



# Southern Alliance for Clean Energy

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November 28, 2007

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9/14/07  
72FR52584  
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RE: Southern Alliance for Clean Energy Comments on the Draft Environmental Impact Statement for the Plant Vogtle Early Site Permit

To Whom It May Concern:

Southern Alliance for Clean Energy is a non-profit energy policy organization with offices in Savannah and Atlanta and members throughout Georgia and the southeastern United States. We promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities in the Southeast. We disagree with the Nuclear Regulatory Commission (NRC) recommendation in the draft Environmental Impact Statement (EIS) that supports approval of the early site permit. Expanding nuclear Plant Vogtle will affect not just this local community in Burke County, but Georgia as a whole and our region overall.

### Water Concerns

We have strong concerns about the NRC's analysis on the impacts Vogtle's proposed expansion would have on our water resources. Businesses, municipalities, and citizens both Georgia and South Carolina, especially downstream stakeholders such as the communities of Savannah and Beaufort/Jasper counties, stand to lose from added water problems if more nuclear reactors are built at Plant Vogtle.

Our energy choices make a big difference on the future of the river basins and the communities and businesses reliant on those water sources. Vogtle is the largest water user in the Savannah River basin and its expansion essentially doubles that water use and water loss. The current reactors are losing approximately 43 million gallons of water per day (mgd) and the new reactors will lose approximately 40 mgd. With average per capita daily water use in Georgia at 75 gpd, this means that more water will be lost from the two existing and two proposed reactors at Plant Vogtle than is currently used by all residents of Atlanta, Augusta, and Savannah combined. On page 2-34, the draft EIS says that Burke County is projected to have a 50% increase in water demand by 2035 and that neighboring South Carolina's water demand will also increase by 50% from 2000-2045 and acknowledges that people will be shifting off of the Floridan Aquifer to the Savannah River and simply states that all of this would also increase demands for Savannah River water downstream of Vogtle. But the NRC does not consider this a problem because the NRC calculated that the two new reactors would not decrease the Savannah River flow of today by more than 5%. Nowhere in this document does it appear that the NRC has evaluated how the Savannah River is going to be able to handle the Georgia and South Carolina that we will live in decades from now, that by the NRC's own statements appears to be a

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E-RFDs = ADM-03  
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future in which the Savannah River is going to see extreme increases in demand. The NRC does not acknowledge that the Savannah River appears to already be over-allocated today, let alone several decades in the future. This needs to be studied before the final EIS is issued.

Other aspects of the proposed expansion that would also have water implications along the Savannah River have not been analyzed in the draft EIS. For instance, the dredging of the Savannah River that would be needed to allow for delivery of the necessary construction materials, reactor components, etc. was not fully analyzed, especially in light of the drought conditions that exist and may worsen. The NRC did not look at how lower river flows downstream of Vogtle would impact possible navigation upstream to the plant nor what the then required dredging would do to water quality, sensitive species, etc. This needs to be done before the final EIS is issued.

Additionally, the draft EIS does not look at the benefits other energy supplies such as energy efficiency and conservation and renewable such as wind, solar, and biomass would have on our water supplies.

Further, the draft EIS has no analysis of climate change predictions on our water systems, such as the prospects for severe, long-lasting mega-droughts, of which Georgia may encounter as global warming impacts are realized. Georgia and many areas in the Southeast are currently dealing with a very severe drought that has pitted municipalities, businesses, and citizens against each other. In fact, Southern Nuclear's Plant Farley in Alabama along the Chattahoochee River basin has been cited by Governor Riley of Alabama as being susceptible to the drought and low river flow conditions. The Vogtle draft EIS does not evaluate the full impacts of a severe, long-lasting drought on the Savannah River basin.

From a technical standpoint, we suggest to the NRC that water use should be reported in different ways to help people actually understand the numbers. For instance, in Section 7.3, water consumption is reported in cubic feet per second. In addition to using those units, we recommend that the NRC convert all of those figures to gallons per day, which is what most of our surface water withdrawal permits in Georgia are licensed under.

### **Other Energy Choices Exist**

The draft EIS failed to fully research other energy choices, including energy efficiency and conservation. Renewable energy supplies are available here in Georgia, such as biopower, solar, and wind. This is particularly timely given the recent drought. All of these energy supplies are less water intensive than the proposed expansion of Plant Vogtle.

According to a 2006 report by the Georgia Environmental Facilities Authority, Georgia has the potential to meet 1518-1618 MW of the state's forecasted electricity demand through *new* renewable resources from biomass, wind, hydropower, landfill gas, and solar photovoltaics (*Meeting Future Electricity Demand*, GA Environmental Facilities Authority, 2006). Further, the NRC should be aware that new, certified wind maps of Georgia were released by the National Renewable Energy Laboratory in October 2006 that show there is substantial wind power available, especially offshore, with a potential of well over 10,000 MW. Go to the Georgia Wind Working Group website at [www.gawwg.org](http://www.gawwg.org) for background. Yet Section 9.2.3.2 on wind power doesn't mention this potential, instead relying on Southern's slanted wording of a study they did with Georgia Tech that "technology limitations and regulatory restrictions would make development of offshore wind projects difficult in the southeast." Instead of taking Southern's word for it, the NRC should actually review the offshore wind study with Georgia Tech that was released in part earlier this summer and is now finalized ready for release.

Additionally, the potential to use Georgia's plentiful agriculture and forestry resources should be more closely evaluated as the benefits include increased self-sufficiency, improved water resource quality, and long-term environmental and rural development benefits. A University of Georgia 2003 study that showed that as much as 12% of Georgia's total electricity demand could be generated from biomass was referenced by the NRC in Section 9.2.3.8, but the NRC dismissed biomass as not being economically competitive with existing technologies. Georgia Power's plan filed with the Georgia PSC this year shows there are competitive biomass projects. Further, nowhere in this draft EIS does it state officially how much these new reactors are going to cost Georgia ratepayers or taxpayers, instead providing estimates on p. 5-38 ranging from \$1.2-2.6 billion for each reactor.

The analysis of energy efficiency is deficient. This issue is still under review by the Georgia PSC as a result of analytical questions that arose in reviewing Georgia Power's Integrated Resource Plan this year. The PSC has ordered a working group to examine these issues further. Energy efficiency and conservation represent the quickest, safest, cheapest way to provide more power and to best protect our air and water resources. As an added benefit, increased energy efficiency reduces water use and consumption by power plants that compete with local industries and cities for much needed water. The NRC should be aware that in 2001, the Energy Information Administration ranked Georgia 8<sup>th</sup> in the nation for per capita energy consumption for electricity and 40<sup>th</sup> in per capita spending on energy efficiency programs and that Georgia is an energy exporting state.

### **Global Warming**

Since we are discussing the prospects of these reactors operating for many decades from now, the NRC needs to evaluate predicted effects of global warming on this region and how nuclear power plants may be negatively impacted or unable to generate electricity. This was demonstrated by the heat waves over the past summers in Europe—when nuclear power plants from Sweden to France, and even here in the U.S. at Browns Ferry, had to shut down because the lake or river water temperatures were too high to allow for continued operation of their nuclear power plants.

### **Comprehensive Review is Lacking: *Cost, Waste, Safety & Security***

We strongly believe that the NRC must conduct a comprehensive review of the Vogtle expansion proposal. That has not happened in the draft EIS. We are observing serious, notable gaps in review of the Vogtle proposal – at the level of the Georgia Public Service Commission, at the level of the Georgia Environmental Protection Division, at the level of the Governor's office and at the level of the federal NRC. It is the NRC's responsibility to ensure that a full environmental impact review is done. State agencies and communities in the surrounding area are under the impression that will happen. Many interests, including every Georgia ratepayer, will rely on the NRC having done a sound review of this proposal. Georgia ratepayers will be harmed in the future from a negligent NRC review. We believe there are serious gaps in the review thus far.

In terms of the socioeconomic review in the draft EIS, Southern Nuclear is the biggest employer in Burke County and Table 2-16 shows that they pay over 80% of the property taxes in the county and that Burke County has one of the highest revenues in the state. However, we do not feel that a full assessment of the cumulative impacts related to socioeconomics has been done. On page 7-17 it states, "In terms of beneficial effects including tax revenues benefits, the impacts on Burke County would be large." Where is the analysis and the NRC review of the cumulative impacts for ratepayers in Georgia who face serious harm from potential adverse impacts that could occur as this expansion moves forward (e.g. cost overruns, rate hikes, etc.)? That possible scenario is part of the socioeconomic impact on the state. There is no historical mention of the rate hikes that occurred when the first two Vogtle reactors became operational: estimates were originally \$660 million for four reactors and

eventually only two were built with costs capped at well over \$8 billion. This resulted in the largest rate hike in Georgia's history.

The draft EIS does not analyze the implications of the Southern Company proposal included in its application to have the new radioactive waste it will generate go to a fictitious federal waste repository. The proposed Yucca Mountain repository does not even exist even though ratepayers have been paying for it over many years and that states have been forced to sue the federal government on that translates into ratepayer dollars. NRC largely ignores this reality in its review of Vogtle's proposal. Ratepayers, state agencies, and the public are likely to think that the NRC as the federal agency charged to oversee a review would have fully addressed this issue in reviewing a new reactor proposal.

The Georgia PSC has directed Georgia Power who is a large partner in the new Vogtle proposal to put its new capacity needs out to bid in the open market. During Integrated Resource Plan proceedings this past summer, PSC experts and other parties questioned the cost numbers that Georgia Power presented for the proposed Vogtle expansion. The company tried to circumvent the PSC rules on competitive bidding this year and tried to make the case that Vogtle expansion is such a unique situation that it warrants special consideration outside the rules. The Georgia PSC did not yet fall for that argument. Likewise, the NRC shouldn't fall short either by giving the company a pass on crucial issues that will have long-term, irreversible impacts on Georgians.

There are keys items the Georgia PSC failed to analyze in its preliminary look at the Plant Vogtle expansion proposal. It did not address the nuclear waste issues fully – neither the high-level radioactive waste issues nor the low-level waste issues. In fact, Georgia Power's plan filed with the Georgia PSC did not even mention low-level waste handling as an issue it needed to address, despite the fact that South Carolina's compact disallows Georgia's waste after 2008. The PSC review did not address the implications of future security regulations that the federal government is responsible for addressing which thus far it appears NRC is also neglecting in this EIS review.

The company when asked what rate impacts could be expected from its proposed plan during the Integrated Resource Planning hearings at the PSC this year, responded by saying it didn't know. That type of vague response shows the massive uncertainties the company faces this round. There are new complications before us today that didn't exist during Vogtle 1 and 2 that make building new reactors even more threatening to ratepayers.

Our point is that uncertainties—such as having no federal waste repository available, pending future security regulation on reactors, and accident potential that exists with all reactors—all have potential and serious negative impacts on ratepayers as well as taxpayers. The NRC should not ignore these issues or you will be harming the entire ratepayer population in our state wherever local utilities are irresponsible enough to buy into this whole agenda as well as the public at large. We request that the NRC conduct a proper review on the full socioeconomic impacts for people who have to pay power bills and taxes.

### **Simultaneous Regulatory Reviews**

We have grave concerns that too many permits are occurring at the same time with Plant Vogtle: a license renewal, an early site permit, and an upcoming application for a combined construction and operating license. Can the NRC keep up with all of this in a manner that is truly protective of public health? For instance, section 2.12.3 of Southern's license renewal application states that the NRC will do a cumulative water analysis in this draft EIS for the early site permit. From our review, the

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cumulative impacts on water quality and quantity have not been satisfactorily evaluated in the draft  
EIS for the early site permit. That is a problem not only for the ESP but also for the license renewal.

**Conclusion**

For the aforementioned reasons, we do not believe that an adequate review was done by the NRC in  
the draft EIS. Further, given the host of issues raised, the proposed expansion of Plant Vogtle is  
unacceptable as it poses severe risks to the ratepayer, taxpayer, public health and environment. Thank  
you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sara Barczak', with a long horizontal flourish extending to the right.

Sara Barczak, Safe Energy Director—Savannah