

## **Pressing Forward with Nuclear Energy**

By Chuck Eaton and Tim Echols

As two of your elected PSC Commissioners that regulate utilities in Georgia, we often have to explain to people exactly what we do and the positions we take on difficult issues that come before us from time to time. Every six years you see our name on your statewide ballot and count on us to make sure Georgia's gas, electricity and phone systems are state-of-the-art, reliable and reasonably priced. Ultimately, our job and role is about building infrastructure that ensures reliability and low cost of service over the long term. Here is why our decision on the Plant Vogtle nuclear project expansion mattered.

Plant Vogtle is Georgia's premiere nuclear site on the Savannah River just south of Augusta. Together, the two existing Vogtle units produce annually nearly 17 million megawatt-hours of baseload, around the clock, electricity. The units came on-line in 1987 and 1989 amidst cost overruns and controversy, but now serve the state's energy consumers with carbon-free electricity at ultra-low prices. And here we are again—with the plant's 3<sup>rd</sup> and 4<sup>th</sup> units running behind schedule and set to cost substantially more than we anticipated and Georgia Power forecasted. But hindsight is not only 20-20—it is helpful to us as commissioners as we weighed the pros and cons of finishing what is possibly the largest construction project in the country.

Let's start with low rates. Affordable electricity and a reliable grid are what companies looking to locate new facilities or relocate to a new state often look for. As commissioners, we froze Georgia Power's base rates in 2013 and they will remain frozen until Georgia Power's next rate case in 2019. Those Vogtle reactors built in the 80's now provide some of the cheapest power in the state. Based on a consulting study by the Brattle Group, a single nuclear plant produces about \$450 million annually in sales of goods and services in the local community. Moreover, the federal Bureau of Labor Statistics show the median nuclear plant operator earns an average annual wage of \$91,170, so the 800 permanent jobs created by these new reactors will go a long way to boost the Georgia economy too. So too are the 6000 construction jobs now on site at the plant. Ceasing construction on the new units would have been like pulling \$115 million in annual payroll from the regional economy. In lieu of building this project, we could consider shorter-term options such as "leasing" a gas plant or out-of-state wind turbines. But having Georgia-grown nuclear power that can last 80 years provides reliable baseload electricity over the longer term despite the higher upfront costs. Georgia Power also looked at renewable energy. In this case, the total cost to replace Vogtle capacity with solar PV coupled with battery storage is roughly \$25 billion, accounting for a 60-year asset life. That's \$7 billion for 4,000 megawatts of solar panels, and another \$18 billion for 3000 megawatts of lithium ion batteries. And these estimates don't include the cost of the 30,000 acres of land needed.

Fast forward to our inbox this week. Subject lines of "Uneconomic," "Cancel Vogtle," and "Punish the power company" came in faster than we could respond. And we most certainly understand the frustration from our ratepayers. For this very reason, we voted this week to put in place risk-sharing mechanisms to save consumers money—especially if the project runs later than expected. Even as we approved a new higher cost and schedule for the beleaguered project, we have imposed penalties on Georgia Power reducing their overall revenue collection from current ratepayers by over \$1.7 billion. And at the end of the project, we are prepared to

disallow every single penny of imprudent expenditures—including schedule delays because of such.

One thing was clear to most who know us. We wanted to finish this new nuclear plant—the only one of its kind in North America. We believe that nuclear energy makes sense in a day when baseload coal plants are disappearing due to early retirements and increased regulations. We also know that the United States must maintain nuclear superiority in an age when Russia and China are building dozens of reactors and exporting their technology. Georgia consumers benefit from the affordable and reliable energy made available from the diverse fuel mix we have throughout our state.

Let's be honest. It was the bankruptcy of Westinghouse, the prime Vogtle project contractor and reactor designer, that has put us in the pickle we are in. All the protections we had built into their contract were made null and void by their self-serving action to walk away from their contract with Georgia Power. However, it is important to note that Toshiba, Westinghouse's parent company has paid a significant penalty for Westinghouse's failure – \$3.68 billion or 40 percent of the original contract price. This payment will reduce the cost of the project and that benefits customers. That payment made a difficult vote a little better.

We have appreciated the feedback from many in the communities we represent urging us to complete this important project. Doing so will help Georgia continue to be the best place to do business in America.

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