

Answering the 'What Ifs' of Electric Transmission



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Consider this scenario: an electric utility, a subdivision and another group of landowners are at odds over a proposed high-voltage power line and your county is faced with how to address the competing interests. When transmission projects affect your community, what should you know about balancing a reliable electric grid with the needs of individual property owners?

Based on our experience with county commissioners, our team developed a list below of common questions officials ask and our views on each topic.

If you're not familiar with Georgia Transmission Corp., our not-for-profit builds and maintains high-voltage systems for Georgia's Electric Membership Cooperatives (EMCs). We build 50 to 200 miles of high-voltage power lines and dozens of substations each year. Our construction and maintenance operations touch nearly every county in the state. Since per-capita energy use grows at a faster rate than the state's population, transmission line construction even reaches counties unaffected by population growth.

What If a New Transmission Line Route is Planned in My Community?

Georgia Transmission is able to site lines objectively, using a siting methodology that combines input from 200 environmentalists, agency officials, civic leaders and engineers. When routing lines, we work to find the line with the least impact on people and the

environment while meeting the needs of the electric grid. Once we have viable corridors based on objective studies that account for geographical, environmental and engineering concerns, we actively engage elected officials and people living along the proposed route to make the best routing selection possible. The good news for county officials is that we work with each affected property owner and very few construction projects become public controversies. In the past five years, only three new power line projects, out of several dozen, have received significant news attention. All have been resolved.

Why Not Bury the Lines?

The solution seems simple: just build it underground.

The county needs the new power line to keep the electric system reliable, but people don't want it near their property. For many county officials encountering this problem, putting the line underground seemed like the easy way to allay the citizens' concerns. But it isn't that simple. Why not? It comes with a hefty price.

Unlike lower voltage distribution power lines, high-voltage transmission lines are rarely built underground because of cost. If the \$16 million tab for underground construction on a contested 1.3-mile stretch in north Georgia was paid by the local EMC's customers – we call members – each customer's share would have been \$1,316.66. That was the cost estimate; that line was built above ground. In an extreme case in Connecticut, a proposed 69-mile transmission project with 24 miles underground is now expected to exceed \$1 billion. So who pays? Is it customers, developers, utilities or local governments?

What If the Economic Slowdown Means These Lines and Substations Aren't Needed?

You might be surprised to know that Georgia's demand for electricity in 2010 is expected to be about 32,000 megawatts (MWs), about double what it was in 1990.

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Hardhats, cranes and bucket trucks are a common sight as the state's utilities build out the power grid to keep electric reliable. Georgia Transmission's crews installed this transmission line a few years ago to prevent overloading of the transmission system in Forsyth and Cherokee Counties.

Photo courtesy of Georgia Transmission.

Per-capita power usage in the United States is expected to increase almost 25 percent over 2007 levels by the year 2030, according to the Energy Information Administration. With the size and scope of transmission projects, completing one takes years. Despite a sluggish economy, we must plan now for what we will need in the future.

Since 2000, Georgia's electric co-ops have added 435 new miles of transmission lines and 126 substations for \$885 million. Over the next five years, these

electric co-ops will invest another \$890 million in transmission systems to keep the lights on in Georgia. This includes the largest upgrade of the bulk transmission system – the backbone of the state's power grid – in 20 years. Georgia Transmission is now working on bulk transmission lines in parts of Jackson, Oconee, Walton, Morgan, Putnam and Athens-Clarke counties.

What if We Just Conserved Energy?

While energy conservation is important, demand cannot be met through

conservation alone. Though some advocacy groups say the building of future power plants and power lines can be curtailed through aggressive customer conservation, that's unlikely to be the case here. While Georgia's EMCs continue to push for better energy conservation, many new plants and power lines will be needed to keep the power grid strong as Georgia remains one the top growing states for decades to come.

Will the Utility Use Eminent Domain?

Since 2000, Georgia Transmission has achieved agreement with property owners on more than 97 percent of its transactions. Months of land use, environmental and engineering studies are followed by public meetings and one-on-one work to accommodate and fairly compensate landowners. Georgia Transmission works hard to keep eminent domain a last resort to prevent one person from denying a community the power it needs.

It's good news that most Georgians enjoy reliable electricity. And it's good that electric service in Georgia is less expensive, on average, than the national average. But we can't relax. The system is still under pressure, and many national policies are being changed. With millions of people coming to share your electricity, it is always possible that a project delay in your part of the state could trigger more frequent and longer outages, emergency conservation during peak demand, greater risk of blackouts and other problems. This would affect new and existing customers alike. A strong electric grid is attractive to new industry and essential for the state's economic growth.

Georgia Transmission will continue to prepare for the state's future electric demands, and continue to work with your communities to find suitable locations for new lines and substations. ■

For a free copy of a civic leaders' guide entitled "Your Right to Light," please contact Barry Dillon at Georgia Transmission at barry.dillon@gatrans.com or call 770-270-7050.



POLK COUNTY

POLK COUNTY — WELCOME HOME

Nestled in the rolling foothills of Appalachia, replete with green valleys and picturesque mountains, Polk County is a beautiful place in which to work and live. Polk County's impressive quality of life is evidenced by a lively economy, easy four-lane access to the Atlanta, Birmingham, and Chattanooga markets, environmental respect, and progressive leadership. Recent projects include: renovation of building for the Division of Driver Services, improvements to the Polk County Airport, resurfacing of more than thirty county roads and paving of five, and continuing expansion of the Silver Comet Trail. The welcome mat is always out — come and visit soon!



Left to Right: Frank Lott, Sandra Galloway, Ricky Clark, Chairman Marshelle Thaxton, Vice Chairman Cleve Hartley, Larry Reynolds

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