Blue Ribbon Commission on America's Nuclear Future Meeting October 18, 2011

Statement of Yomi Noibi, Ph.D., Executive Director of Environmental Community Action (ECO-Action)

My name is Dr. Yomi Noibi and I am the Executive Director of Environmental Community Action Inc. (ECO-Action). ECO-Action is located at250 Georgia Avenue, Suite 309, Atlanta, GA 30312 (phone: 404-584-6499; <u>http://www.eco-act.org/</u>). ECO-Action is a 20 year old statewide non-profit, grassroots organization whose mission is *to help communities organize to confront environmental health threats*.

We oppose the development of nuclear power in the United States (i.e., Southern Nuclear's expansion of Plant Vogtle in Burke County, GA). The recommendation of the Blue Ribbon Commission on America Nuclear Future fall short of solving America's nuclear waste dilemma. I acknowledge that some of the recommendations are useful and could fix some of the symptoms but not the cause of the symptoms. We need recommendations from the BRC that will address the root cause of nuclear energy problems in the United States. We also need recommendations that will result in systemic reform to ensure protection of human health and the environment. Nuclear power is a dangerous technology that provides high-cost electricity and is unnecessary given the availability of clean and low-cost energy efficiency measures and renewable energy sources such as solar power and wind.

ECO-Action is working to promote the adoption of the Precautionary Principle by federal, state, and local energy and environmental regulatory agencies. The Precautionary Principle guides environmental and energy policy and regulation in the European Union. It has been defined in the following manner:

"When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some of the cause and effect relationships are not fully established scientifically." (Wingspread Statement on the Precautionary Principle).

We request that the BRC consider the precautionary principle in its recommendations.

The four central tenets of the precautionary principle are:

- Heed early warnings: Take preventive action in the face of uncertainty (but with credible evidence of potential harm)
- Shift the burden of proof to the proponents of the activity or technology (in this case, Southern Nuclear)
- Explore a wide range of alternatives to possibly harmful actions or technology
- Increase public participation in decision-making.

We especially want to emphasize that the BRC to think outside the box in its recommendations. How one frames a problem, and the types of questions we ask, have a great impact on the way a problem is addressed. For example, the Environmental Review Process could limit its focus to determining the extent of the risk of the proposed nuclear plants and whether that risk can be managed and is "acceptable" (of course, one can always ask the question, acceptable to whom?). Alternatively, the Environmental Review Process can have a much broader and fundamental focus, asking questions such as:

- \Rightarrow Is the proposed nuclear plants needed?
- \Rightarrow Are there safer and less expensive alternatives?
- \Rightarrow Can risks be prevented rather than managed?

An Alternatives Assessment guided by the Precautionary Principle is a flexible, holistic analysis of alternatives to prevent impacts from potentially harmful activities or technologies. It considers the need for the proposed technology. It focuses on what a proponent of a technology could or should be doing rather than focusing on the "acceptability" of the proposed, potentially harmful technology. It focuses attention away from questions such as "How risky is the technology?" and instead focuses attention on what kinds of solutions are needed and are beneficial to the public health and welfare.

We are requesting that the BRC to broaden the scope of its review process and explore a wide range of alternatives to the proposed nuclear power plants, including energy efficiency measures, wind technology, solar power technology, biomass, and hydrogen fuel cells. In particular, we are requesting that the BRC consider what Southern Nuclear and its parent company and associated companies should and could be doing to promote energy efficiency and the use of clean, safe, and economical renewable energy sources.

Sometimes we tend to forget the potential dangers of nuclear power. Let me remind you:

- the hazards to workers, communities and the environment over the entire nuclear fuel cycle,
- the possibility of a catastrophic accident that could make inhabitable an area the size of the state of GA and kill tens of thousands,
- the increased rates of specific cancers that occurred as a result of the TMI near-catastrophic accident (i.e., non-Hodgkin's lymphoma, leukemia, and lung cancer, that were related to the estimated doses from the plant), as well as the increased levels of stress to the population and the economic costs of the accident to the community
- the risk of a terrorist attack on the plant itself and on its "interim" on-site storage of nuclear fuel rods
- the failure to solve the problem of long-term nuclear waste storage
- the inadequacy of evacuation plans in the event of a serious accident
- the enormous water consumption of these plants at a time when the state has drought problems and there is an ongoing, 3-state dispute about water, and
- the "mobile Chernobyl" hazards of nuclear waste transport.

But given the limited time, I will not discuss these issues. Instead, I will simply say that nuclear power is a dangerous, costly, and totally unnecessary technology. There are good reasons why no new nuclear power plants have been ordered since 1978 and none have come on line since 1996!

The rest of my comments will focus on the alternatives to nuclear power plant such as to plant Vogtle in Burke County, GA.... First, there is no debate that energy efficiency measures are the cheapest, quickest, and safest way to meet electricity demand. Up to half of the electricity we use in this country is not used efficiently. Many states have realized this and are taking action. For example, the state of Nevada has established a goal of reducing electricity use by 22% as part of its overall energy efficiency strategy. Unfortunately the state of Georgia has an extremely poor record when it comes to energy efficiency.

GA is often near the bottom of the list of states when it comes to policies and programs that benefit the public health and welfare. Energy efficiency is no exception. According to an October 2005 report of the American Council for an Energy Efficient Economy, GA ranks 37th in energy efficiency spending per capita and energy efficiency spending as a percentage of total utility revenues. While the top 10 states spend over \$10 per capita on energy efficiency, and the national average is \$4.65, GA spends 15 cents per capita. Whereas the top 10 states spend 1.2% to 3% of total utility revenues on energy efficiency, and the national average is 0.52%, GA spends a meager 0.02%. This is a disgrace.

A 2005 report by the Georgia Environmental Facilities Authority entitled "Assessment of Energy Efficiency Potential in Georgia" stated the following:

- "In recent decades, many energy utilities and public agencies have made strong and sustained efforts to promote energy efficiency through programs and standards. These efforts have brought significant economic benefits to energy customers and have contributed to ongoing initiatives to enhance the environment and improve public health nationwide.
- However, the state of Georgia has not invested in energy efficiency as vigorously as most other states. In fact, Georgia is one of a small number of states in which energy efficiency programs are barely in evidence.
- For this reason, there is now great opportunity to seize energy efficiency as a large untapped source of economic and environmental benefits for the state of Georgia. Building upon the successes and failures of a wide range of other energy efficiency efforts, Georgia is in an excellent position to stimulate greater investment in energy efficiency. "

The report went on to add that energy efficiency measures could save the state up to \$1.5 billion and reduce state water usage by up to 234 million gallons per day. This could be

achieved by adopting measures that would reduce electricity sales by 8.7% and peak demand by 6.1%. These are very modest goals. Other states have embarked on much more ambitious energy efficiency programs.

The latest draft of the state energy plan, released in September, stated:

• "At present, there are only limited programs in place in Georgia designed to reduce energy demand.... Also, there are only very minimal policies in place to help bring about energy demand reductions."

Given the lack of energy efficiency programs in Georgia, and the resulting waste of vast quantities of electricity, it is more than a little disingenuous for the V.P. of Georgia Power to claim that there is a need for more generating power. Simply by promoting reasonable measures to improve the efficiency of electricity usage in the state, Georgia Power could meet the needs of a growing population over the next several decades without building new nuclear or coal plants.

In addition to energy efficiency measures, GA utilities should be transitioning to safe, clean and affordable renewable energy sources such as wind power, solar power, and hydrogen fuel cells. This year the MIT Press published the book, <u>Solar Revolution: The Economic Transformation of the Global Energy Industry</u>, by Travis Bradford. Bradford shows that wind power <u>today</u> produces electricity at half the cost of nuclear power. Currently, centralized solar thermal plants produce electricity at a cost competitive with nuclear power.

Bradford projects that in the next decade, photovoltaic cells and hydrogen fuel cells will be competitive sources of electricity generation. His projections are based solely on letting market forces do their thing to promote these renewable energy sources. Of course, nuclear power has never had to rely solely on market forces for its promotion. Nuclear power has received the most subsidies of any energy technology. Even so, with all these taxpayer subsidies, nuclear power is more costly than wind power. Of course, if instead of being heavily subsidized by taxpayer money, nuclear power had to rely solely on market forces, we would not be here tonight having this meeting! Moreover, if only a tiny portion of the subsidies larded on nuclear power had been provided for solar and wind power technologies, we would not be meeting here tonight!

Nuclear power is a dangerous technology, an expensive technology, and an unnecessary technology. A thorough alternatives assessment would show without a doubt that there are safer, cleaner, and cheaper alternatives to building new nuclear plants in the United States. We ask the BRC to take seriously the precautionary principle, undertake a thorough alternatives assessment, and reject expansion of nuclear power plant in the United States.

THE BRC on America's future Nuclear Power has an opportunity to resolve America's nuclear waste dilemma. While it has provided a credible analysis and introduced some new ideas, it has focused more on the symptoms of American failed approach to nuclear

waste management that addressing the system structural deficiencies. There is no future in nuclear power for America.

Thank you.

Yomi Noibi, Ph.D.