



Southern Alliance for Clean Energy

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RE: Environmental Scoping Comments for Vogtle License Renewal

To Whom It May Concern:

Southern Alliance for Clean Energy is a non-profit energy policy organization with members throughout Georgia. We promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities in the Southeast. Enclosed are our environmental scoping comments for the license renewal application for Southern Nuclear's Vogtle nuclear power plant. We believe that extending the operating life of the existing reactors poses unacceptable risks that should be avoided. These written comments include portions of oral public comment given at the public meeting on September 27, 2007 on the license renewal and oral comments given at the public meeting on the draft Environmental Impact Statement for the Vogtle early site permit in early October.

Other Energy Choices Exist

The NRC needs to fully research other energy choices, including energy efficiency and conservation as the application from Southern Nuclear is woefully inadequate. Renewable energy supplies are available here in Georgia, such as biopower, solar, and wind. In fact, according 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). These energy supplies should be supported due in part, because they keep dollars here at home and don't pose the risks to the community that nuclear power does.

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 10,000MW. Go to the Georgia Wind Working Group website at www.gawwg.org. Yet information in the application is completely outdated; in terms of wind it referenced 1986 data in spite of Southern Company being involved in a an offshore wind study with Georgia Tech that was released in part earlier this summer. Additionally, the potential to use Georgia's plentiful agriculture and forestry resources should be evaluated. A conservative estimate from a University of Georgia study showed that as much as 12% of Georgia's total electricity demand could be generated from biomass. The benefits to Georgia include increased self-sufficiency, improved water resource quality, and long-term environmental and rural development benefits.

E-RFDS = ADM-03

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The application is deficient in its analysis of energy efficiency. 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 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 8th in the nation for per capita energy consumption for electricity and 40th in per capita spending on energy efficiency programs. Additionally, we are an energy exporting state. We use our natural resources, impact our citizens' health, and pile up nuclear waste within our border to power other states' air conditioning units. The NRC needs to evaluate both Georgia's actual need for power and how conservation and efficiency could reduce this supposed need.

Negative Impacts on Our Water Resources

Power plants have a tremendous impact on our water resources. Our energy choices make a big difference on the future of the river basins and the communities and businesses reliant on those water sources. And given that the license renewal for Vogtle is for 20 additional years of operation—taking us to 2047 and 2049 if approved, we believe the NRC needs to evaluate not only the Georgia of today, but the Georgia we may be living in 40 years from now. The State of Georgia and surrounding states are currently facing a drought of epic proportions, and there does not appear to be any analysis of the current situation in the application nor analysis beyond a level 3 drought. Plant Vogtle is the largest water user in the entire Savannah River basin and has an average withdrawal of 64 million gallons per day from the Savannah River and an average water consumption of 43 million gallons per day. That means that Vogtle is returning only about one-third of what it withdraws from the Savannah River. An additional 20 years of operation, as populations increase, will not be a positive development for our water resources.

Further, the proposed new nuclear reactors at Plant Vogtle are estimated to use 53 million gallons of water per day with 50-75% of that lost as steam. (*Southern Nuclear Operating Company, Early Site Permit Application, Environmental Report, August 2006*). 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. Yet, the application doesn't discuss the cumulative impacts of the existing and proposed reactors. Instead, it says in section 2.12.3 that the NRC will do such an analysis in the draft EIS for the Vogtle ESP that was released earlier in September, actually after this license renewal application was submitted. From our review of the draft EIS for the ESP at Vogtle, the cumulative impacts on water quality and quantity have not been satisfactorily evaluated. Therefore, we believe that this issue is also deficient in terms of the license renewal evaluation.

There are concerns about tritium contamination, a radioactive form of hydrogen that can impact our health. Faced with saltwater intrusion of the Floridan Aquifer, both Beaufort and Jasper counties in South Carolina and the Savannah area will become more dependent on the Savannah River for drinking water. Plant Vogtle already contributes to the tritium in the river and allowing the reactors to operate for longer will do nothing to reduce this reality, let alone when and if more reactors come online. The NRC needs to study tritium in the river, future projections especially given the Savannah River Site's already large contribution to the tritium pollution, and to analyze this with droughts and future population growth in mind.

Licensing Deficiencies / Regulatory Concerns

The NRC should not make its decisions or evaluations in a vacuum. If the two new reactors are approved and actually built, the existing two reactors will be operating at the same time, and this application and all other applications associated with Plant Vogtle have to address the cumulative impacts—not pass the buck assuming that some other committee within the NRC working on some other project is going to cover it. There doesn't appear to be any assurance that things won't slip through the cracks so-to-speak. 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? We are doubtful; as we all know, bureaucracies themselves have their deficiencies. The idea that everything will be coordinated seamlessly between all these different staff and all these different projects seems unrealistic.

Further, if we're looking to support a nuclear power infrastructure, we need to make sure we're able to support the needs to oversee it properly for the public—right now, the NRC must be aware that we've got a shortfall in terms of funding and capacity in Georgia to monitor the nuclear facilities we already have, let alone extending the operating lives of what we've already got or monitoring more that could be brought online in the future.

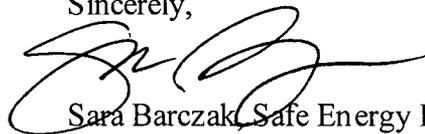
Global Warming

Additionally, 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 wave this past summer in Europe—when nuclear power plants from Sweden to France had to shut down because the lake or river water temperatures were too high to allow for safe operation of their nuclear power plants.

Vogtle Early Site Permit Issues / Concerns

Please see attached public comments from October 4, 2007 public meeting. Due to time limitations at that meeting, only a small portion was read into the record. We feel that these comments are pertinent to the Vogtle relicensing process and request that they be reviewed.

Sincerely,



Sara Barczak, Safe Energy Director
Southern Alliance for Clean Energy
428 Bull Street, Suite 201
Savannah, GA 31401

ATTACHMENT

**U.S. Nuclear Regulatory Commission Public Meeting on the
Draft EIS for the Vogtle Early Site Permit
October 4, 2007 -- Augusta Technical College, Waynesboro Campus
Public Comments from Southern Alliance for Clean Energy**

Good evening. My name is Sara Barczak. I am the Safe Energy Director with Southern Alliance for Clean Energy, a non-profit energy policy organization with members throughout Georgia. We promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities in the Southeast. I am also a resident of the downstream community of Savannah, which stands to lose especially from added water problems if more nuclear reactors are built at Plant Vogtle. Expanding Vogtle will affect not just this local community, but Georgia as a whole and our region overall. We disagree with the NRC recommendation in the draft EIS that supports approval of the early site permit. Given our limited time tonight, we intend to submit more detailed written comments.

I want to underscore the grave necessity for NRC to do its job and conduct a comprehensive review of the Vogtle expansion proposal. 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 your job to ensure that a full environmental impact review is done. Some state agencies think you are going to do that and communities in the surrounding area think you are going to do that. There are a lot of people including every Georgia ratepayer who will rely on the NRC to have done a sound review of this proposal. Georgia ratepayers will be harmed in the future from a negligent NRC review. And there are serious gaps in the review thus far. It is your job to correct this problem.

Sure, you are going to hear all the local economic boosters come out in numbers to say the existing reactors generate revenue and jobs. You will hear folks who live here say how Southern is the biggest employer in Burke County and you will see Table 2-16 show that Southern pays over 80% of the property taxes in the county and that Burke County has one of the highest revenues in the state. And you'll hear the company make it look like a full assessment of the cumulative impacts related to socioeconomics has been done where it states on page 7-17 that, "In terms of beneficial effects including tax revenues benefits, the impacts on Burke County would be large."

But where's the analysis and the NRC review of the cumulative impacts for ratepayers in Georgia who face serious harm from potential adverse impacts down the road? Isn't that part of the socio-economic impact on all of us? Who's doing any analysis on 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? A repository that doesn't even exist and that ratepayers have been paying for 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. But you can know that ratepayers and state agencies and the public would think that surely the NRC as the federal agency charged to oversee a review would have fully addressed this issue in reviewing a new reactor proposal.

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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 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 hasn't fallen for that argument yet. The NRC shouldn't fall short by giving the company a pass on crucial issues that will have long-term, irreversible impacts on Georgians either.

There are key 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 last go around with Vogtle 1 and 2 decades ago resulted in the largest rate hike in Georgia's history. 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. And what about the U.S. taxpayers...the people who are shouldering the massive subsidies the nuclear industry has lobbied Congress so hard for in order to make it economical to build these new nuclear plants? And if Burke County has all this tax revenue and expects to see so much more, why are there still so many empty wallets here in this county? Who stands to gain? Who stands to lose?

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. So don't ignore these 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.

This draft EIS presents that impacts on people, their health, and that of the environment from a Vogtle expansion would be small. We ask that you move beyond the fact that some of the wallets in Burke County and those of Southern's shareholders and those companies involved in the expansion stand to benefit financially and conduct the proper review on the full socio-economic impacts for people who have to pay power bills and taxes.

We have strong concerns about the NRC's analysis on the impacts Vogtle's proposed expansion would have on our water resources. 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

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use and water loss. We would 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. Though I did the math, I don't think most people have the time to convert all of those figures to gallons per day, which is what most of our surface water withdrawal permits in Georgia are licensed under. When you do the math, it shows that the current reactors are losing ~43 million gallons of water per day and that the new reactors will lose ~40 mgd. 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. And on p. 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 in the end, because the NRC calculated that the two new reactors would not decrease the Savannah River flow of today by more than 5%, it acts as though all is good. Well, 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 future in which the Savannah River is going to see extreme increases in demand. 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. Again we ask, who stands to gain and who stands to lose?

I mentioned to the NRC staff last week that are working on Vogtle's license renewal that these decisions cannot be made in a vacuum and I'm going to reiterate that tonight. 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. Well, I can tell you that it appears that the 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.

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. In fact, according 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). These energy supplies should be tapped because they keep dollars here at home, provide safe jobs, and don't pose the risks to the community that nuclear power does.

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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 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 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 8th in the nation for per capita energy consumption for electricity and 40th in per capita spending on energy efficiency programs. Additionally, we are an energy exporting state. We use our natural resources, impact our citizens' health, and pile up nuclear waste within our border to power other states' air conditioning units.

Additionally, 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.

The future of not only this community, but many, many, others, are at stake.

Thank you for your time and consideration.