subsurface deposits; all within the remaining plowzone. The evidence suggests plowing and grading have severely impacted the cultural deposits present along the bluff top. As a result, the preservation of subsurface features or a subplowzone cultural level is very unlikely at this site. While the location of Site 9WG168 on a high, flat bluff above the Ogeechee is ideal for a larger prehistoric occupation site, due to the severe impacts to the site, we recommend that the site be considered not eligible for inclusion on the NRHP.

Site 9WG169 is a scatter of prehistoric lithics and ceramics from visibly disturbed surface deposits on a hill above the north bank of the Little Ogeechee River, south of Agricola Road. It was initially identified during a Phase I walkover survey of a clearcut area. None of the six shovel tests on this landform produced any prehistoric material; thus indicating that there is no subplowzone cultural context. The surface collection, on the other hand, produced four lithic tools and three ceramic sherds. One tool is a Morrow Mountain projectile point attributable to the Middle Archaic (5550-5050 BC). A total of 20 chert and 36 quartz pieces of debitage were also collected. Of the pottery fragments, there is one coarse, sand-tempered piece with a stamped curvilinear rim. The majority of the artifacts collected were not attributable to any cultural phase. The disturbed nature of the surface deposits and lack of subsurface cultural materials indicate that it is unlikely that intact portions of the site exist. We therefore recommend that Site 9WG169 be considered not eligible for inclusion on the NRHP.

Site 9WG170 is a twentieth century domestic site located on a small knoll above the floodplain north of the Little Ogeechee River. A walkover of the area additionally located a cement well or cistern and the scattered remains of a brick chimney. Both the features and the artifact finds are restricted to a slight berm bounded by two unimproved roads. What appears to be a structure near this locale is indicated on the 1981 *Warthen NE, Georgia* USGS quadrangle map. The artifact assemblage is indicative of a late nineteenth or early twentieth century house site as evidenced by the architectural debris; 11 nails, 12 shingles, two flat glass shards, and four brick fragments. The largest percentage of the assemblage is modern machine-made glass. The artifact assemblage and visible house remains coupled with the map evidence suggest that Site 9WG170 represents an early twentieth century house that was razed in the past 20-25 years. Based on this evidence, we recommend that Site 9WG170 be considered not eligible for inclusion on the NRHP.

Site 9WG171 is a late nineteenth to early twentieth century cemetery located on the property line of Ms. Ilsa A. Walker which is located north of the intersection of Sparta-Davisburro and Centralia-Rachel roads. During the pedestrian survey of the property, the fenced-in cemetery was identified just within the tree line opposite a pecan grove. Two fallen grave markers were also noted 15-20 meters to the southwest of the cemetery. It is likely the fallen stones have been pulled from the fenced cemetery by vandals. Internment dates on the stones place the cemetery's period of use at 1873-1917. The cemetery has not been fully delineated, and does not appear to be eligible for the NRHP under any of the four Section 106 criteria. However, it is protected by the Georgia Burial Codes (Code Sections 36-72-1 through 16, 44-12-260 through 264, 12-3-52 through 53, 12-3-620 through 622, 31-21-6, 31-21-45, 44-12-280 through 285), and avoidance of the cemetery is recommended.

Site 9WG172 is a small prehistoric artifact scatter located adjacent to wetlands along Cowpen Creek. The site was identified through seven positive shovel tests during Phase I Survey which yielded prehistoric lithics and pottery. The artifact assemblage, consisting of nine pieces of chert debitage, five quartz pieces, and two sherds of prehistoric pottery, was recovered entirely from the A-horizon. The ceramics consisted of one small viable fragment and a rectilinear stamped body piece. The nature of the assemblage, the absence of diagnostic materials, and the light density of artifacts strongly suggest that this small

artifact scatter is not likely to produce information about prehistoric lifeways. Therefore, we recommend that Site 9WG172 be considered not eligible for inclusion on the NRHP.

Site 9WG173 is a nineteenth century alkaline glazed stoneware kiln site and kiln waster dump located on a ridge top north of Cowpen Creek. During the field investigations, a portion of the articulated remains of the kiln itself were identified and exposed. A small unnamed tributary to Cowpen Creek runs north-south and 180 m east of the site. At the head of this drainage and approximately 250 m to the northeast, the Redfern Kiln site (9WG88) was previously identified. The current site, Site 9WG173, was delineated through 29 positive shovel tests during Phase I Survey. A walk-over of the area additionally located a hand-dug well and a large surface scatter of alkaline-glazed stoneware sherds. A metal detector sweep of the area identified two concentrations of metal, one east and one west of the access road. In order to further assess the site deposits, a 1 x 2 m test unit was excavated in each of these loci and excavated in arbitrary 10-cm levels. In the test east of the road, the articulated interior corner of the firebox of a kiln was encountered 50 cm below the ground surface. The construction of the kiln is consistent with the “groundhog” kilns common in the southern pottery tradition. Of the over one thousand stoneware sherds in the collection, most exhibit the green alkaline glaze typical of Washington County potters of the nineteenth century. The pieces generally have only simple decoration; usually one or two incised lines below the shoulder of the vessel. Stoneware forms at the site are also typical of the region; jugs with strap handles and flattened rims, lidded storage jars, and crocks with straight lug handles. Further background research and archaeological investigations are needed to make further judgments about the ownership and operation of the kiln at 9WG173 and its relationship with the Washington County Pottery industry as a whole. There has been some impact to the site as a result of twentieth century logging operations; more substantial features such as the well and the foundation of the kiln have been preserved. Because of its potential to contribute information on the nineteenth century pottery industry in Washington County, we recommend that Site 9WG173 be considered eligible for inclusion on the NRHP. This site should be avoided by the construction of the Thomson-Warthen transmission line.

Site 9MF502 is a previously identified Mid-Archaic and nineteenth century artifact scatter on a ridge between Brier and Sweetwater Creeks. The proposed Thomson-Warthen Transmission Line runs through the southern portion of this site. Shovel testing during the current survey identified disturbed and graded soils, presumably affected during road improvements since the site’s discovery in 1999. No natural soils or artifacts were recovered or identified within the boundaries of 9MF502. It is clear that any remaining surface or subsurface deposits related to site 9MF502 within the project corridor have been previously impacted by construction along SR 17. This is consistent with the 1999 recommendations that the site be considered not eligible for the NRHP.

Two isolated finds were identified within the project corridor. They consist of two chert flakes (IF #1) and two chert flakes and a residual sherd (IF #2). Both isolated finds were recovered in disturbed contexts, and additional shovel testing at their locations failed to produce any other cultural material. We recommend that both isolated finds be considered not eligible for inclusion on the NRHP.

8.3.2 Historic Structures

Historic Properties listed in or eligible for listing in the NRHP include significant historic structures as well as significant archaeological sites. To determine the possible existence of historic structures eligible for listing on the NRHP within the project's Area of Potential Effect, Georgia Transmission requested Historic Preservation Consulting to prepare the Historic Property Survey for the Area of Potential Effect centered on the proposed transmission line corridor.

The Area of Potential Effect for the project is defined by visibility of the proposed transmission line. The lattice steel towers range from 80 to 150 feet in height and could possibly be visible from 3,000 feet, although in some areas vegetative buffers will reduce visibility to less than 500 feet. Because of the varying visibility, the Area of Potential Effect of 3,000 feet was applied to the entire project.

Nineteen of the 83 historic resources identified within the Area of Potential Effect were documented as eligible for the National Register of Historic Places under Criterion C (noted for illustrating a particular architectural style). The other resources are ineligible because of loss of physical integrity. The construction of the proposed transmission line will not adversely affect any significant historic structures listed or eligible for inclusion in the NRHP.

In accordance with 36 CFR 800.5(c), the Criteria of Adverse Effect, it was determined that the Thomson-Warthen 500 kV Transmission Line will have No Adverse Effect on National Register of Historic Places eligible resources.

8.4 Floodplains

Executive Order 11988 directs Federal Agencies, including RUS, to avoid, to the greatest extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The location of floodplains and other flood hazard areas are identified using Insurance Rate Maps produced by the U.S. Department of Housing and Urban Development or the Federal Emergency Management Agency.

Only McDuffie County participates in the Federal Emergency Management Agency's National Flood Insurance Program. Floodplains in the other four counties in the study area were interpreted from USGS 7.5 minute Quadrangles.

Construction of transmission line towers within the 100 year floodplain will be avoided as much as possible. However, due to the length of the transmission line corridor, one tower will be constructed on the edge of a 100 year floodplain. Tower number 30 is located on the edge of the 100 year flood plain of Brier Creek in McDuffie County.

RUS has determined that lattice steel towers do not adversely affect the 100-year floodplain.

8.5 Jurisdictional Wetlands

Section 404 of the Clean Water Act charges the United States Army Corps of Engineers (USACE) with the regulation of discharges of “dredged or fill” materials into water of the United States, including wetlands and other special aquatic sites. Activities associated with transmission line construction and maintenance, which require the discharge of dredged or fill material, may have to be authorized by Individual or General Nationwide Permit from the Corps of Engineers.

Georgia Transmission contracted with JGG to perform a jurisdictional delineation within the proposed project area for the transmission line.

Jurisdictional studies identified the presence of 82 jurisdictional wetlands, 57 jurisdictional streams, and 10 jurisdictional open waters, within or adjacent to the proposed transmission line corridor. The jurisdictional wetlands are classified as palustrine forested, palustrine scrub-shrub, and palustrine emergent systems. The jurisdictional waters are classified as riverine lower perennial or intermittent systems. Refer to the separate Jurisdictional Area Maps (24-inch x 36-inch) provided with this report.

8.5.1 Compliance with USACE Requirements

A Pre-Construction Notification (PCN) to the United States Army Corp of Engineers (USACE) under Nationwide Permits (NWP) 3a (maintenance), 12 (utility line activities), and 33 (temporary construction access) will likely be required, because streams and wetlands will be impacted as a result of line construction. Construction and maintenance of the proposed transmission line corridor will require some impacts to jurisdictional areas for necessary access roads. NWP 12 is intended for use with utility line activities and can be used to permit the installation of towers and any new or enhanced culverts or crossings required for access. In areas in which existing culverts require upgrading, NWP 3 will be utilized for maintenance to existing structures. The majority of impacts to wetlands and waters will be associated with access roads and maintenance and in the form of short culverts and at-grade road crossings permitted under NWP 12. Temporary impacts as a result of temporary construction and access mats will be permitted with NWP 33.

8.5.2 Compliance with State of Georgia Requirements

The 67 jurisdictional waters also meet the definition of State Waters and are subject to State of Georgia Stream Buffer Protection. A Stream Buffer Variance will not be required for the proposed activity. A minimum 25-foot buffer will be maintained for all streams and wetlands. Any vegetation cleared in these areas will be hand-cleared. Any such clearing will not result in land disturbing activities and will not require a Land Disturbance Permit. Therefore, a Stream Buffer Variance will not be required. In addition, perpendicular road crossings such as those established or upgraded for access and maintenance are exempt from Stream Buffer Variance requirements.

8.6 Prime Farmland and Soils

Through the passage of the Farmland Protection Policy Act of 1981 and the Final Rule for its implementation, 7 CFR Part 658, the U.S. Department of Agriculture (USDA) mandated that any Federal agency contemplating a land disturbing activity should review its actions with respect to prime, unique, statewide or locally important farmland soils. The Department of

Agriculture also has internal policies requiring the Department to consider the impact of its own agency's actions on prime farmland soils.

The Georgia Office of the Natural Resources Conservation Service (NRCS) website (www.nrcs.usda.gov) was consulted to determine the presence of prime farmland soils and soils of statewide importance along the proposed transmission line corridor. In total, there are twenty-two soil series that are considered prime farmland or soils of statewide importance within the proposed transmission line corridor. Prime farmland soils are located within 130.6 acres (18.3%) of the proposed corridor. Soils of statewide importance are located within 225.2 acres (31.6%) of the proposed corridor. Due to the linear nature of this project, existing, adjacent soils will be left undisturbed; therefore, impacts to prime farmland will be minimal. Construction of this project will not significantly impact agricultural lands in Glascock, McDuffie, Warren, and Washington Counties.

TASK 9.0 ENVIRONMENTAL CONSEQUENCES

9.1 Threatened and Endangered Species

As indicated in Section 8.2 of this Environmental Assessment, there is potential habitat within the proposed right-of-way for ten species which are federally listed, state listed or tracked by GADNR-NCS. Of these ten species, there are three federally listed species: threatened bald eagle (in the delisting process), endangered red-cockaded woodpecker, and federal candidate Georgia aster. Due to the linear nature of this project, impacts to potential terrestrial species habitat will be limited to clearing of a 150-foot right-of-way. Existing, adjacent habitat will be left undisturbed. Furthermore, the stringent use of BMPs, application of stream buffers, and hand clearing within stream buffers will be implemented to maintain water quality and minimize erosion and sedimentation. Existing stream habitat will not be affected by construction or maintenance of the proposed project; therefore, this project is not likely to affect protected terrestrial or aquatic species or their overall habitat.

Section 7 Consultation with the U.S. Fish and Wildlife Service is not necessary, because no federally listed species will be affected by the construction of the transmission line.

9.2 Cultural Resources

As described in Section 7.3.1 of this Environmental Assessment, the archaeology field investigation resulted in the identification of twelve archaeological sites (Sites 9GL16 through 9GL20; 9WG168 through 9WG173; and 9MF502 [previously recorded]) and two isolated finds (IF#1 and IF#2).

Two of the archaeology sites meets National Register of Historic Places (NRHP) eligibility criteria (9GL18 and 9WG173) and are recommended eligible. One additional site (9WG171) is a cemetery, and though not NRHP-eligible, is protected by the Georgia Burial Codes (Code Sections 36-72-1 through 16, 44-12-260 through 264, 12-3-52 through 53, 12-3-620 through 622, 31-21-6, 31-21-45, 44-12-280 through 285). If avoidance of these resources occurs by either moving the corridor around them, or by spanning them and protecting them by fencing, then archaeological clearance on the corridor is recommended.

As described in Section 9.3.2 of this Assessment, nineteen of the 83 historic resources identified within the Area of Potential Effect were documented as eligible for the National

Register of Historic Places under Criterion C (noted for illustrating a particular architectural style). The other resources are ineligible because of loss of physical integrity. The construction of the proposed transmission line will not adversely affect any significant historic structures listed or eligible for inclusion in the NRHP.

In accordance with 36 CFR 800.5(c), the Criteria of Adverse Effect, it was determined that the Thomson-Warthen 500 kV Transmission Line will have No Adverse Effect on National Register of Historic Places eligible resources.

9.3 Floodplains

As described in Section 8.4 of this Environmental Assessment, only McDuffie County participates in the Federal Emergency Management Agency's National Flood Insurance Program. Floodplains in the other counties were interpreted from USGS 7.5 minute Quadrangles.

Construction of transmission line towers within the 100 year floodplain will be avoided as much as possible. However, due to the length of the transmission line corridor, one tower of the proposed 157 towers would be constructed on the edge of 100 year floodplain. Tower number 30 would be located on the edge of the 100 year flood plain of Brier Creek in McDuffie County.

RUS has determined that lattice steel towers do not adversely affect the 100-year floodplain.

9.4 Jurisdictional Areas

As discussed in Section 7.5 of this Environmental Assessment, 82 jurisdictional wetlands and 57 jurisdictional waters were identified within or adjacent to the transmission line study area. Thirty-two (32) of these streams are intermittent channels less than four to seven feet in width with a sand, organic, and or mud substrate. Twenty-five (25) streams are classified as perennial streams ranging from four to seventy feet in width with a cobble-gravel, sand, and or bedrock substrate. In addition, there are ten waters classified as palustrine open water features, which are typically farm ponds.

Georgia Transmission Corporation will avoid impacts to waters to the extent possible along the project corridor. However, impacts will occur as a result of necessary pole installations. In addition, some impacts will result from access roads that will be used for construction and maintenance of the proposed transmission line corridor. Where possible, impacts will be minimized by utilizing existing access roads. However, some existing stream and wetland crossings will need to be upgraded, and some new access points may need to be established. The majority of impacts to wetlands and waters will be in the form of short culverts and at-grade road crossings.

As mentioned in Section 7.5.1, permit coordination will include a PCN under NWP 3, 12, and 33.

9.5 Prime Farmland Soils

There are twenty-two soil series within the proposed transmission line right-of-way that are listed by the Georgia Office of the NRCS as prime farmland soils or soils of statewide

importance. As a result of the linear nature of this project, construction will not have a significant or adverse impact on the amount of agricultural land in Glascock, McDuffie, Warren, and Washington Counties.

9.6 Aesthetics

Visual considerations are significant factors when developing alternative transmission corridors and when making comparisons between them. The visual impact of a transmission line is influenced by several factors, including distance to the viewer, the number of structures viewed, whether visible structures are seen against backdrops (vegetation, terrain, man-made elements) or silhouetted against the skyline, the amount of vegetative modification that contrasts with surrounding landscapes, and the overall scenic condition (landscape content and context) of the area in which the facility is seen.

The visual quality of the study area is dominated by forestry. The aesthetic impact of power lines can be significant if they are very near occupied homes or formally classified areas such as scenic overlooks, scenic highways, wilderness areas, national forests and wild and scenic rivers. As stated in this Environmental Assessment, there are no such formally classified lands in the study area.

There are only twenty-three residences within 300 feet of the proposed transmission line right-of-way. Only three of the twenty three houses will have a view of the transmission line. The other twenty properties are forested, therefore, views of the transmission line is obscured.

9.7 Coastal Barriers

The proposed project is not located within areas protected by the Coastal Barrier Resources Act of 1972 (16 USC part 3501, et seq.).

No impact to any area protected by the Coastal Barrier Resources Act is anticipated.

9.8 Coastal Zone Management

The National Oceanic and Atmospheric Administration (NOAA) approved the Georgia Coastal Management Program (GCMP) on January 26, 1998, pursuant to the provisions of section 306 of the Federal Coastal Zone Management Act of 1972, as amended, 19 U.S.C. 1455 (CZMA). The GCMP is prescribed in the Georgia Coastal Management Program and Final Environmental Impact Statement (P/FEIS) published in the *Federal Register* on February 6, 1998.

Section III of the GCMP Program Document identifies those “Federal Assistance Programs Applicable to the Consistency Process,” with coded references to the Catalog of Federal Domestic Assistance Programs. The U.S. Department of Agriculture heading, “Code 10.850, Rural Electrification Loans and Loan Guarantees,” is not included in Section III as a “listed activity” requiring federal consistency.

9.9 Wild and Scenic Rivers

In Georgia, the only river designated as a Wild and Scenic River is the Chattooga River located in the extreme northeastern part of the state (16 USC 1276). No Wild and Scenic

Rivers will be affected as a result of the construction and operation of the Thomson-Warthen 500 kV Transmission Line.

9.10 National Forests

In Georgia, there are two National Forests. The Chattahoochee National Forest is comprised of two units in the mountains of North Georgia. The Oconee National Forest, also comprised of two separate units, is located on the lower Piedmont north of Macon, Georgia.

The proposed project is not located in or near either of these National Forests.

No National Forest will be affected as a result of the construction and operation of the Thomson-Warthen 500 kV Transmission Line.

9.11 State and Federal Parks

Throughout Georgia, the Parks, Recreation, and Historic Sites Division of the United States Department of the Interior (USDI) operates 45 State parks, 3 State historic parks, and 15 historic sites. The National Park Service of the USDI operates 10 units in the State of Georgia, which includes facilities such as National Battlefield Parks, National Historic Sites, and National Monuments.

The proposed project is not located within any State Park units or National Park units operated by the National Park Service of the USDI.

No state or federal park will be affected as a result of the construction and operation of the Thomson-Warthen 500 kV Transmission Line.

9.12 Noise, Radio, and Television Interference

General ambient noise levels at the proposed Thomson-Warthen 500 kV Transmission Line right-of-way consist of typical highway noise from automobile and truck traffic traveling along adjacent U.S. Highways 78 and 278, and State Routes 10, 17, 80, 171, 16, 15.

Short-term construction-related increases in noise would occur during the clearing, construction, and maintenance operations. These noises would result from operation of chain saws and heavy equipment needed to fell and dispose of timber, grade the access drives, dig footings and foundations, erect structures, string conductors, etc. However, since the transmission line right-of-way is relatively isolated, even short-term construction-related noise impacts are not anticipated to be significant because of the distance to the nearest residential properties. Once constructed and placed in service, the Thomson-Warthen Transmission Line would not be a significant long-term noise source in any areas adjacent to the right-of-way.

Radio and television interference depends on distance and direction of the signals, grounding, the operation of motors and fans, etc. Interference would also depend on the nearness of the signal receptors; in this case the nearest residence is approximately 100 feet from the transmission line. There are 22 other residences within 300 feet of the transmission line. As the Thomson-Warthen Transmission Line connection to the Thomson Primary Substation

and the Warthen Switching Station will be properly constructed and grounded, neither is expected to generate significant radio or television interference.

The construction, operation and maintenance of transmission facilities will not adversely affect the reception signals for radio, television or any other electronic device.

9.13 Air Quality

The proposed project introduces no new stationary air pollution sources. Georgia Transmission Corporation will ensure that the project complies with State of Georgia Rules for Air Quality Control (Chapter 391-3-1) for construction activities. Fugitive dust emissions from land clearing and grading operations will be minimized by using Best Management Practices (BMPs) such as water trucks and gravel exit pads. The construction of these facilities will have no significant impact, short- or long-term, on air quality.

9.14 Water Quality

Georgia Transmission Corporation will comply with the standards required by the Georgia Erosion and Sedimentation Control Act of 1975, as amended, and the National Pollution Discharge System General Permit for Construction Sites. They mandate that appropriate erosion control measures such as seeding, straw bales, silt screens and vegetative buffers will be utilized where appropriate to prevent degradation of surface water quality during clearing and construction for transmission lines.

Georgia Transmission Corporation is preparing a NPDES Erosion Sedimentation and Pollution Control Plan (Plan) and Comprehensive Monitoring Program (CMP) for the preferred route. Both will be implemented using Best Management Practices.

Georgia Transmission Corporation adheres to all stream buffer regulations as set forth in the Georgia Erosion and Sedimentation Control Act of 1975, as amended. All streams in the study area have a 50-foot buffer, 25 feet either side of the stream, in the GIS database to represent the State regulations.

9.15 Transportation

The nearest airport is the Thomson-McDuffie County Airport. It is located about 7 miles from the eastern end of the Thomson-Warthen Transmission Line and the Thomson Primary Substation. The Georgia Barkfield Airport is located approximately 27 miles from the eastern end of the Thomson-Warthen Transmission Line and the Thomson Primary Substation in Augusta, Georgia. The third airport is Kaolin Field that is about 10 miles from the southwestern end of the Thomson-Warthen Transmission Line in Sandersville, Georgia. Given the distances to these airports this project does not meet the criteria requiring notification of the Federal Aviation Administration (FAA), as outlined in FAA Regulations, 14 CFR 77, Objects Affecting Navigable Airspace.

While both the Ogeechee River and the Little Ogeechee River cross the study area in a northwest-southeast direction, neither river is navigable. The nearest navigable water is the Savannah River which is approximately 19 miles east of Thomson, Georgia.

The Thomson-Warthen Transmission Line would cross U.S. Highways 78/278 that is a four lane highway, and State Routes 10, 17, 80, 171, 16, 15 that are two lane roads. It also crosses 2 railroads, the Georgia Railroad and the Southern Railway.

9.16 Human Health and Safety

GTC is committed to providing electricity in a reliable and safe manner that protects the health and safety of energy consumers, GTC employees, and the general public. GTC's design is based on established safety codes and government requirements. Should regulations or safety codes change or scientific evidence dictate a need, GTC would commit the necessary resources to protect the public safety. The Thomson-Warthen 500 kV Transmission Line will be constructed according to all national, state and local codes and regulations.

Electric and magnetic fields (EMF) are a natural byproduct of the use of electricity and are encountered by people every day from a variety of sources. Lights, motors, television sets, power lines, coffee makers, hair dryers, and all other devices that use electricity produce these fields. Over the past 25 years, numerous studies and more than 20 scientific review panels have concluded that no cause-and-effect relationship has been established between EMFs and any harmful health effects.

Georgia Transmission Corporation has joined with other power producers and manufacturers to fund research. The corporation encourages additional public and private research efforts and endorses national research programs.

9.17 Cumulative Impacts

“Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or No Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Thomson-Warthen Transmission Line 150 foot wide right-of-way will require the long-term conversion of approximately 704 acres. The right-of-way includes 222.5 acres of planted pine, 21.6 acres of clear cut, 300.9 acres of forest, 93.1 acres of agriculture and 33.8 acres of undeveloped land for a total of 672.1 acres. Uses of the remaining 32.1 acres of right-of-way are listed in the chart on Pages 40-41.

Jurisdictional Waters

Jurisdictional studies, performed by JIG, identified the presence of 82 jurisdictional wetlands, 57 jurisdictional streams, and 10 jurisdictional open waters within or adjacent to the proposed transmission line right-of-way. Appropriate permits are filed with the United States Army Corp of Engineers (USACOE).

Sixty-seven jurisdictional waters also meet the definition of State Waters and are subject to State of Georgia Stream Buffer Protection. A minimum 25-foot buffer will be maintained for all streams and wetlands. Georgia Transmission Corporation's Best Management Practices will be

followed. Authorized conservation banks in the watershed will receive compensation for the wetland and stream crossings.

Plant Vogtle Future Expansion

Plant Vogtle Units 1 & 2

The existing Vogtle Nuclear Plant Units 1 and 2 are owned by the Integrated Transmission System (ITS). The ITS includes GPC, OPC, MEAG and Dalton Utilities.

Plant Vogtle currently has a 20-year license renewal application being reviewed by the U.S. Nuclear Regulatory Commission (NRC). Extending the units’ operational life another 20 years will benefit both Oglethorpe Power and the Southeastern grid infrastructure by maintaining a diverse fuel supply. Plant Vogtle life extensions are expected to be approved in April 2009.

Plant Vogtle Units 3 & 4 Opportunity

Southern Nuclear Operating Company, on behalf of Vogtle co-owners, filed a Combined Construction and Operating License Application with the NRC in spring 2008 for two additional, advanced-passive reactor plants. An Early Site Permit (ESP) Application is being reviewed by the NRC. When approved, the ESP allows nuclear units to be built at the Vogtle site anytime within a 20-year window. The advanced-passive reactors will be of similar size to the existing Units 1 & 2, but with much newer technology. Oglethorpe Power, as a co-owner of Vogtle, is pursuing this opportunity as part of an expanding, diverse portfolio of environmentally-friendly electric generation. Nuclear power continues to be the largest emission-free source of bulk power, and the technology is continually improving. If this option is adopted by owners in 2008, the units are expected to become commercial in 2016 and 2017.

A 60-mile long, 200 foot-wide transmission line corridor will connect Plant Vogtle to Thomson Primary 500/230/225/46 kV Substation. At this time, the transmission line corridor has not been selected.

All other impacts associated with this project would be temporary.

	Summary of Impacts	0 = No Change
Resource	“No Action” Alternative	Thomson-Warthen Preferred TL 150’ ROW
<u>Land Use/Land Cover</u>		Acres/Crossings
Agriculture	0	95.47 acres crossed
Planted Pine	0	224.1 acres crossed
Clear-cut	0	21.68 acres crossed
Forest	0	304.64 acres crossed
Orchard	0	1.09 acres crossed

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Undeveloped Land	0	37.09 acres crossed
Mining	0	2.79 acres crossed
Rock Outcrops	0	0.18 acres crossed
Cross Corner of Residential Properties		0.18
Transportation Road Crossings		3.12:
Parallel or Cross existing Utility ROW		11.49
<u>Hydrology</u>	0	
Jurisdictional Wetlands	0	82 crossings
Jurisdictional Streams		57 crossings
Jurisdictional Open Waters	0	10 crossings
GA Jurisdictional Waters		67 crossings
Floodplains	0	17.23 acres
<u>Cultural Resources</u>	0	
2 NRHP Eligible Archaeology Sites	0	2
Cemetery	0	1
Air Quality	0	0
Water Quality	0	0
Fish and Wildlife	0	0
Threatened and Endangered Species	0	0
Noise	0	0
Soils		0
Socioeconomic Resources	0	+\$14,587 paid to counties
Hazardous Waste and Materials	0	0
Environmental Justice & Child Health & Safety	0	0
Transportation	0	3.12 acres crossed
Utilities	0	11.49 acres crossed

9.18 Socioeconomic and Community Resources

There will be economic benefits to the communities from the construction of the Thomson-Warthen 500 kV Transmission Line. The tax revenue that the four counties would receive from the proposed transmission line is estimated to be approximately \$14,587 a year.

Local retail establishments such as hotels, restaurants, stores and gas stations will benefit temporarily from the demand for products and services resulting from workers engaged in project clearing and construction.

9.19 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires federal agencies to address potential environmental justice considerations for all federal actions by determining if a project would produce disproportionately high and/or adverse environmental and/or human health effects on minority or low-income populations. If disproportionate impacts on these populations are identified, efforts must be made by the federal agency to avoid or mitigate these effects of its project. This executive mandate requires two related assessments: the determination of whether a minority or low-income population is present within a project area, and if present, whether that population suffers disproportionately high and adverse effects from the project.

The environmental justice survey for the Thomson-Warthen Transmission Line was conducted in accordance with GTC's *Environmental Justice Guidelines and Methodology for Analyzing Potential Environmental Justice Areas of Concern*. These documents, based upon methodology developed by Environmental Protection Agency (EPA) Region IV, explain the fundamental details of this analysis. However, the EPA methodology is based on Census 1990 population numbers, and the Georgia minority population percentage increased from approximately 30% in 1990 to 37.3% in 2000. The EPA has not yet developed new thresholds for the latest Census figures, but the new thresholds will be somewhat higher than the 1990 thresholds. At this time, GTC is continuing to use the 1990 EPA thresholds for environmental justice evaluations; therefore, this analysis is more inclusive than will be required by future EPA thresholds.

There are 59 Census blocks intersected by the proposed Thomson-Warthen Transmission Line corridor. Sixteen (16) blocks are in Glascock County, 23 are in McDuffie County, 5 are in Warren County, and 14 are in Washington County. A total of 13 blocks are classified as high-minority areas. These blocks are located along the length of the proposed line and are present in all four study area counties. A review of aerial photography identified three homes in one of the McDuffie County high-minority blocks. These residential structures are situated within 100 to 150 feet of the proposed centerline. With exception of the McDuffie County block, no other structures were identified in the high-minority blocks along the proposed centerline.

In regard to income, the proposed transmission line intersects a total of nine block groups along the proposed centerline. A total of three (3) block groups are classified as low-income areas. McDuffie, Glascock, and Washington Counties each contain one low-income block group. Warren County does not exhibit a low-income block group. In McDuffie County, several mobile homes and another structure are located in close proximity to the proposed transmission line. These structures range from approximately 75 feet to almost 200 feet from the proposed

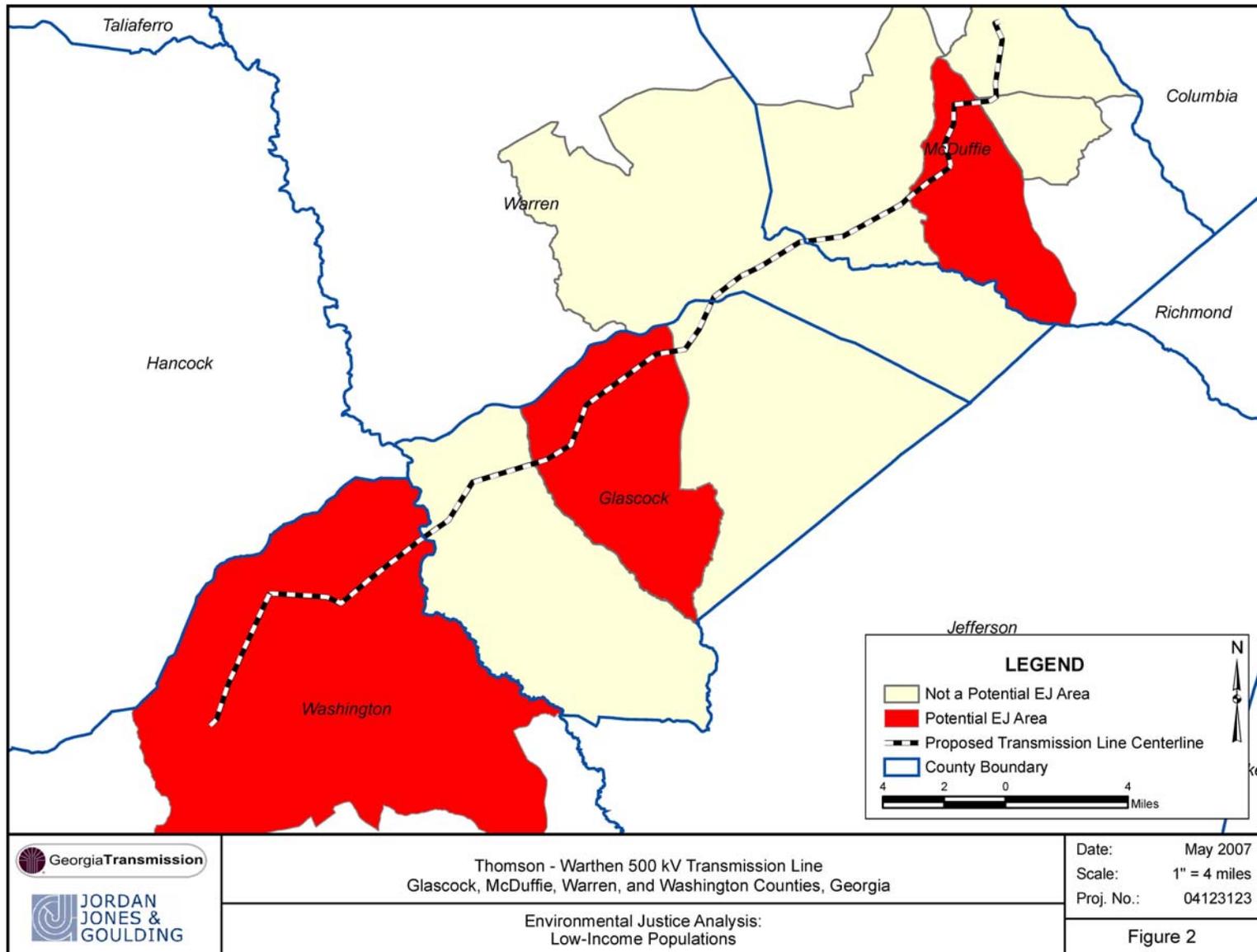
Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

transmission centerline. The structure nearest the line was identified during field studies as an abandoned home. The mobile homes are located approximately 125 to 200 feet east of the proposed transmission centerline. No other structures were identified in this block group, and no homes or other structures in the Glascock County and Washington County low-income block groups are located in proximity to the line.

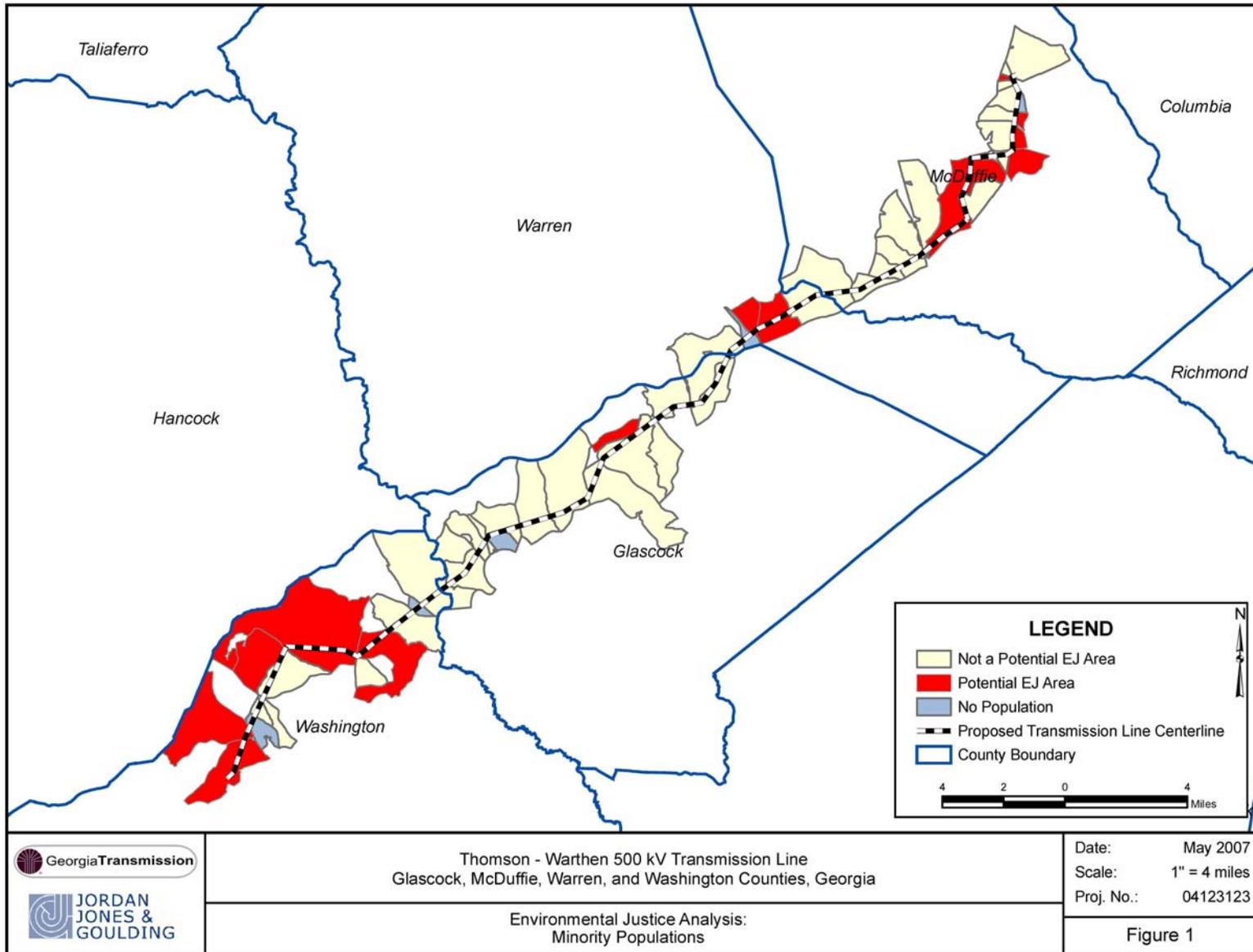
The review of the Thomson-Warthen 500 kV Transmission Line study area found potential environmental justice areas for both minority populations and low-income populations. The proposed transmission line largely avoids homes and other structures, in part because the proposed line traverses broad areas of cleared fields, forests, and undeveloped areas. Three homes are located within 150 feet of the proposed line in a high-minority block in McDuffie County. Impacts to these homes are not anticipated; however, the minority status of the residents is not known at this time. Field studies indicate that the mobile homes on Mitchener Road are most likely the homes of low-income families. None of these homes are located in the right-of-way or will be directly affected by the line, but these homes are situated less than 200 feet from the proposed transmission centerline.

The review of the Thomson-Warthen Transmission Line indicates that the proposed project is unlikely to result in disproportionately high and adverse human health or environmental impacts to minority or low-income populations.

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



TASK 10.0 PERMITTING AND CONSTRUCTION

Construction and maintenance of the Thomson-Warthen 500 kV Transmission Line follows guidelines noted in Environmental Criteria for Electrical Transmission Systems published jointly by the United States Departments of Agriculture and Interior. Georgia Transmission will comply with the standards required by the Georgia Erosion and Sedimentation Control Act of 1975, as amended, which mandates that appropriate erosion and control measures such as seeding, straw bales, silt screens, and vegetative buffers will be utilized where appropriate to prevent degradation of surface water quality during construction and operation. Georgia Transmission will acquire any necessary permits and will comply with all pertinent local, state, and federal regulations during the construction of the project.

Formal and documented erosion and sediment control inspections would take place weekly as well as within 24 hours of a half-inch or greater rainfall event for this project. Inspections would consist of visiting all sites where soil is exposed to erosive forces, observing Best Management Practices (BMPs) for appropriate application, installation and maintenance, and examining discharge areas to determine if BMPs are effective. Any deficiencies in erosion and sediment control measures would be noted during these inspections and corrective action would take place within seven days after the inspection. Informal inspections would take place as described above in areas where NPDES permit activities are not covered.

Water quality monitoring would be conducted on all projects subject to NPDES permitting. Monitoring would consist of sampling a representative group of either outfalls or receiving waters or a combination of both associated with the project. Sampling would be conducted in accordance with NPDES permit guidelines until final stabilization is achieved at the site.

The design and construction of the Thomson-Warthen 500 kV Transmission Line would have no significant adverse impact on the natural, cultural, social, or economic environment.

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COMPLIANCE OF PREFERRED ALTERNATIVES WITH ENVIRONMENTAL STATUTES AND OTHER ENVIRONMENTAL REQUIREMENTS

<u>Archeological Resources Protection Act, 16 U.S.C. 470, et seq.</u>	<u>Full Compliance</u>
<u>Clean Water Act (Fed. Water Pollution Control Act), 33 U.S.C. 1251, et seq.</u>	<u>Full Compliance</u>
<u>Coastal Zone Management Act, 16 U.S.C. 1451, et seq.</u>	<u>Not Applicable</u>
<u>Endangered Species Act, 16 U.S.C. 1531, et seq.</u>	<u>Full Compliance</u>
<u>Estuary Protection Act, 16 U.S.C. 1221, et seq.</u>	<u>Not Applicable</u>
<u>Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.</u>	<u>Full Compliance</u>
<u>Land and Water Conservation Fund Act 16 U.S.C. 4601-4, et seq.</u>	<u>Not Applicable</u>
<u>Marine Protection Res. and Sanctuary Act, 33 U.S.C. 1401, et seq.</u>	<u>Not Applicable</u>
<u>National Environmental Policy Act, 42 U.S.C. 4321, et seq.</u>	<u>Full Compliance</u>
<u>Nat. Historic Preserv. Act of 1966, as amended, 16 U.S.C. 470</u>	<u>Full Compliance</u>
<u>Rivers and Harbors Act, 33 U.S.C. 403, et seq.</u>	<u>Full Compliance</u>
<u>Wild and Scenic River Act, 16 U.S.C. 1271, et seq.</u>	<u>Not Applicable</u>
<u>Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.</u>	<u>Full Compliance</u>
<u>Protection & Enhancement of Cult. Environ. (Exec. Order 11593)</u>	<u>Full Compliance</u>
<u>Floodplain Management (Executive Order 11988)</u>	<u>Full Compliance</u>
<u>Protection of the Wetlands (executive Order 11990)</u>	<u>Full Compliance</u>
<u>Environmental Justice (Executive Order 12998)</u>	<u>Full Compliance</u>
<u>Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</u>	<u>Full Compliance</u>
<u>Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970</u>	<u>Full Compliance</u>

NOTES:

- a. Full Compliance: Meeting all requirements of the statute for the current stage of planning (either preauthorization or post authorization)
- b. Partial Compliance: Not having met some of the requirements that normally are met in the current stage of planning
- c. Noncompliance: Violation of a requirement of the statute
- d. Not Applicable: No requirements for the statute required; compliance for the current stage of planning

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

LIST OF PREPARERS

Thomson-Warthen 500 kV Transmission Line Project Environmental Assessment

Gayle Houston
Environmental and Regulatory Coordinator
Georgia Transmission Corporation
2100 East Exchange Place
Tucker, Georgia 30384
770-270-7748

Report Graphics, Aerial Photography and GIS Data provided by:

Photo Science Inc.
2100 East Exchange Place
Tucker, Georgia 30084
770-270-7919

Intensive Archaeological Resources Survey for the Proposed Thomson-Warthen Electric Transmission Line

Brockington and Associates
6611 Bay Circle, Suite 220
Norcross, Georgia 30071
770-662-5807

Report of No Adverse Effect on Historic Resources

Historic Preservation Consulting
38 Camino De Caballos
Rancho de Taos, NM 87557
505-770-8774

Biological Survey Report

Thomson-Warthen 500 kV Transmission Line
Glascok, McDuffie, Warren, and Washington Counties, Georgia
Jordan, Jones and Goulding
6801 Governors Lake Parkway Place
Bldg. 200
Norcross 30071
678-333-0457

Environmental Justice Report

Jordan, Jones and Goulding
9101 Southern Pine Boulevard
Suite 160
Charlotte, NC 28273
704-527-4106

APPENDIX A

**RUS Scoping Meetings
Thomson-Warthen 500 kV Transmission Line
Brown Reporting, Inc.**

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

June 3, 2005

Ms. Stephanie Strength
Engineering and Environmental Staff
Rural Utilities Service
Stop 1571
1400 Independence Avenue, SW
Washington, DC 20250-1571

Dear Ms. Strength:

It was good to meet you and work with you on the Rural Utilities Service (RUS) Scoping Meetings for the Thomson-Warthen 500 kV Transmission Line.

Enclosed please find Georgia Transmission Corporation's Meeting Summary per RUS Bulletin 1794A-603.

Please don't hesitate to contact me at 800 241-5374, extension 7741 or jeannine.rispin@gatrans.com if you have any comments or questions.

Sincerely,

Jeannine Rispin
Sr. Public Relations Representative

JR:hd

Enclosure

cc: Greg Starks, GTC
Gayle Houston

bcc: Tom Parker
Tony Chaapel
Quan Fan
Record Center -TW03T-26.2

Thomson-Warthen 500 kV Transmission Line Environmental Assessment

RUS Public Meeting Summary
Georgia Transmission Corporation
Thomson-Warthen 500 kV Transmission Line

Meeting Summary Georgia Transmission Corporation Thomson-Warthen 500 kV Transmission Line

Rural Utilities Service Public Meetings
Tuesday, May 24, 2005
1:00 – 3:00 p.m.
5:00 – 7:00 p.m.

Summary

The Rural Utilities Service (RUS) conducted two open house public meetings for the Thomson-Warthen 500 kV T/L on Tuesday, May 24, 2005. The first meeting was held at the Warthen Community Center from 1:00 - 3:00 p.m. There were 10 attendees including representatives from the Georgia Department of Transportation, Hamburg State Park and the McDuffie County Chamber of Commerce. Senator Johnnie Grant and Mr. Charles Tarbutton also attended. The second meeting was held at Thomson High School from 5:00 - 7:00 p.m. There were 3 attendees from the general public. They were Charlie Newton, Chairman, McDuffie County Commissioners, Mr. Billie Faulk and Mr. Wilcher. RUS is in possession of the sign-in sheets from both meetings.

Comments

RUS is in possession of the written comments from both meetings. The court reporters transcript for both meetings is attached.

GTC representatives received the following verbal comments:

Hamburg State Park Manager, Daniel Hill, does not want the proposed TL to cross the park. Gayle Houston explained that the park is not included in the macro corridors where GTC will concentrate the transmission line site selection. He is going to send the park Master Plan so GTC can map the location of the historic structures, campgrounds and other park facilities.

Senator Johnny Grant said the area between Jewell and Shoals in the vicinity of the Ogeechee River is, in his opinion, the most beautiful in the area. He would like for GTC to protect it.

DOT will widen Highways 15 & 17 from 2 lanes to 4 lanes. There will be a median.

One gentleman wanted to know when the next meeting would be and when GTC would announce the route location. Gayle Houston told him that it would be during the first quarter of 2006.

D'Ann Simpson, Executive Director, Glascock County Chamber is working with Georgia Electric Membership Corporation through Jefferson Energy to identify future sites for development. She requested a copy of the project timeline, transmission line siting criteria and land acquisition process. She is a landowner in one of the macro corridors.

D'Ann Simpson and Wanda Davis wanted to know where GTC gets wetlands data and how we handle wetland and watershed recharge area crossings. Gayle Houston described GTC's siting, BMP and wetland approach. She stated that we use NWI data in the early stages of siting. A field survey of the wetlands with GPS when is done after we have selected a preferred transmission line route. The ladies provided Kim Gray's phone number, 706-210-2000, to acquire "recharge area" maps of Glascock County.

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RUS Public Meeting Summary
Georgia Transmission Corporation
Thomson-Warthen 500 kV Transmission Line

The following corrections to the Study Area Map were received from D'Ann Simpson:
Smith McCorkle Road should be Eley Road, Levie Jackson Road should be Log Cab
Road (both in Glascock County between SR 171 and SR 80.)

Charles Tarbutton stated that his family is planning a "Reynolds Plantation type"
development near the Hancock/Washington County line near Hamburg State Park.

Charlie Newton, McDuffie County Chairman, said that next year will be a rough one for
him. The county is putting in a water line and a sewer line and now GTC will be coming
through with a transmission line. He asked to be informed as soon as we have a
centerline.

Handouts

The following handouts were provided at both meetings. Copies of the handouts are attached

Study Area Map

Notice of Intent Legal Ad

Electric Alternative Evaluation Study and Macro-Corridor Study Report

RUS – Public Opportunity to Participate in the Review Process

RUS – Sign In table handout (At This Station ...)

GTC's "In Demand" brochure

Invitations

Invitation letters were sent to the following elected officials:

State Senator James Whitehead

State Senator Johnny Grant

State Representative Sistie Hudson

State Representative Jimmy Lord

State Senator James Powell

Anthony Griswell, Chairman, Glascock County Board of Commissioners

Johnny Samuel Crutchfield, Commissioner, Glascock County Board of Commissioners

Joe Dixon, Jr., Commissioner, Glascock County Board of Commissioners

Samuel Duggan, Chairman, Hancock County Board of Commissioners

Billy Boyer, Commissioner, Hancock County Board of Commissioners

Adam Jackson, Commissioner, Hancock County Board of Commissioners

Thomson-Warthen 500 kV Transmission Line Environmental Assessment

RUS Public Meeting Summary
Georgia Transmission Corporation
Thomson-Warthen 500 kV Transmission Line

Awanna Leslie, Commissioner, Hancock County Board of Commissioners
Bobby Warren, Commissioner, Hancock County Board of Commissioners
Charlie Newton, Chairman, Glascock County Board of Commissioners
Robert Farr, McDuffie County Board of Commissioners
Frederick Favors, McDuffie County Board of Commissioners
Darrell Wester, McDuffie County Board of Commissioners
Sammie Wilson, McDuffie County Board of Commissioners
John Graham, Chairman, Warren County Board of Commissioners
Richard Burley, Jr., Commissioner, Warren County Board of Commissioners
Terry Johnson, Commissioner, Warren County Board of Commissioners
Horace Daniel, Chairman, Washington County Board of Commissioners
Tuttle Barksdale, Commissioner, Washington County Board of Commissioners
Charles Hancock, Commissioner, Washington County Board of Commissioners
Melton Jones, Commissioner, Washington County Board of Commissioners
Wayne Sheppard, Commissioner, Washington County Board of Commissioners

Invitation letters were sent to the following agencies:

U.S. Army Corps of Engineers
Attn: CESAS-OP-FS Carol Bernstein
Savannah, GA

U.S. Fish and Wildlife Service, North Georgia Office
Attn: Robin Goodloe
Athens, GA

Georgia Department of Natural Resources
Georgia Natural Heritage Program
Attn: Greg Krakow
Social Circle, GA

Georgia Department of Natural Resources
Georgia Environmental Protection Division
Erosion & Sedimentation Control Unit
Attn: Peggy Chambers
Atlanta, GA

Georgia State Parks and Historic Sites
Attn: Becky Kelley
Atlanta, GA

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Thomson-Warthen 500 kV Transmission Line Environmental Assessment

RUS Public Meeting Summary
Georgia Transmission Corporation
Thomson-Warthen 500 kV Transmission Line

Hamburg State Park
Mitchell, Georgia

Georgia Department of Natural Resources
Wildlife Resources Division
Special Permits
Social Circle, GA
Local contact:
Ogeechee Wildlife Management Area
Thomson, GA

Central Savannah River Area RDC
Attn: Andy Crosson
Augusta, GA

Georgia Department of Transportation
Gus Cooper, District Utilities Engineer
Tennille, Georgia

Georgia Department of Transportation
Jeff Baker, State Utilities Engineer
Atlanta, Georgia

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RUS SCOPING MEETING
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

Thomson High School
Thomson, Georgia 30824

May 24, 2005
5:00 p.m. - 7:00 p.m.

Susan Gale Salenger, CCR-B-1942, RPR

BROWN
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

THOMSON-WARTHEN 500 kV TRANSMISSION LINE

May 24, 2005

Page 1

[1] RUS SCOPING MEETING
[2] THOMSON-WARTHEN 500 kV TRANSMISSION LINE

[10] Thomson High School
[11] Thomson, Georgia 30824

[14] May 24, 2005
[15] 5:00 p.m. - 7:00 p.m.

[18] Susan Gale Salenger, CCR-B-1942, RPR

[1] C E R T I F I C A T E
[2]
[3] STATE OF GEORGIA:
[4] COUNTY OF RICHMOND:
[5] I hereby certify that the foregoing
[6] comments were taken down and reduced to
[7] typewriting under my direction, and that t
[8] foregoing pages 1 through 2 represent a tr
[9] complete, and correct transcript of said
[10] comments.

[11] This, the 26th day of May, 2005.

[14] SUSAN GALE SALENGER, CCR-B-1942, RPR
[15] My commission expires on the
[16] 31st day of May, 2008.

Page 2

[1] Comments

[2] Billy Faulk: "Okay. My address is 3774
[3] Highway 171 North. That's about 3, 4 miles outside
[4] of Gibson, Georgia, north. I don't want to hold up
[5] progress, but if it -- you know, if it's a
[6] possibility, I would prefer that it would go in a
[7] different direction than through my property, but I'm
[8] not gonna hold up progress."
[9]

BROWN REPORTING, INC.

Min-U-Script®

(1) Page 1

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Questions/Comments

Thomson-Warthen 500 kV Transmission Line
Warthen Community Center
Warthen, Georgia
July 11, 2006
2:00-4:00 PM

Questions: Why do you have to run the lines
to cut my fields with cross lines
when you could follow the right of way
of the existing gas line

Comments: PLEASE DON'T CROSS MY PROPERTY IN
TWO DIFFERENT PLACES -
IT WILL RUIN IT FOREVER FOR ANY USE FOR ME.

OPTIONAL:

Name: Ralph Walker
Address: 10870 Hwy 15 N Warthen, GA 31094

If you wish to take this form with you to prepare your questions and comments you may fax or mail to: Jeannine Rispin
Georgia Transmission Corporation
2100 East Exchange Place
Tucker, Georgia 30084-5336
770 270-7450 (FAX)

Please use reverse for additional comments.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Questions/Comments

Thomson-Warthen 500 kV Transmission Line
Warthen Community Center
Warthen, Georgia
July 11, 2006
2:00-4:00 PM

Questions:

Revision #4 was workable for us.
Why change?

Comments:

- My first choice would be for structures not to cross my property.
- 2nd Could line be drawn that would not be so aggressive to the use of these 100 acres?
Every acre taken away takes away from possible revenue. This version (2) restrains ability to make farm profitable.

OPTIONAL:

Name: Herman Smith

Address: 2881 Hamburg St Pk Rd

If you wish to take this form with you to prepare your questions and comments you may fax or mail to: Jeannine Rispin
Georgia Transmission Corporation
2100 East Exchange Place
Tucker, Georgia 30084-5336
770 270-7450 (FAX)

Please use reverse for additional comments.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Questions/Comments

Thomson-Warthen 500 kV Transmission Line

Warthen Community Center
Warthen, Georgia

July 11, 2006
2:00-4:00 PM

Questions:

*Why did the personell from Georgia
Transmission Corporation meet almost a year ^{LATE} ^{Early} (2004-2005)
with some select land owners and pre planned -
so the line did not cross their land anymore;
then come down in the fall of 2005 and took
the maps to us and what is to go along with what
had been planned even without our input -*

Comments:

*The company coming through our land in two places
is more than horrible; and I understand a price payment
for right of way is a steal. The land will be ruined
no fun at being useful to us anymore (and we did not even
want to sell other land; but you are taking it. It is as if
its been removed from our possession forever! We have had
enough deaths in our family recently and this is just
another death.*

*I wish you would go away and never come back.
You are a night mare, and a bad dream in reality!*

OPTIONAL:

Name: *Margaret J. Wacker (Ralph Wacker)*

Address: *1870 Hwy 15 N - Warthen, GA 31094*

If you wish to take this form with you to prepare your questions and comments you
may fax or mail to: Jeannine Rispin
Georgia Transmission Corporation
2100 East Exchange Place
Tucker, Georgia 30084-5336
770 270-7450 (FAX)

Please use reverse for additional comments.

In The Matter Of:

*RUS SCOPING MEETING
THOMSON-WARTHEN 500 kV TRANSMISSION LINE*

May 24, 2005

*BROWN REPORTING, INC.
Atlanta, Augusta, Macon, Rome & Savannah
1740 Peachtree Street N.W.
Atlanta, GA U.S.A. 30309
(404) 876-8979 or (800) 637-0293*

Original File 0524rus1.v1, Pages 1-3

Word Index included with this Min-U-Script®



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RUS SCOPING MEETING
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

Warthen Community Center
Warthen, Georgia 31094

May 24, 2005
1:00 p.m. - 3:00 p.m.

Susan Gale Salenger, CCR-B-1942, RPR

BROWN
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

GEORGIA CARDIOVASCULAR ASSOCIATES, P.C.

**ABDULLA M. ABDULLA, M.D., F.A.C.P., F.A.C.C.
JANET L. UTZ, M.D.
FAIZ REHMAN, M.D.**

**818 St. Sebastian Way, Suite 404
Augusta, Georgia 30901
(706) 774-9000 (706) 774-0900 FAX**

December 6, 2005

To Whom It May Concern:

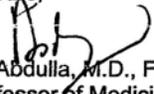
RE: RAY, Marcia R.

This is to certify that Mrs. Marcia R. Ray is a patient of mine.

She's status post implantation of a permanent pacemaker that was performed in 1978, following a syncopal episode. Since that time, the patient has had 4 generator replacements. The last of this was performed on 2/24/05.

Mrs. Ray informs me that high voltage overhead power lines may be placed on her property. For the technical information related to the effect of these power lines on her pacemaker generator, I refer you to the letter of Mr. Christopher Readmond who is the St. Jude Medical Technical Support person. We sought his opinion because Mrs. Ray has a St. Jude pacemaker device. I would like to affirm that I have absolutely no way of knowing the effects of such a power line, upon the patient's pacemaker, should she drive or walk below them. The letter from Mr. Readmond suggested that the patient wear a Holter monitor to evaluate the effects of the power lines on a pacemaker. Since such a power line is not available in the immediate vicinity, this is not possible. Additionally, the patient informs me that she is afraid of walking underneath such a power line and refuses to consider wearing a Holter monitor under such circumstances. She vividly remembers her syncopal episode, prior to receiving a permanent pacemaker.

Sincerely yours,


Abdulla M. Abdulla, M.D., F.A.C.C.
Clinical Professor of Medicine
AMA:doby
Enclosure

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Cardiac Rhythm
Management Division
15900 Valley View Court
Sylmar, CA 91342
818 362-6822
800 777-2237
www.sjm.com

November 22, 2005

CR05-033

Marcia Ray
160 Purvis School Road
Warrenton, GA 30828-7443

Dear Ms. Ray:

Thank you for your telephone call, Monday, November 21st asking about the potential electromagnetic interference (EMI) from high voltage, overhead, power distribution lines. Our pacemaker registration records show your pacemaker to be a St. Jude Medical, VVIR, pulse generator model 5157 M/S, with no registration for the lead wire.

The following is a discussion of electromagnetic interference, suggestions for EMI evaluation and expected pacer compatibility.

Generally, there are two types of electromagnetic interference. Conducted interference can occur when the skin of the patient comes in contact with an apparatus producing or carrying electrical currents, thus causing the body to become a path of current flow. The pacemaker thus senses the voltage developed across the pacemaker electrodes by the current flowing through the body. Effects of conducted interference will commonly cease as soon as the electrical current is no longer being conducted through the patient. However, if the conducted electrical current is unusually large it is potentially possible for the pacer to be damaged. We would not expect that type of interference in this case since you would not be near the electrical distribution wires nor would you be touching the towers.

Radiated Interference, is the second type of electromagnetic interference to be considered when evaluating for potential EMI interactions with pacemakers. Radiated EMI does not require direct body contact. The electrical energy travels unseen through the air. Examples of devices that can generate radiated EMI are arc welders, ham radios, electrical appliances, metal detectors, and high voltage power lines. EMI with signal modulation can mimic normal intercardiac signals. When detected by the pacemaker the response to EMI may present itself as a single beat inhibition, total inhibition, noise reversion/asynchronous pacing, rate increase, erratic pacing, or no output. Potentially, this type of interference could be present in this situation.

Global Leadership in Medical Technology

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Cardiac Rhythm
Management Division
15900 Valley View Court
Sylmar, CA 91342
818 362-6822
800 777-2237
www.sjm.com

On Friday of last week your son had called and described the proposed the power company's line as 500,000 volts with large 4 legged steel towers. The line would cross your property about 1000 feet from the house and extend over a pond area. Apparently you want to use the pond which would be near or under the wires. Your son indicated that your pacemaker leads are unipolar, epicardial leads. Additionally your son indicated that you have been diagnosed as being pacemaker dependant, or lacking any underlying heart rhythm without your pacemaker.

In other cases, we have had patients with our pacemakers walk or work under similar power distribution lines with no effect on their pacemaker's operation. While we would not expect any EMI interactions with your pacemaker we cannot offer that guarantee. When a patient is totally pacemaker dependent or when the patient is in the environment in question on a daily basis an EMI evaluation is sometimes done. For example, the attending cardiologist can prescribe a Holter monitor which records the ECG while the patient takes an escorted tour of that area or a similar environment. The doctor examines the ECG recording for normal and abnormal pacemaker operation. Because of the potential for EMI interactions with pacemakers this assessment is best pursued with the clinical recommendations of your attending cardiologist. In addition, your pacemaker is only one part of your medical care and your doctor who knows your complete medical history is probably the best person to assess what medical risk if any, exists in this situation.

If there are questions about this letter or any further information is needed, please call or contact me at the references below.

Regards,

A handwritten signature in black ink, appearing to read 'Christopher Readmond', written over a horizontal line.

Christopher Readmond

St. Jude Medical Technical Support, CRMD
15900 Valley View Court Sylmar, CA 91342
Telephone: 1(800)722-3774, fax: 1(800)756-7223
CReadmond@sjm.com

A small, stylized handwritten mark or signature, possibly initials, located below the contact information.

Global Leadership in Medical Technology

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Questions/Comments

Thomson – Warthen 500 kV Transmission Line
Best Western White Columns Inn
1890 Washington Road
Thomson, Georgia
September 11, 2006
2:00-4:00 PM

Questions:

When will the company let you know what they are going to pay for land use lost.

Comments:

OPTIONAL:

Name: T.M. Roquemore
Address: 1221 Kaylyn Cr., Kennesaw, GA

If you wish to take this form with you to prepare your questions and comments you may fax or mail to: Jeannine Rispin
Georgia Transmission Corporation
2100 East Exchange Place
Tucker, Georgia 30084-5336
770 270-7670 (FAX)

Please use reverse for additional comments.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Connecting Rural America



Questions/Comments

RUS Scoping Meeting
Thomson-Warthen 500 kV Transmission Line

Warthen Community Center, Warthen, Georgia 31094

May 24, 2005 1:00 pm - 3:00 pm

AS A REPRESENTATIVE FOR THE GA. DEPT. OF
TRANSPORTATION UTILITIES OFFICE IN TENNILE, THE
DEPT. REQUESTS THAT ONCE A ROUTE FOR THE
TRANSMISSION LINE HAS BEEN ESTABLISHED THAT
THERE BE COORDINATION BETWEEN THE DEPT. &
THE ~~UTILITY~~ DEPT. & THE UTILITY OWNER AS IT
RELATES TO THE LOCATION OF ANY TOWERS (STRUCTURES)
AND THE CROSSING ON ANY STATE ROUTES WHERE
FUTURE HIGHWAY PROJECTS HAVE BEEN PROGRAMMED
ESPECIALLY ANY CROSSINGS ON STATE ROUTE
15 AND STATE ROUTE 17. ALSO WHERE IT MAY
CROSS THE BYPASSES AROUND THOMSON.

OPTIONAL: Name: *Department of Transportation*
Eric Cooper, DISTRICT UTILITIES ENGR.
Address: *P.O. Box 8*
Tennile, GA. 31089

If you wish to take this form with you to prepare your questions and comments you may mail to:
Stephanie A. Strength
Environmental Protection Specialist, RUS
1400 Independence Ave. SW
Mail Stop 1571, Room #2244
Washington, DC 20250-1571
202-720-0468
Stephanie.Strength@usda.gov

Please use reverse for additional questions or comments.



Georgia Transmission Corporation's Thomson-Warthen 500kV Transmission Line
Scoping Meeting Sign In Sheet
Tuesday, May 24, 2005
1:00 pm to 3:00 pm

	Name	Street Address
1	JAMIE LINDSEY	6101 - TENNILLE 821 FOURTH ST, TENNILLE, GA 31088
2	GUS CARPER	GPOT - TENNILLE "
3	Jack Everett	GPOT - TENNILLE "
4	Heath Payne	GTC - TUCKER
5	Stephen Cottle	9358 Hwy 242 Harrison GA 31055
6	Daniel Hill	6071 Kambing Snake Pock Rd. Mitchell, GA 31020
7	D'Ann Simpson	P.O. Box 278, Gibson, GA 31010
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Georgia Transmission Corporation's Thomson-Warthen 500kV Transmission Line
Scoping Meeting Sign In Sheet
Tuesday, May 24, 2005
1:00 pm to 3:00 pm

	Name	Street Address
1	Ngoc Linh Le	GTC - Tucker
2	KEVIN HEUER	GTC - TUCKER
3	Staci Beckwith	GTC - Tucker
4	Harold Hyatt	local Property Owner 3005 Mills Lindroy Rd
5	Wanda Davis	2389 Bastonville Rd. Gibson, GA 30810
6	Senah Johnny Grant	P.O. Box 1458 Milledgeville Ga 31059
7	John Rabes	GTC - Tucker
8	Faye Buzsaky	Whitaker
9	Charles Tolbush	P.O. Box 269, Sandersville, GA 31082
10	Lance A Gearney	9194 Hwy 15 N WARTHEN, Ga. 31094
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Georgia Transmission Corporation's Thomson-Warthen 500kV Transmission Line
Scoping Meeting Sign In Sheet
Tuesday, May 24, 2005
5:00 pm to 7:00 pm

	Name	Street Address
1	CHAZLIE, NORTON	357 MAIN ST, THOMSON, GA 30824
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APPENDIX B

**Title 22 Meetings
Thomson-Warthen 500 kV Transmission Line
Brown Reporting, Inc.**

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF RICHMOND:

I hereby certify that the foregoing proceedings were taken down, as stated in the caption, and reduced to typewriting under my direction, and that the foregoing pages 1 through 3 represent a true, complete, and correct transcript of said proceedings.

This, the 20th of September, 2006.



JAN ALDERFER RUSSELL, RPR, CCR-2438

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

3

1 PhotoScience Map Coordination; Jeannine Rispin -
2 External Affairs; Rob Wiley and Teres Czyz -
3 Planning; Ty King - Operations and Maintenance.

4 * * * * *

5 MS. JEANNINE RISPIN: The time is 8:00
6 p.m. and the public information meeting for the
7 Thompson-Warthen 500 kV transmission line has
8 concluded.

9 Approximately 36 individuals from the area
10 visited after the meeting opened at 6:00 p.m.

11 (Meeting concluded at 8:00 p.m.)
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

2

1 MS. JEANNINE RISPIN: The time is 6:00
2 p.m., September 12, 2006.

3 Georgia Transmission Corporation's public
4 information meeting for the Thompson-Warthen 500
5 kV transmission line has begun.

6 The meeting is being held at the Glascock
7 County Board of Education Boardroom in Gibson,
8 Glascock County, Georgia.

9 Georgia Transmission Corporation has
10 arranged for seven tables where property owners
11 and others may ask questions of subject matter
12 experts. A sign-in sheet is used at the door.
13 In addition to asking questions and making oral
14 comments, individuals may submit questions or
15 statements in writing on forms provided, or they
16 may request the court reporter present to take
17 down questions and comments. Information
18 packages on the Thompson-Warthen 500 kV
19 transmission line are available for the public.

20 Subject matter experts are: John Raese
21 and Greg Starks - Project Management; Quan He
22 Fan - Transmission Line Design; Gayle Houston -
23 Environmental Compliance; Tony Chaapel - Land
24 and Legal Rights Coordinator; Pat Barron and
25 Dwaine Wright - Land Agents; Jeff Olson -

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**PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE**

September 12, 2006

6:00 p.m.

**Glascock County Board of Education
Gibson, Georgia**

Jan Alderfer-Russell, CCR-B-2438, RPR

B R O W N
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

3 of 3 pages



Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Gibson, Georgia
September 12, 2006 6:00 - 8:00 p.m.

	Name	Street Address	Phone
1	Louis Swint	3768 Swint Rd	706-465-9692
2	Gwen Swint	" " "	706-465-9692
3	LORI BOYEN	3587 BEALL SPRINGS RD	
4	FARREN BOYEN	" "	706-598-2432
5	Denise DALLAS	4834 Hwy 171, Gibson GA	706-598-3509
6	CHILLAS	1054150 Thomson GA 30824	
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Gibson, Georgia

September 12, 2006 6:00 - 8:00 p.m.

2 of 5 pages

	Name	Street Address	Phone
1	William J. Dawson	3814 Old Mitchell Rd	706-598-3482
2	RICHARD HUNT	854 COUNTY LINE RD, GIBSON	706-465-9549
3	LARRY MARGARET HUGHES	222 Hobbs Mill Rd, Doaning, GA	706-595-6651
4	LEE DUFFIE	3238 Hwy 102 W MITCHELL GA 30820	706-466-7922
5	Stella Allen (Gumbly)	7939 Nunn Rd Mitchell GA 30820	706-598-2283
6	WAYNE LANDRUM	586 Landrum RD Gibson GA	706-598-3016
7	William Sawyer	POB 457, Wren, Ga. 30833	706-547-5710
8	Ray W. Heddy	3223 Gentry Ln Rd West Gibson Ga.	706-547-0862
9	Jim Memichau	90 Johnson St Warrenton	706-465-2453
10	Ota A Johnson	1489 PATTY CT CONYERS	770-922-4940
11	Spacie B. Bodd	730 West Main St. Gibson 30810	706-598-3851
12	Spencie D. Bodd	213 WARRIOR ST. GIBSON	706-598-3591
13	HTCRISWELL	6216 Hwy 102 Mitchell	706-598-3666
14	Monnie Jordan	311 Calhoun St. Gibson GA	706-598-2941
15			

Hilly -

We are missing
the first sign in
sheet.

We looked everywhere
for it.

I think an
attachee walked off
with it.

There were 15
names on it.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

lot: page

Gibson, Georgia

September 12, 2006 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	Jim Aycock	Lincolnton GA	706-359-1986
2	Harold Eubank		
3	Gil Pepper		
4	Paul Pugh		
5	Lisa Schultz	Gibson	
6	Charles Tucker	Gibson	
7	Mae Tucker	Gibson	
8	Beth O'Connor	3920 Chalken Rd. Gibson	706-598-2333
9	Sam O'Byrne	Bull Springs Rd	404-252-5592
10	Jack Fay	338 Hwy 70-nd Dr. August Ga	206-720-8282
11	Ryan Kent	1400 St Gibson Ga	706-598-2861
12	Billy & Pamela	4830 Old Mitchell Rd	
13	Julia Morgan	511 Chalken Rd Gibson	706 598 0990
14	Lee Morse	. 11	u u
15	Dwain Melburn	102 Adams Fr New Town Ga	706-854-9581

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



1 of 1 page

Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Gibson, Georgia

September 12, 2006 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	Millie Williams	43 Mitchell Mill Creek Rd	598-3303
2	Teater Wilkford	1277 Bunch Dr. Lawrenceville, Ga. 30045	478-625-7145
3	JOE DEAN USRY	570 SHELTON CIRCLE	706-598-3614
4	Paul Thomas	BOX 7 131 PONCE DELEON AVE. GA 30108	334-740-7407
5	Perk Patterson	1483 Central Rd. EXT Thomson GA 30288	597-0601
6	Betty Staded	2252 County Line Rd. E. Adams Ga	706-465-2638
7	Buddy Haddon		
8	Arthur Howell	7604 Sandhill Rd. Mitchell GA 30820	(706) 598-0336
9	Alvin J. Jones	1380 New Hope Rd. S.W. Atlanta, Ga	404-699-0559
10	Willie B. Moore		
11	Allison Blair	2185 Old Mitchell Rd. Gibson	706 598-0083
12	Allyson Brydger	Jefferson Hwy Waynes Ave. 30833	706-547-5110
13	A. H. Taylor	P.O. Box 1150 Thomson GA 30824	706-339-5088
14	James R. Neely	4500 Mill Creek ch Rd. Mitchell Mo.	666-0754 30824
15	James R. Neely	4060 Old Mitchell, Mitchell, Ga	706-598-0205

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE**

September 12, 2006

1	County 2:7,8 court 2:16 Creek 3:5,7 crossed 4:5 Czyz 3:2	L	R
12 2:2		land 3:14,15,23;4:5 Land 2:23,25 last 3:6 left 3:18 Legal 2:24 level 3:23 line 3:20;4:3,10 Line 2:5,19,22 little 3:20	Raese 2:20 receive 4:4 reporter 2:16 request 2:16 right 3:17 Rights 2:24 Rispin 3:1 RISPIN 2:1;4:8 road 3:8,10,16;4:3 Road 3:5,8,15 Rob 3:2
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2:00 2:1;4:13 2006 2:2	Design 2:22 door 2:12 down 2:17;3:10 Dwaine 2:24		
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Barron 2:24 begun 2:5 best 3:22 big 3:17,19;4:5 bigger 3:22 bit 3:20 Board 2:7 Boardroom 2:7	Gayle 2:22 Georgia 2:3,8,9 Gibson 2:7 Glascock 2:6,8 good 3:19 Greg 2:21	Olson 2:25 opened 4:13 Operations 3:3 oral 2:13 others 2:11 out 3:9 over 3:21 owners 2:10	
C	H	P	U
can 3:9;4:2 Chaapel 2:23 Church 3:5,8 comments 2:14,17 company 4:2 compared 3:19 complaint 4:6 Compliance 2:23 concerned 4:1 concluded 4:11,14 considered 3:24 Coordination 3:1 Coordinator 2:24 Corporation 2:9 Corporation's 2:3	held 2:6 Houston 2:22	packages 2:18 parcel 3:14,17,18 Pat 2:24 payment 4:2,4 PhotoScience 2:25 Planning 3:2 pm 2:2;4:9,13,14 portion 3:15,22;4:2,5 possible 3:25 present 2:16 Project 2:21 property 2:10;3:6,7,10,11 provided 2:15 public 2:3,19;4:9	used 2:12
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	K	Q	
	Kester 3:6 King 3:3 kV 2:5,18;4:10	Quan 2:21	

BROWN REPORTING, INC.

Min-U-Script®

(1) 12 - writing

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

September 12, 2006

PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

Page 5

[1] C E R T I F I C A T E
[2]
[3] STATE OF GEORGIA:
[4] COUNTY OF RICHMOND:
[5]
[6] I hereby certify that the foregoing
[7] proceedings were taken down, as stated in the
[8] caption, and reduced to typewriting under my
[9] direction, and that the foregoing pages 1
[10] through 4 represent a true, complete, and
[11] correct transcript of said proceedings.
[12] This, the 20th day of September, 2006.
[13]
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[16] JAN ALDERFER RUSSELL, RPR, CCR-2438
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Page 5 (2)

Min-U-Script®

BROWN REPORTING, INC.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE**

September 12, 2006

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PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

September 12, 2006
2:00 p.m.

Glascock County Board of Education
Gibson, Georgia

Jan Alderfer-Russell, CCR-8-2438, RPR

Page 3

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122
123
124
125

Map Coordination; Jeannine Rispin - External
Affairs; Rob Wiley and Teres Czyz - Planning; Ty
King - Operations and Maintenance.

MR. WILLIFORD: On Mill Creek Church Road,
on Kester Williford's property, I want the last
structures on my property next to Mill Creek
Church Road moved just across the road, and then
they can go out wherever they want to. Instead
of going down the road on my property, get
across on somebody else's property and go across
the field.

MS. JONES: The parcel of land is along
Mitchell Road, and I have a portion of land that
is about an acre on the other side of the road.
The big parcel is on the right and the small
parcel, about an acre, is on the left, which is
no good to me, in a way, compared to the big
side. And if the line varied a little bit, they
could have that over there to go through, which
would give me a bigger portion on the best end
of my land, level, where there is a well and
everything. And I wish that was considered, if
possible.

Page 2

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125

MS. JEANNINE RISPIN: The time is 2:00
p.m., September 12, 2006.

Georgia Transmission Corporation's public
information meeting for the Thomson-Warthen
500 kV Transmission Line has begun.

The meeting is being held at the Glascock
County Board of Education Boardroom in Gibson,
Glascock County, Georgia.

Georgia Transmission Corporation has
arranged for seven tables where property owners
and others may ask questions of subject matter
experts. A sign-in sheet is used at the door.
In addition to asking questions and making oral
comments, individuals may submit questions or
statements in writing on forms provided, or they
may request the court reporter present to take
down questions and comments. Information
packages on the Thomson-Warthen 500 kV
Transmission Line are available for the public.

Subject matter experts are: John Raese and
Greg Starks - Project Management; Quan He Fan -
Transmission Line Design; Gayle Houston -
Environmental Compliance; Tony Chaapel Land and
Legal Rights Coordinator; Pat Barron and Dwaine
Wright - Land Agents; Jeff Olson - PhotoScience

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And as far as I'm concerned, with the
payment of it, the company can have that portion
across the road, if the line went that way, and
then I would receive payment for just where they
crossed the big portion of the land.

Okay. That's it. That's my complaint.

MS. JEANNINE RISPIN: The time is 4:00
p.m. and the public information meeting for the
Thomson-Warthen 500 kV transmission line has
concluded.

Approximately 30 individuals from the area
visited after the meeting opened at 2:00 p.m.
(Meeting concluded at 4:00 p.m.)

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE**

September 12, 2006

1	E	O	V
12 2:2	Education 2:7	Olson 2:25	visited 3:10
2	Environmental 2:23 experts 2:12,20 External 3:2	opened 3:10 Operations 3:3 oral 2:13 others 2:11 owners 2:10	W
2006 2:2	F		Wiley 3:2 Wright 2:25 writing 2:15
3	Fan 2:22 forms 2:15	P	
36 3:9	G	packages 2:18 Pat 2:24 PhotoScience 3:1 Planning 3:3 pm 2:2;3:6,10,11 present 2:16 Project 2:21 property 2:10 provided 2:15 public 2:3,19;3:6	
5	Gayle 2:22 Georgia 2:3,8,9 Gibson 2:7 Glascok 2:6,8 Greg 2:21		
500 2:4,18;3:7	H		
6			
6:00 2:1;3:10			
8	held 2:6 Houston 2:22	Q	
8:00 3:5,11	I	Quan 2:21	
A	individuals 2:14;3:9 information 2:4;3:6 Information 2:17	R	
addition 2:13 Affairs 3:2 Agents 2:25 Approximately 3:9 area 3:9 arranged 2:10 available 2:19	J	Raese 2:20 reporter 2:16 request 2:16 Rights 2:24 Rispin 3:1 RISPIN 2:1;3:5 Rob 3:2	
B	Jeannine 3:1 JEANNINE 2:1;3:5 Jeff 2:25 John 2:20	S	
Barron 2:24 begun 2:5 Board 2:7 Boardroom 2:7	K	September 2:2 seven 2:10 sheet 2:12 sign-in 2:12 Starks 2:21 statements 2:15 subject 2:11 Subject 2:20 submit 2:14	
C	King 3:3 kV 2:5,18;3:7	T	
Chapel 2:23 comments 2:14,17 Compliance 2:23 concluded 3:8,11 Coordination 3:1 Coordinator 2:24 Corporation's 2:9 Corporation's 2:3 County 2:7,8 court 2:16 Czyz 3:2	L	tables 2:10 Teres 3:2 Thompson-Warthen 2:4,18;3:7 Tony 2:23 transmission 2:5,19;3:7 Transmission 2:3,9,22 Ty 3:3	
	M		
D	Maintenance 3:3 making 2:13 Management 2:21 Map 3:1 matter 2:11,20 may 2:11,14,16 meeting 2:4,6;3:6,10 Meeting 3:11	U	
Design 2:22 door 2:12 down 2:17 Dwaine 2:25		used 2:12	

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

September 12, 2006

Page 1

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[18] PUBLIC HEARING FOR THE
[19] THOMSON-WARTHEN 500 kV TRANSMISSION LINE
[20]
[21] September 12, 2006
[22] 6:00 p.m.
[23]
[24] Glascock County Board of Education
[25] Gibson, Georgia

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[11] PhotoScience Map Coordination; Jeannine Rispin -
[12] External Affairs; Rob Wiley and Teres Czyn -
[13] Planning; Ty King - Operations and Maintenance.
[14] *****
[15] MS. JEANNINE RISPIN: The time is 8:00
[16] p.m. and the public information meeting for the
[17] Thomson-Warthen 500 kV transmission line has
[18] concluded.
[19] Approximately 36 individuals from the area
[20] visited after the meeting opened at 6:00 p.m.
[21] (Meeting concluded at 8:00 p.m.)
[22]
[23]
[24]
[25]

Page 2

[11] MS. JEANNINE RISPIN: The time is 6:00
[12] p.m., September 12, 2006.
[13] Georgia Transmission Corporation's public
[14] information meeting for the Thomson-Warthen 500
[15] kV transmission line has begun.
[16] The meeting is being held at the Glascock
[17] County Board of Education Boardroom in Gibson,
[18] Glascock County, Georgia.
[19] Georgia Transmission Corporation has
[20] arranged for seven tables where property owners
[21] and others may ask questions of subject matter
[22] experts. A sign-in sheet is used at the door.
[23] In addition to asking questions and making oral
[24] comments, individuals may submit questions or
[25] statements in writing on forms provided, or they
[26] may request the court reporter present to take
[27] down questions and comments. Information
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[32] Fan - Transmission Line Design; Gayle Houston -
[33] Environmental Compliance; Tony Chaapel - Land
[34] and Legal Rights Coordinator; Pat Barron and
[35] Dwaine Wright - Land Agents; Jeff Olson -

Page 4

[11] C E R T I F I C A T E
[12]
[13] STATE OF GEORGIA:
[14] COUNTY OF RICHMOND:
[15]
[16] I hereby certify that the foregoing
[17] proceedings were taken down, as stated in the
[18] caption, and reduced to typewriting under my
[19] direction, and that the foregoing pages 1
[20] through 3 represent a true, complete, and
[21] correct transcript of said proceedings.
[22] This, the 20th of September, 2006.
[23]
[24] JAN ALDERFER RUSSELL, RPR, CCR-2438
[25]

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In The Matter Of:

*PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE*

September 12, 2006

*BROWN REPORTING, INC.
Atlanta, Augusta, Macon, Rome & Savannah
1740 Peachtree Street N.W.
Atlanta, GA U.S.A. 30309
(404) 876-8979 or (800) 637-0293*

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF RICHMOND:

I hereby certify that the foregoing proceedings were taken down, as stated in the caption, and reduced to typewriting under my direction, and that the foregoing pages 1 through 4 represent a true, complete, and correct transcript of said proceedings.

This, the 20th day of September, 2006.



JAN ALDERFER RUSSELL, RPR, CCR-2438

1 Map Coordination; Jeannine Rispin - External
2 Affairs; Rob Wiley and Teres Czyz - Planning; Ty
3 King - Operations and Maintenance.

4 * * * * *

5 MR. WILLIFORD: On Mill Creek Church Road,
6 on Kester Williford's property, I want the last
7 structures on my property next to Mill Creek
8 Church Road moved just across the road, and then
9 they can go out wherever they want to. Instead
10 of going down the road on my property, get
11 across on somebody else's property and go across
12 the field.

13 * * * * *

14 MS. JONES: The parcel of land is along
15 Mitchell Road, and I have a portion of land that
16 is about an acre on the other side of the road.
17 The big parcel is on the right and the small
18 parcel, about an acre, is on the left, which is
19 no good to me, in a way, compared to the big
20 side. And if the line varied a little bit, they
21 could have that over there to go through, which
22 would give me a bigger portion on the best end
23 of my land, level, where there is a well and
24 everything. And I wish that was considered, if
25 possible.

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

2

1 MS. JEANNINE RISPIN: The time is 2:00
2 p.m., September 12, 2006.

3 Georgia Transmission Corporation's public
4 information meeting for the Thompson-Warthen
5 500 kV Transmission Line has begun.

6 The meeting is being held at the Glascock
7 County Board of Education Boardroom in Gibson,
8 Glascock County, Georgia.

9 Georgia Transmission Corporation has
10 arranged for seven tables where property owners
11 and others may ask questions of subject matter
12 experts. A sign-in sheet is used at the door.
13 In addition to asking questions and making oral
14 comments, individuals may submit questions or
15 statements in writing on forms provided, or they
16 may request the court reporter present to take
17 down questions and comments. Information
18 packages on the Thompson-Warthen 500 kV
19 Transmission Line are available for the public.

20 Subject matter experts are: John Raese and
21 Greg Starks - Project Management; Quan He Fan -
22 Transmission Line Design; Gayle Houston -
23 Environmental Compliance; Tony Chaapel Land and
24 Legal Rights Coordinator; Pat Barron and Dwaine
25 Wright - Land Agents; Jeff Olson - PhotoScience

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PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

September 12, 2006
2:00 p.m.

GlascocK County Board of Education
Gibson, Georgia

Jan Alderfer-Russell, CCR-B-2438, RPR

B R O W N
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

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Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Thomson, Georgia

September 11, 2006 6:00 - 8:00 p.m.

	Name	Street Address	Phone
1	Marie Perry	3857 Mitchell Drive	706 597-1929
2	John Gillis	2964 Old Milledgeville Rd	706-595-2840
3	Joe Stine	N/A	706-651-9320
4	John Fuller	4008 Wrens Rd	910-624-7775
5	Dexter & Juhanne Louins	5341 Augusta Hwy Dearing	706-598-3855
6	Russell Thompson	2247 Fort Creek Road Army GA 30808	706 597-9209
7	Mary Rutherford		
8	Elmer Bridger	POB 457, Ware, Ga. 30833	706-547-5110
9	Colby Williams	8311 Argents Hwy Dearing 30808	706 595-4696
10	Stephany	298 Hobbs Mill Rd Dearing GA 30808	706 595-8736
11	Paula	298 Hobbs Mill Rd Dearing GA 30808	706-598-8736
12	Sam Brooks	4353 Augusta Rd Dearing 30808	706-556-9440
13	Carl C. Bowen Jr	3829 Veterans Hwy Thomson 30824	706-595-3097
14			
15			

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



2 of 2, use

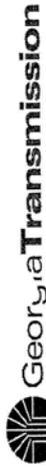
Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Thomson, Georgia

September 11, 2006 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	DONALD H. REEVES	4613 WESTERS HWY.	595-3133
2	Margie McCarley Landrum	P.O. Box 173 Jackson S.C.	803-471-334
3	Sharon Anderson	Same	Same
4	S.M. Gloyd	3979 Rabun Rd. Thomson Ga.	706-595-4922
5	Ruby Hays	Same	Same
6	Allen McConkle	3204 Augusta Hwy.	595-5209
7	Esie Burke Davis	2715 Gays Creek SE	556-9854
8	Annec E Phillips	PO Box 372 Deering Ga	
9	John Sutherland	3907 Mitchell Rd SE Deering GA	595-5805
10	Greg Sutherland	Same	
11	Rebecca Neal	346 Lakewood Dr. Thomson	
12	Carroll Burton	259 Stappin Valley Rd. "	
13	Shirley H. Whitaker	3543 Augusta Hwy Deering	
14	Harold R. Whitaker	3543 Augusta Hwy Deering	
15	Daniel W. Usry	558 Locke Rd.	595-7410

1 of 2 p jes



Thomson - Warthen 500 kV Transmission Line
Public Open House Meeting Sign-In Sheet

Thomson, Georgia

September 11, 2006 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	Theresa Usry	558 Luke Rd	595-7410d
2	T.M. Zogwemore	1221 KAYLYN CR. KENNESAW	770-919-7341
3	Faye Foguemore	3291 West Pleasant Rd	706-597-8871
4	JOHN G. BROOKS JR	2719 Old Augusta Rd. (DEARINGGA.)	336-312-7279
5	DAN GRUMPTON	477 ATLANTA HWY, WARRENTON, GA.	30828 706-465-9919
6	George Reeves	3390 Wrens Hwy Thomson	706 595 2980
7	Cayla Grims	3051 Mitchem Rd Deering SA	706 595 6455
8	Charles Foster	5435 Highway 242 Sandersville GA	706 552 7107
9	Chris King	1895 TALLASSEE RD - ATHENS	GA 706-365-3083
10	John & Wilma	385 Sweetwater Rd. N. Augusta	SC 803-275-2754
11	Kelmer Budjer	3077 Hwy 17N. Wrens, Ga.	30833 706-587-5110
12	Ronald Shepherd	P.O. Box 310, Thomson GA	30824 706 597 2560
PM 13	SAR PHILLIPS	P.O. Box 245, Grantville GA	706 650-5001
14	Don Hall	3694 Augusta Hwy, S.E. Dearing, GA.	706-595-3150
15	Denny M Blume	400 Fern St. New Ellenton, S.C.	Coal 706-394-1606

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE**

September 11, 2006

*	coordinator 2:25 Corporation 2:9 Corporation's 2:3	land 2:24,25 legal 2:24 line 2:4,19,23;4:2	sheet 2:12 sign-in 2:12 somebody 3:14
**** 3:6,23	County 2:8	M	Starks 2:21 start 3:10,11 statements 2:15
1	court 2:16 cream 3:14 Czyz 3:3	maintenance 3:4 making 2:14 management 2:22 map 3:1	subject 2:11 Subject 2:21 submit 2:14
11 2:2 13 4:3	D	matter 2:11,21 may 2:11,14,16 McDuffie 2:7 meeting 2:3,6;4:1,4	T
2	dealing 3:15 design 2:23 door 2:13 down 2:17 Dwaine 2:25	N	tables 2:10 Teresa 3:3 Thomson 2:7 Thomson-Warthen 2:4, 18;4:2
2006 2:2 2010 3:19,19	E	nice 3:17	together 3:14 Tony 2:24 transmission 2:4,19,22; 4:2
4	F	Olson 3:1 one 3:10 opened 4:4 operations 3:4 oral 2:14 others 2:11 owners 2:10	Transmission 2:2,9 Ty 3:4
40 3:13	G	P	U
5	easy 3:12 end 3:10 environmental 2:23 experts 2:12,21 external 3:2	O	up 3:10 used 2:12
500 2:4,18;4:2	H	packages 2:18 party 3:14 Pat 2:25 people 3:12,13,17 PhotoScience 3:1 planning 3:3 pm 2:1,3;25;4:5,6 power 3:18 present 2:17 problem 3:20 project 2:22 property 2:10 provided 2:16 public 2:3,20;3:16;4:1	V
6	I	Q	W
6:00 2:1;4:5	Fan 2:22 forms 2:15	Quan 2:22	wait 3:19,20 Warthen 3:11 Western 2:7 White 2:7 Wiley 3:3 Wright 2:25 writing 2:15
8	J	R	
8:00 3:25;4:6	Gayle 2:23 Georgia 2:2,8,9 Greg 2:21	reporter 2:16 request 2:16 rights 2:24 Rispin 3:2 RISPIN 2:1;3:25 Rob 3:3	
A	K	S	
addition 2:13 affairs 3:3 agents 3:1 answered 3:9,17 Approximately 4:3 area 4:4 arranged 2:10 available 2:19	ice 3:14 individuals 2:14;4:3 information 2:3;4:1 Information 2:18 Inn 2:7	September 2:2 seven 2:10	
B	L		
Barron 2:25 begun 2:5 Best 2:6 Boneville 3:11 Bowen 3:9 BOWEN 3:8	lack 3:18		
C			
call 3:13 care 3:13 Chaapel 2:24 Columns 2:7 comments 2:14,17 complain 3:12 compliance 2:24 concluded 4:3 Concluded 4:6 coordination 3:2			

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

September 11, 2006

TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE

Page 5

[1] C E R T I F I C A T E
[2]
[3] STATE OF GEORGIA:
[4] COUNTY OF RICHMOND:
[5] I hereby certify that the foregoing
[6] proceedings were taken down, as stated in
[7] the caption, and reduced to typewriting under
[8] my direction, and that the foregoing pages 1
[9] through 4 represent a true, complete,
[10] and correct transcript of said proceedings.
[11] This, the 20th day of September, 2003.
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[14] D. PAIGE FLEMING, CCR-B-1779, RPR
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE

September 11, 2006

Page 1

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[16] TITLE 22 PUBLIC MEETING
[17] FOR THE
[18] THOMSON TO WARTHEN 500 kV TRANSMISSION LINE
[19]
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[113] September 11, 2006
6:00 p.m.
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[116]
[117] Best Western White Columns Inn
1890 Washington Road
Thomson, Georgia
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[121] D. Paige Fleming, CCR-B-1779, RPR
[122]
[123]
[124]
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Page 3

[11] agents. Jeff Olson, PhotoScience map
[12] coordination. Jeannine Rispin, external
[13] affairs. Rob Wiley and Teresa Czyz, planning.
[14] Ty King, operations and maintenance.
[15]
[16] *****
[17]
[18] **MR. BOWEN:** I got all my questions
[19] answered. This Mr. Karl Bowen. This job, from
[110] one end up to the other, if you want to start it
[111] at Warthen or if you want to start at Boneville,
[112] it's not easy. You got people going to complain
[113] I don't care what. If you call 40 people
[114] together for an ice cream party, somebody
[115] couldn't make it. You're dealing with the
[116] public.
[117] The people were nice, and they answered my
[118] questions. We're going to have a lack of power
[119] in 2010. We can't wait until 2010 to do
[120] something. We can't wait until the problem is
[121] here.
[122]
[123] *****
[124]
[125] **MS. RISPIN:** The time is 8:00 p.m., and

Page 2

[11] **MS. RISPIN:** The time is 6:00 p.m.,
[12] September 11, 2006. Georgia Transmission
[13] Corporation's public information meeting for the
[14] Thomson-Warthen 500 kV transmission line has
[15] begun.
[16] The meeting is being held at the Best
[17] Western, White Columns Inn, Thomson, McDuffie
[18] County, Georgia.
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[110] arranged for seven tables where property owners
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Page 4

[11] the public information meeting for the
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[14] the area visited after the meeting opened at
[15] 6:00 p.m.
[16] (Concluded at 8:00 p.m.)
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

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1 And as far as I'm concerned, with the
2 payment of it, the company can have that portion
3 across the road, if the line went that way, and
4 then I would receive payment for just where they
5 crossed the big portion of the land.

6 Okay. That's it. That's my complaint.

7 * * * * *

8 MS. JEANNINE RISPIN: The time is 4:00
9 p.m. and the public information meeting for the
10 Thompson-Warthen 500 kV transmission line has
11 concluded.

12 Approximately 30 individuals from the area
13 visited after the meeting opened at 2:00 p.m.

14 (Meeting concluded at 4:00 p.m.)

15 * * * * *

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In The Matter Of:

*TITLE 22 PUBLIC MEETING FOR THE THOMSON
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September 11, 2006

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

4

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6 (Concluded at 8:00 p.m.)

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3 affairs. Rob Wiley and Teresa Czyz, planning.
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

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15 questions or statements in writing on forms
16 provided or they may request the court reporter
17 present to take down questions and comments.
18 Information packages on the Thomson-Warthen 500
19 kV transmission line are available for the
20 public.

21 Subject matter experts are: Greg Starks,
22 project management. Quan He Fan, transmission
23 line design. Gayle Houston, environmental
24 compliance. Tony Chaapel, land and legal rights
25 coordinator. Pat Barron and Dwaine Wright, land

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TITLE 22 PUBLIC MEETING
FOR THE
THOMSON TO WARTHEN 500 kV TRANSMISSION LINE

September 11, 2006
6:00 p.m.

Best Western White Columns Inn
1890 Washington Road
Thomson, Georgia

D. Paige Fleming, CCR-B-1779, RPR

B R O W N
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE**

September 11, 2006

*	E	others 2:11 owners 2:10	W
***** 3:6	environmental 2:23 experts 2:12,21 external 3:2	P	Western 2:7 White 2:7 Wiley 3:3 Wright 2:25 writing 2:15
1		packages 2:18 Pat 2:25 PhotoScience 3:1 planning 3:3 pm 2:1;3:8,13,14 present 2:17 project 2:22 property 2:10 provided 2:16 public 2:3,20;3:9	
11 2:2	F		
2	Fan 2:22 forms 2:15		
2:00 2:1;3:13 2006 2:2 27 3:11	G		
4	Gayle 2:23 Georgia 2:2,8,9 Greg 2:21	Q	
4:00 3:8,14	H	Quan 2:22	
5	held 2:6 Houston 2:23	R	
500 2:4,18;3:10	I	reporter 2:16 request 2:16 rights 2:24 Rispin 3:2 RISPIN 2:1;3:8 Rob 3:3	
A	individuals 2:14;3:11 information 2:3;3:9 Information 2:18 Inn 2:7	S	
addition 2:13 affairs 3:3 agents 3:1 Approximately 3:11 area 3:12 arranged 2:10 available 2:19	J	September 2:2 seven 2:10 sheet 2:12 sign-in 2:12 Starks 2:21 statements 2:15 subject 2:11 Subject 2:21 submit 2:14	
B	Jeannine 3:2 Jeff 3:1		
Barron 2:25 begun 2:5 Best 2:6	K		
C	King 3:4 kV 2:4,19;3:10		
Chaapel 2:24 Columns 2:7 comments 2:14,17 compliance 2:24 concluded 3:11 Concluded 3:14 coordination 3:2 coordinator 2:25 Corporation 2:9 Corporation's 2:3 County 2:8 court 2:16 Czyz 3:3	L	T	
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	Olson 3:1 opened 3:12 operations 3:4 oral 2:14	visited 3:12	

BROWN REPORTING, INC.

Min-U-Script®

(1) ***** - writing

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE

September 11, 2006

Page 1

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[6] TITLE 22 PUBLIC MEETING
[7] FOR THE
[8] THOMSON TO WARTHEN 500 kV TRANSMISSION LINE
[9]
[10]
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[12]
[13] September 11, 2006
[14] 2:00 p.m.
[15]
[16]
[17] Best Western White Columns Inn
1890 Washington Road
Thomson, Georgia
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[21] D. Paige Fleming, CCR-B-1779, RPR
[22]
[23]
[24]
[25]

Page 3

[1] agents. Jeff Olson, PhotoScience map
[2] coordination. Jeannine Rispin, external
[3] affairs. Rob Wiley and Teresa Czyz, planning.
[4] Ty King, operations and maintenance.
[5]
[6] *****
[7]
[8] MS. RISPIN: The time is 4:00 p.m., and
[9] the public information meeting for the
[10] Thomson-Warthen 500 kV transmission line has
[11] concluded. Approximately 27 individuals from
[12] the area visited after the meeting opened at
[13] 2:00 p.m.
[14] (Concluded at 4:00 p.m.)
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Page 2

[1] MS. RISPIN: The time is 2:00 p.m.,
[2] September 11, 2006. Georgia Transmission
[3] Corporation's public information meeting for the
[4] Thomson-Warthen 500 kV transmission line has
[5] begun.
[6] The meeting is being held at the Best
[7] Western, White Columns Inn, Thomson, McDuffie
[8] County, Georgia.
[9] Georgia Transmission Corporation has
[10] arranged for seven tables where property owners
[11] and others may ask questions of subject matter
[12] experts. A sign-in sheet is being used at the
[13] door. In addition to asking questions and
[14] making oral comments, individuals may submit
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Page 4

[1] C E R T I F I C A T E
[2]
[3] STATE OF GEORGIA:
[4] COUNTY OF RICHMOND:
[5] I hereby certify that the foregoing
[6] proceedings were taken down, as stated in
[7] the caption, and reduced to typewriting under
[8] my direction, and that the foregoing pages 1
[9] through 3 represent a true, complete,
[10] and correct transcript of said proceedings.
[11] This, the 20th day of September, 2003.
[12]
[13]
[14] D. PAIGE FLEMING, CCR-B-1779, RPR
[15]
[16]
[17]
[18]
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In The Matter Of:

*TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE*

September 11, 2006

*BROWN REPORTING, INC.
Atlanta, Augusta, Macon, Rome & Savannah
1740 Peachtree Street N.W.
Atlanta, GA U.S.A. 30309
(404) 876-8979 or (800) 637-0293*

Original File 0911MEE1.v1, Pages 1-4

Word Index included with this Min-U-Script®

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF RICHMOND:

I hereby certify that the foregoing proceedings were taken down, as stated in the caption, and reduced to typewriting under my direction, and that the foregoing pages 1 through 3 represent a true, complete, and correct transcript of said proceedings.

This, the 20th day of September, 2003.


D. PAIGE FLEMING, CCR-B-1779, RPR

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

3

1 agents. Jeff Olson, PhotoScience map
2 coordination. Jeannine Rispin, external
3 affairs. Rob Wiley and Teresa Czyz, planning.
4 Ty King, operations and maintenance.

5
6 *****

7
8 MS. RISPIN: The time is 4:00 p.m., and
9 the public information meeting for the
10 Thomson-Warthen 500 kV transmission line has
11 concluded. Approximately 27 individuals from
12 the area visited after the meeting opened at
13 2:00 p.m.

14 (Concluded at 4:00 p.m.)
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

2

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3 Corporation's public information meeting for the
4 Thomson-Warthen 500 kV transmission line has
5 begun.

6 The meeting is being held at the Best
7 Western, White Columns Inn, Thomson, McDuffie
8 County, Georgia.

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10 arranged for seven tables where property owners
11 and others may ask questions of subject matter
12 experts. A sign-in sheet is being used at the
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TITLE 22 PUBLIC MEETING
FOR THE
THOMSON TO WARTHEN 500 kV TRANSMISSION LINE

September 11, 2006
2:00 p.m.

Best Western White Columns Inn
1890 Washington Road
Thomson, Georgia

D. Paige Fleming, CCR-B-1779, RPR

BROWN
Reporting INC.
513 Ellis Street
Augusta, GA 30901

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Thomson-Warthen 500 kV Transmission Line
Warren-County Community Service Building

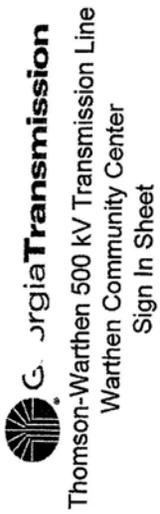
Sign In Sheet *Warren Community*

Tue

Monday, July 14, 2006 - 6:00 - 8:00 p.m.

	Name	Street Address	Phone
1	<i>Margaret H. Hitchcock</i>	<i>623 Evergreen Dr.</i>	<i>552-3610</i>
2	<i>Alison Hitchcock</i>		
3			
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Tuesday, July 11, 2006 - 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1			
2	<i>P. Robert Brown Sr.</i>	<i>547 Mt. Zion Rd.</i>	
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4			
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



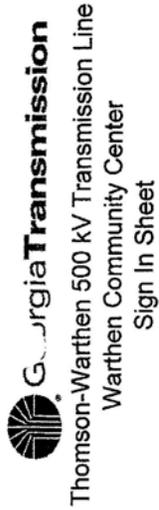
Thomson-Warthen 500 kV Transmission Line
Warthen Community Center
Sign In Sheet

Tuesday, July 11, 2006 - 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	Bill GARNER	11161 Hwy 15N Warthen, Ga	478-552-2747
2	K. J. LANDERS	5148 HERSHEY DR DUBWOODY GA	220 496 6553
3	Robert J. Landers	3990 Whitewater Pl. Norcross Ga.	770-662-8220
4	Krista Albright	1600 Mills Lindsey School Rd Warthen, GA	478-240-2400
5	FRANK CHANDLER	1600 MILLS LINSEY SCHOOL RD	478-240-2400
6	Janna O. Cook	430 Raper Rd - Canton Ga.	770-475-0103
7	Donna Cook	" "	" "
8	Albion Budzko	IEC 3077 Hwy 17N, Wm, Ga. 30833	706-547-5110
9	Mr + Mrs Kevin Shelley	499 Harmony Church Rd Swille	478-454-4045
10	Mr. Ray Abbott Bonnie Moore	579 Union Church, kd. Warthen GA	478 552-7023
11	Herman G. Swiden	2881 Hamburg St Pk. Rd. Warthen, GA	478-552-2332
12	Elaine W. Barker	4325 mayview Rd. Swille	478-348-4689
13	Bernice C. Suckler	588 Canton Rd. Swille	478-552-6873
14	Bernice Cunningham	378 Canton Rd. Swille	478-552-5493
15			

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7.1

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Tuesday, July 11, 2006 - 2:00 - 4:00 p.m.

	Name	Street Address	Phone
1	Prin Vazey CASON	7399 Hwy 123 Mitchell Ga 30850	706-598-2697
2	Stephanie Chapman	777 E. Glendale Rd. Warthen Ga 31082	478-552-0780
3	Edward G. Walker	5300 Leeburn Rd #20	Macon Ga 31210
4	John E. Walker	125 Leeburn Way	Warthen Ga 31082
5	Elizabeth A. Walker	510 Walker Pl. Warthen, Ga 31084	478-552-2757
6	Donald Walker	560 WALKER RD. WARTHEN, GA 31084	478-552-2757
7	Carl Hodges	609 KINNEY ST SANDERSVILLE	GA 31082 478-552-3434
8	William C. Hodges	7010 Hwy. 688 Tennille GA 31087	478-640-1112
9	Phyllis Smith	PO Box 643, Okeech, FL 34761	407-656-4394
10	Kyame Chappin	1823 AMER-904 ROAD	478-552-2856
11	Eric Garner	19472 Sparden-Davisboro Rd N GA	478-552-2778
12	Betty W. Garner	259 Mansfield Brown Rd Warthen GA	478-552-2687
13	Yvonne D. Pittman	4570 HAMPSHIRE STATE PK RD	478-552-1069
14	Randy Yarbrough	PO Box 1442 Thomson, Ga.	706-595-9274
15	Margaret T. Walker	10870 Hwy 15N Warthen, Ga 31084	478-552-2868

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**PUBLIC HEARING FOR THE THOMSON-WARTHEN
500 kV TRANSMISSION LINE**

July 11, 2006

1	F	Printing 2:16 proceedings 3:11,15 project 2:7 Project 2:10,19 provide 2:6 Public 2:1,21
1 3:13 11th 2:24 12th 3:16	Fan 2:17 foregoing 3:10,13 Fourman 2:12	
2	G	Q
2 3:14 2006 2:24;3:16 2008 3:20	GALE 3:19 Gayle 2:12 Georgia 2:5,9 GEORGIA 3:7 GIS 2:13 Greg 2:10	Quan 2:17
3		R
30th 3:20		Raese 2:18 reduced 3:12 represent 2:18,19;3:14 RICHMOND 3:8 RISPIN 2:1,21 Rob 2:17 RPR 3:19
5	H	
5 2:25 5:50 2:4 500 2:2	Hearing 2:2 hereby 3:10 Houston 2:13	S
8	I	
8:00 2:24;3:1	information 2:6,8	SALENGER 3:19 set 2:7 seven 2:7 several 2:15 Signs 2:13 Smith 2:14 Starks 2:11 started 2:3,4 STATE 3:7 stated 3:11 stations 2:8 SUSAN 3:19 System 2:16
A	J	
accept 2:6 actually 2:4 agents 2:16 along 2:15 attendance 2:9 attended 2:25	JEANNINE 2:1,21 John 2:18 July 2:24;3:16	
	K	
	kV 2:2	
C	L	
came 2:23 caption 3:12 CCR-B-1942 3:19 certify 3:10 Chaapel 2:15 Chris 2:14 close 2:23 comments 2:6 complete 3:14 concluded 3:1 contract 2:16 COUNTY 3:8	land 2:16 Land 2:14 Line 2:3,23	T
	M	Thomson-to-Warthen 2:2,22 Tony 2:14,15 transcript 3:15 Transmission 2:3,5,10, 23 true 3:14 typewriting 3:12
	Maintenance 2:11 Management 2:19 Manager 2:10 Mapping 2:13 May 3:20 Meeting 2:22;3:1 Mike 2:12	U
D		under 3:12 up 2:7
day 3:16,20 direction 3:13 down 3:11	O	W
	o'clock 2:24 Operations 2:11	Wiley 2:17
E	P	
Engineering 2:18 Environmental 2:12	pages 3:13 people 2:25 Photo 2:13 pm 3:1	

BROWN REPORTING, INC.

Min-U-Script®

(1) 1 - Wiley

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

PUBLIC HEARING FOR THE THOMSON-WARTHEN
500 kV TRANSMISSION LINE

July 11, 2006

Page 1

Page 3

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PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

July 11, 2006
5:50 p.m.

Warthen Community Center
Warthen, Georgia

Susan Gale Salenger, CCR-B-1942, RPR

(11) (Meeting concluded at 8:00 p.m.)
(12)
(13)
(14)
(15) CERTIFICATE
(16)
(17) STATE OF GEORGIA:
(18) COUNTY OF RICHMOND:
(19)
(20) I hereby certify that the foregoing
(21) proceedings were taken down, as stated in
(22) the caption, and reduced to typewriting under
(23) my direction, and that the foregoing pages 1
(24) through 2 represent a true, complete,
(25) and correct transcript of said proceedings.
This, the 12th day of July, 2006.

SUSAN GALE SALENGER, CCR-B-1942, RPR
My commission expires on the
30th day of May, 2008.

Page 2

(11) MS. JEANNINE RISPIN: The Public
(12) Hearing for the Thomson-to-Warthen 500 kV
(13) Transmission Line started at -- well,
(14) actually, it started at about 5:50.
(15) Georgia Transmission is here to
(16) provide information and accept comments on
(17) the project. We have set up seven
(18) information stations.
(19) In attendance from Georgia
(20) Transmission is the Project Manager, Greg
(21) Starks; from Maintenance and Operations,
(22) Mike Fourman; from Environmental, Gayle
(23) Houston; from Photo Signs GIS Mapping, we
(24) have Chris Smith; for Land, we have Tony
(25) Chaapel, and along with Tony are several
contract land agents; from System Printing,
we have Rob Wiley; we have Quan Fan here to
represent Engineering; and John Raese is
here to represent Project Management.

MS. JEANNINE RISPIN: The Public
Meeting for the Thomson-to-Warthen
Transmission Line came to a close at
8:00 o'clock on July the 11th, 2006.
5 people attended.

BROWN REPORTING, INC.

Min-U-Script®

(1) Page 1 - Page 3

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In The Matter Of:

*PUBLIC HEARING FOR THE THOMSON-WARTHEN
500 kV TRANSMISSION LINE*

July 11, 2006

*BROWN REPORTING, INC.
Atlanta, Augusta, Macon, Rome & Savannah
1740 Peachtree Street N.W.
Atlanta, GA U.S.A. 30309
(404) 876-8979 or (800) 637-0293*

Original File 0711mee1.v1, Pages 1-3

Word Index included with this Min-U-Script®

1 (Meeting concluded at 8:00 p.m.)
2
3

4
5 C E R T I F I C A T E
6

7 STATE OF GEORGIA:

8 COUNTY OF RICHMOND:
9

10 I hereby certify that the foregoing
11 proceedings were taken down, as stated in
12 the caption, and reduced to typewriting under
13 my direction, and that the foregoing pages 1
14 through 2 represent a true, complete,
15 and correct transcript of said proceedings.

16 This, the 12th day of July, 2006.

17 
18

19 SUSAN GALE SALENGER, CCR-B-1942, RPR
20 My commission expires on the
21 30th day of May, 2008.
22
23
24
25

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

2

1 MS. JEANNINE RISPIN: The Public
2 Hearing for the Thomson-to-Warthen 500 kV
3 Transmission Line started at -- well,
4 actually, it started at about 5:50.

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7 the project. We have set up seven
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12 Mike Fourman; from Environmental, Gayle
13 Houston; from Photo Signs GIS Mapping, we
14 have Chris Smith; for Land, we have Tony
15 Chaapel, and along with Tony are several
16 contract land agents; from System Printing,
17 we have Rob Wiley; we have Quan Fan here to
18 represent Engineering; and John Raese is
19 here to represent Project Management.

20 * * * * *

21 MS. JEANNINE RISPIN: The Public
22 Meeting for the Thomson-to-Warthen
23 Transmission Line came to a close at
24 8:00 o'clock on July the 11th, 2006.
25 5 people attended.

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PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

July 11, 2006
5:50 p.m.

Warthen Community Center
Warthen, Georgia

Susan Gale Salenger, CCR-B-1942, RPR

BROWN
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

1 (Meeting concluded at 4:00 p.m.)
2
3

4
5 C E R T I F I C A T E
6

7 STATE OF GEORGIA:

8 COUNTY OF RICHMOND:
9

10 I hereby certify that the foregoing
11 proceedings were taken down, as stated in
12 the caption, and reduced to typewriting under
13 my direction, and that the foregoing pages 1
14 through 6 represent a true, complete,
15 and correct transcript of said proceedings.

16 This, the 12th day of July, 2006.
17

18 

19 SUSAN GALE SALENGER, CCR-B-1942, RPR
20 My commission expires on the
21 30th day of May, 2008.
22
23
24
25

1 Walker. I have a very unusual tree growing
2 on the right-of-way that I sure hate to see
3 destroyed, and I don't know anything can be
4 done about it. It can't be transplanted.
5 But I just want to register that this
6 unusual tree will be destroyed with the
7 construction of the powerline.

8 * * * * *

9 MR. HERMAN SNIDER: Well, we don't
10 have but about a hundred acres in that
11 piece of land and it's a block off from the
12 other, and there's cows and things like
13 that that need all the open they can get.
14 I don't know exactly where it's gonna cross
15 there and how much it's gonna take up, but
16 I'd really appreciate taking as little off
17 of it as it has to.

18 I just appreciate the opportunity to
19 say what I think, and that's it.

20 * * * * *

21 MS. JEANNINE RISPIN: Okay. The
22 Public Meeting for the Thomson-to-Warthen
23 Transmission Line came to a close at
24 4:00 o'clock on July the 11th, 2006.
25 37 people attended.

1 You take it up in 20 years, have
2 growth on timber, you know, we could do it
3 for \$12,000 on timber, and he was talking
4 about y'all wasn't gonna pay for
5 speculation, and y'all doing the same thing
6 on speculation with what the roads is gonna
7 be in Thomson, so that's a two-way sword.

8 Y'all want to play the game. Y'all
9 don't want anybody else to get in the game
10 and play it.

11 That's about it right now.

12 * * * * *

13 MRS. BONNIE MOON: I do not wish for
14 it to be on the property because of all of
15 the wildlife and the animals and, you know,
16 we have this land to try to keep it as
17 natural, in its natural state as possible,
18 not to add any electrical. I mean, you
19 know, that just takes away from the beauty
20 of it, and who knows what the health risks
21 are involved with it as, you know, years go
22 by. You know, I just don't want it.

23 Don't know what else to say.

24 * * * * *

25 MR. DONALD WALKER: My name is Donald

1 where they got 40 some residents -- and my
2 wife is here -- there ain't but three dots
3 and all.

4 They're going out of the way to come
5 through the Hill Islands and we done told
6 them we just about give them the
7 right-of-way to come through, you know.

8 Where the gas line is, that would be
9 one way to cross it, and now that's one of
10 the three ways we showed them, and they
11 were gonna come across our place. We got
12 one big high line and a gas line and a
13 third line. Now, this is gonna be the
14 fourth one. They have 80 acres, but
15 they're gonna take almost 30 acres off of
16 the place, and they ain't paid us no
17 attention now.

18 Well, I'm just telling the truth.

19 They was saying on there, when I had
20 talked to Dwaine Wright -- I think he's
21 y'all's man -- and we was talking about the
22 lease and the perpetuating lease on it, and
23 we'll cut the timber, and that's \$5600
24 extra for the timber, and then they said
25 they was gonna pay that.

1 Why was the -- why was this survey
2 done and it came out at an angle and then
3 jutted back at this angle?

4 I know they wanted to go into where
5 the power plant was.

6 (Discussion off the record.)

7 MS. MARGARET WALKER: But that's
8 another question that I was wanting to know
9 about the turning across the two pieces of
10 property, one on one side of 15 and one on
11 the other side of Highway 15, and it just
12 splits them open, and I just don't think
13 that's right to have it split open and
14 there's other property there that doesn't
15 seem to be approached that way.

16 That's about all that I know right
17 this minute. There's plenty more that I
18 could say from having looked at the maps.

19 * * * * *

20 MR. RAY MOON: We done showed them
21 three different routes that they could come
22 around built 3 miles closer and they still
23 don't have to come across our place either
24 way.

25 And then over there on Hattaway Road,

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

2

1 MS. JEANNINE RISPIN: The Public
2 Hearing for the Thomson-to-Warthen 500 kV
3 Transmission Line started at -- well,
4 actually, it started at about 1:15.

5 Georgia Transmission is here to
6 provide information and accept comments on
7 the project. We have set up seven
8 information stations.

9 In attendance from Georgia
10 Transmission is the Project Manager, Greg
11 Starks; from Maintenance and Operations,
12 Mike Fourman; from Environmental, Gayle
13 Houston; from Photo Signs GIS Mapping, we
14 have Chris Smith; for Land, we have Tony
15 Chaapel, and along with Tony are several
16 contract land agents; and from System
17 Printing, we have Rob Wiley.

18 * * * * *

19 MS. MARGARET WALKER: My name is
20 Margaret Walker. I wanted to find out why
21 we couldn't have it all surveyed ourselves
22 and find out the right-of-way or the amount
23 of land. I just wonder why they had to go
24 over our land twice, split it open twice,
25 and it's already been split open twice.

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PUBLIC HEARING FOR THE
THOMSON-WARTHEN 500 kV TRANSMISSION LINE

July 11, 2006
1:15 p.m.

Warthen Community Center
Warthen, Georgia

Susan Gale Salenger, CCR-B-1942, RPR

B R O W N
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Thomson-Warthen 500 kV Transmission Line
Warren County Community Service Building
Sign In Sheet

Monday, July 10, 2006 - 6:00 - 8:00 p.m.

	Name	Street Address	Phone
1	Mr + Mrs Buddy Haddon	2265 County Line Rd East Gibson	465-7638
2	Marcus + Ed Ray	160 Purvis School Rd Warrenton	706-465-2830
3	Martin Normand	1525 Purvis School Rd	706-465-3749
4	Keel W. Hayward	P.O. Box 306 Warrenton, OR 97146	706-465-3395
5	DAVID FRUCE	3174 Hwy 171W Gibson, GA 30810	706-527-5002
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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

**TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE**

July 10, 2006

		stations 2:5	
1	I		
10th 2:2	information 2:5,6	T	
5	J	ten 2:20 Thomson 2:3,19 Tony 2:13 transmission 2:3 Transmission 2:4	
500 2:3,19	July 2:2		
6	K	U	
6:00 2:1	kV 2:3,19		
8	L	up 2:4	
8:00 2:20,22	land 2:15 line 2:4,19	W	
A	M	Warthen 2:3,19 Wiley 2:12 Wright 2:14	
acquisition 2:15 approximately 2:20 attendees 2:21	maintenance 2:8 manager 2:16 mapping 2:11 meeting 2:2,18 Meeting 2:22 Michael 2:7 Monday 2:2 much 2:21		
B			
Barron 2:14 begun 2:4			
C	O		
came 2:19 Chapel 2:13 Chris 2:10 close 2:19 concluded 2:22	o'clock 2:1,20 operations 2:8		
D	P		
design 2:12 different 2:5 Dwaine 2:13	Pat 2:14 planning 2:13 pm 2:22 pretty 2:21 project 2:6,16 provide 2:5 public 2:2,18		
E			
engineering 2:12 environment 2:9			
F	Q		
Fan 2:11 Fourman 2:7	Quan 2:11		
G	R		
Gayle 2:8 Georgia 2:4 GIS 2:10 Greg 2:15	represent 2:8,9,12,13,14 RISPIN 2:1,18 Rob 2:12 route 2:10		
H	S		
Houston 2:9	selection 2:10 set 2:4 seven 2:5 Smith 2:10 software 2:11 Starks 2:15		

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(1) 10th - Wright

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE

July 10, 2006

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[6] TITLE 22 PUBLIC MEETING
[7] FOR THE
[8] THOMSON TO WARTHEN 500 kV TRANSMISSION LINE
[9]
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[12]
[13] July 10, 2006
[14] 6:00 p.m.
[15]
[16]
[17] Warren County Community Center
[18] 48 Warren Street
[19] Warrenton, Georgia
[20]
[21] D. Paige Fleming, CCR-B-1779, RPR
[22]
[23]
[24]
[25]

[1] CERTIFICATE
[2]
[3] STATE OF GEORGIA:
[4] COUNTY OF RICHMOND:
[5] I hereby certify that the foregoing
[6] proceedings were taken down, as stated in
[7] the caption, and reduced to typewriting under
[8] my direction, and that the foregoing pages 1
[9] through 2 represent a true, complete,
[10] and correct transcript of said proceedings.
[11] This, the 14th day of July, 2006.
[12]
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[14] D. PAIGE FLEMING, CCR-B-1779, RPR
[15]
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Page 2

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[2] Monday, July the 10th. And the public meeting
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[6] information about the project.
[7] Let's see. Michael Fourman is here to
[8] represent maintenance and operations. Gayle
[9] Houston is here to represent environment and
[10] route selection. Chris Smith is here with GIS
[11] software and mapping. Quan Fan is here to
[12] represent engineering and design. Rob Wiley is
[13] here to represent planning. Tony Chapel, Dwaine
[14] Wright, and Pat Barron are here to represent
[15] land acquisition. And then Greg Starks is the
[16] project manager. And that's it.
[17] *****
[18] MS. RISPIN: The public meeting for the
[19] Thomson to Warthen 500 kV line came to a close
[20] at 8:00 o'clock. We had approximately ten
[21] attendees. And that's pretty much it.
[22] (Meeting concluded at 8:00 p.m.)
[23]
[24]
[25]

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In The Matter Of:

*TITLE 22 PUBLIC MEETING FOR THE THOMSON
TO WARTHEN 500 kV TRANSMISSION LINE*

July 10, 2006

*BROWN REPORTING, INC.
Atlanta, Augusta, Macon, Rome & Savannah
1740 Peachtree Street N.W.
Atlanta, GA U.S.A. 30309
(404) 876-8979 or (800) 637-0293*

Original File 0710MEET.v1, Pages 1-3

Word Index included with this Min-U-Script®

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF RICHMOND:

I hereby certify that the foregoing proceedings were taken down, as stated in the caption, and reduced to typewriting under my direction, and that the foregoing pages 1 through 2 represent a true, complete, and correct transcript of said proceedings.

This, the 14th day of July, 2006.

D. Paige Fleming
D. PAIGE FLEMING, CCR-B-1779, RPR

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TITLE 22 PUBLIC MEETING
FOR THE
THOMSON TO WARTHEN 500 KV TRANSMISSION LINE

July 10, 2006
6:00 p.m.

Warren County Community Center
48 Warren Street
Warrenton, Georgia

D. Paige Fleming, CCR-B-1779, RPR

BROWN
Reporting INC.
513 Ellis Street
Augusta, GA 30901
706-724-2778

APPENDIX C

**Correspondence with the
Georgia Department of Natural Resources
Wildlife Resources Division
Nongame Conservation Section**

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



6801 Governors Lake Parkway
Building 200
Norcross, Georgia 30071
T 770.455.8555
F 770.455.7391
www.jjg.com

November 17, 2006

Ms. Katrina Morris
Georgia Natural Heritage Program
2065 U.S. Hwy. 278 S.E.
Social Circle, Georgia 30025

**RE: Coordination Request for Georgia Transmission Corporation
Thomson – Warthen 500 kV Transmission Line Project
McDuffie, Glascock, Washington, and Warren Counties, Georgia**

Dear Ms. Morris:

Jordan, Jones, and Goulding (JJG) has been contracted by the Georgia Transmission Corporation (GTC) to perform routine ecological investigations, which include the identification of jurisdictional wetlands, waters of the U.S., and a protected species survey for the above-referenced project. We are requesting your office to advise us of any documented elemental occurrences of any protected species within the immediate vicinity of the project area.

The project area is located across McDuffie, Warren, Glascock, and Washington Counties, Georgia. The project is located within the Thomson East, Bowdens Pond, Bastonville, Beall Springs, Mitchell, and Warthen, Georgia, 7.5-minute topographic maps from the United States Geological Survey. Please find enclosed a project location map.

The project will consist of the construction of a 500 kV Transmission Line that will begin approximately 5 miles east of Thomson, Georgia at the Thomson Substation along Hampton Davis Road. The line traverses south for approximately 2.5 miles before turning due west at Wire Road (U.S. 78). The line traverses approximately 0.5 miles before turning southwest. The line traverses in a southwest direction for approximately 34 miles before terminating just west of Warthen Road (Highway 15) at the Warthen Substation. In total, the transmission line will traverse approximately 37 miles. Constructing this transmission line will address the power needs for this area and reduce the vulnerability to voltage problems.

Protected species database searches for McDuffie, Warren, Glascock, and Washington Counties indicates the potential presence of the following fauna: bald eagle (*Haliaeetus leucocephalus*), red-cockaded woodpecker (*Picoides borealis*), Atlantic pigtoe mussel (*Fusconaia masoni*), and robust redhorse (*Moxostoma robustum*). In addition, the

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Ms. Katrina Morris
November 17, 2006
Page 2

JORDAN
JONES &
GOULDING

following floral species are listed as potentially occurring: bay star-vine (*Schisandra glabra*), Harper dodder (*Cuscuta harperi*), and granite rock stonecrop (*Sedum pusillum*).

In addition, the GNHP quarter quad database was also reviewed for known occurrences of these protected species. The database search indicates that there are known locations of the federally-threatened pool sprite (*Amphianthus pusillus*) and the federally-endangered mat-forming quillwort (*Isoetes tegetiformans*). In addition, there are known locations of the state-endangered Atlantic pigtoe mussel. There are also records of the following GNHP-tracked species: Alexander rock aster (*Aster avitus*), flatrock fimbry (*Fimbristylis brevivaginata*), American pillwort (*Pitularia americana*), spotted turtle (*Clemmys guttata*), brassy jumprock (*Moxostoma* sp. 4), and redmargin zephyrlily (*Zephyranthes simpsonii*).

JJG appreciates your timely attention to this matter. If you have any questions or need additional information, please call me at (678) 333-0495.

Sincerely,

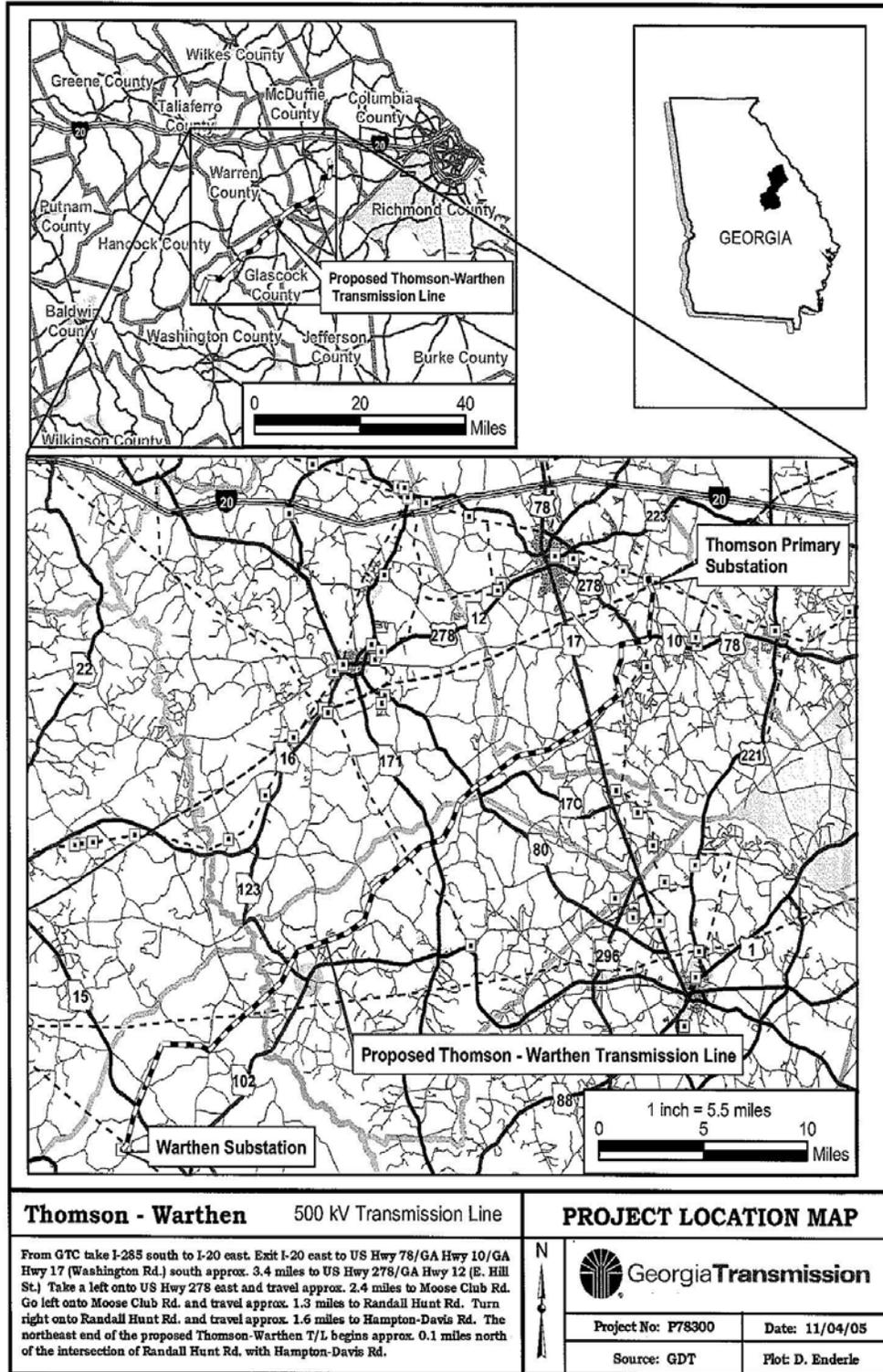
JORDAN, JONES, AND GOULDING, INC.



Kevin A. Mullinax
Ecologist

cc: Gayle Houston, GTC

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment



Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

Nbel Holcomb, Commissioner
Dan Forster, Director

Georgia Department of Natural Resources
Wildlife Resources Division

Nongame Conservation Section
2065 U.S. Highway 278, S.E., Social Circle, Georgia 30025-4743
(770) 918 6411

December 11, 2006

Kevin Mullinax
Ecologist
Jordan, Jones, & Goulding
6801 Governors Lake Parkway
Building 200
Norcross, GA 30071

Subject: Known Occurrences of Conservation Areas and Special Concern Animals and Plants On or Near GA Trans Corp, Thomson-Warthen 500 kV Transmission Line Project, McDuffie, Glascock, Washington & Warren Counties, Georgia

Dear Mr. Mullinax:

This is in response to your request of November 17, 2006. According to our records, within a three-mile radius of the project corridor there are the following Natural Heritage Database occurrences:

Thomas Primary Substation (-82.41153, 33.45172; NAD27):
No occurrences.

(-82.44135, 33.39138; NAD27):
Meduffie PFA and Fish Hatchery [Georgia DNR] approx. 0.5 mi. SE of site

(-82.50137, 33.35817; NAD27):
Cyprinella nivea (Whitefin Shiner) approx. 2.0 mi. E of site in Brier Creek
Brier Creek [High Priority Stream] approx. 1.5 mi. N of site

(-82.57139, 33.33105; NAD27):
No occurrences.

(-82.62371, 33.28871; NAD27):
No occurrences.

(-82.67699, 33.24718; NAD27):
Zephyranthes simpsonii (Simpson Rain Lily) approx. 2.5 mi. SW of site

(-82.71867, 33.19786; NAD27):
GA *Clemmys guttata* (Spotted Turtle) approx. 1.5 mi. W of site in the Ogeechee River
Hamburg State Park [Georgia DNR] approx. 2.5 mi. W of site
Ogeechee River [High Priority Stream] approx. 1.0 mi. NW of site

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Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

(-82.74234, 33.14170; NAD27):
Ogeechee River [High Priority Stream] approx. 2.5 mi. E of site

(-82.80631, 33.09746; NAD27):
Williamson Swamp Creek [High Priority Stream] approx. 1.0 mi. NE of site

Warthen Substation (-82.83235, 33.04042; NAD27):
No occurrences.

* Entries above preceded by "US" indicates species with federal status in Georgia (Protected or Candidate). Species that are federally protected in Georgia are also state protected; "GA" indicates Georgia protected species.

Recommendations:

We have no records of species of concern within the project corridor. In order to protect aquatic habitats and water quality, we recommend that all machinery be kept out of creeks during substation construction. Streams should not be culverted/forded to allow equipment access during construction or for future ROW maintenance. Further, we strongly advocate retaining at least a 25-foot vegetative buffer between each stream bank and the closest power pole, and allow this buffer to regenerate to shrub-scrub growth after the pipe is installed (if the landowner is willing). We realize that some trees may have to be removed, but recommend that shrubs and ground vegetation be left in place. Wider buffers may be needed for projects where land slopes sharply toward the stream being crossed. We also recommend that stringent erosion control practices be used during construction activities and that vegetation is re-established on disturbed areas as quickly as possible. Silt fences and other erosion control devices should be inspected and maintained until soil is stabilized by vegetation. Please use natural vegetation and grading techniques (e.g. vegetated swales, turn-offs, vegetated buffer strips) that will ensure that the project area does not serve as a conduit for storm water or pollutants into the water during or after construction. These measures will help protect water quality in the vicinity of the project as well as in downstream areas.

Please be aware that this project occurs near several high priority streams. As part of an effort to develop a comprehensive wildlife conservation strategy for the state of Georgia, the Wildlife Resources division has developed and mapped a list of streams that are important to the protection or restoration of rare aquatic species and aquatic communities. High priority waters and their surrounding watersheds are a high priority for a broad array of conservation activities, but do not receive any additional legal protections. We now have GIS ESRI shapefiles of GA high priority waters available on our website (<http://www.georgiawildlife.com/content/displaycontent.asp?txtDocument=89&txtPage=13>). Please contact the Georgia Natural Heritage Program if you would like additional information on high priority waters.

IR 11132

Thomson-Warthen 500 kV Transmission Line
Environmental Assessment

New Data Available on GNHP Website

We have recently updated the GNHP Website!!! You can view the updated rare species and natural community information by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at:
<http://georgiawildlife.dnr.state.ga.us/content/displaycontent.asp?txtDocument=89>

An updated ESRI shape file of our rare species and natural community data by quarter quad and county is also available. It can be downloaded from:
<http://georgiawildlife.dnr.state.ga.us/assets/documents/gnhp/gnhpds.zip>

Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Georgia Natural Heritage Program comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Georgia Natural Heritage Program can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know of populations of special concern species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<http://www.georgiawildlife.com>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,



Katrina Morris
Environmental Review Coordinator

IR 11132