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COMMENTS: ENVIRONMENTAL  
SCOPING PROCESS FOR THE VOGTLE EARLY SITE PERMIT REVIEW

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19 October 2006

Commenter: I am Co-Chair of the Savannah River Group of the Georgia Sierra Club. I am also a retired university Botanist/Ecologist professor from Evans, GA. I do research on endangered plant species, including the Shoals Spider Lily in the Savannah River near Augusta.

Areas of Concern:

1. Our biggest environmental problem is *over-population*, something no one wants to address but until we do, we have no long-term hope of curbing greenhouse gasses or curbing the equally dangerous build up of nuclear waste if additional nuclear plants are constructed. Nuclear facilities also place additional stress on Georgia's already limited water resources and expansion of plants such as Vogtle will certainly place increased demands on the water available from the Savannah River. Surface waters such as the Savannah River are variously used and re-used for multiple purposes, usually without regard to environmental degradation and ultimately the health of both the human and non-human species that depend on safe and sufficient water.

2. Our second biggest environmental problem is *lack of state and federal leadership* to educate Americans on the connection between growth and environmental degradation. As a biologist I know that communities, human or otherwise, cannot grow forever and that we need to approach energy use from the stand point of SUSTAINABILITY. So many comments I hear at meetings such as this suggest that growth and economic development will ultimately solve all our energy problems. This is what biologists call short-sighted, short-term thinking. We need leaders who are not afraid to speak the truth, even if it requires that we be constantly reminded of the need to conserve and to make sacrifices.

3. A third problem which local officials do not want to acknowledge is *what to do with the dangerous waste* generated by nuclear facilities. Those advocating for nuclear power generation should be willing to keep the resulting waste where it is generated. Why should this waste be shipped elsewhere to become another state's problem? Why should we expose citizens to this dangerous material on poorly maintained railroads or congested highways? Why would we give terrorists the opportunity to turn either stored or transported waste into a weapon directed against us?

Solving the problems:

1. Initiate a *public campaign* via TV, radio, newspapers, etc. that stresses that educated people are the solution to conservation and wise energy use. Stress the NEGATIVE impacts of growth and over-population; encourage the importance of individual responsibility. Publicly award and acknowledge those people who do such things as adopt children, start recycling programs, and promote various sustainable approaches to energy use such as use of wind, solar, biofuels, and such.

3. Provide *tax breaks* to industries promoting sustainable energy use. Likewise, provide tax payers credits when they buy energy efficient vehicles, home appliances, and when they retrofit or build houses that are energy-saving. INCREASE PENALTIES FOR THOSE INDUSTRIES THAT CONTINUE TO POLLUTE OUR AIR AND WATER.

4. FINALLY, STOP THE LOBBYING PROCEDURES THAT GIVE INDUSTRIES ACCESS TO LEGISLATORS AND THUS DILUTE THE VOICES OF ORDINARY CITIZENS.

## SUPPORTING MATERIAL

One of the most widely used text books for beginning ecology classes in colleges throughout the US is that of G. T. Miller, NOW IN ITS 15<sup>TH</sup> EDITION (2007): *Living in the Environment*, Brooks/Cole, Thompson Corp. This book provides much of the information that supports my remarks: For example:

p. 374- "Even with massive government subsidies using the nuclear fuel cycle to generate electricity costs more than burning coal or natural gas and using wind power to produce electricity."

p. 379- "Building more nuclear power plants will not lessen dependence on imported oil and will not reduce CO<sub>2</sub> emissions as much as other quicker, safer, and cheaper alternatives."

p. 380- "Nuclear plants themselves are not emitters of CO<sub>2</sub>, but the **nuclear fuel cycle** is—a fact that is rarely mentioned by the nuclear industry or by the press." The key word here is **fuel cycle**. **This includes not just the electrical generating plant, but the mining of uranium, its enrichment, and disposal of waste as well as plant decommissioning.**

p. 379- "Experience indicates that dismantling a plant and storing the resulting radioactive wastes costs 2-10 times more than the building of the plant in the first place."

p. 382- "Since 1948, nuclear energy (fission and fusion) has received about 58% of all federal energy and development funds in the United States—compared to 22% for fossil fuels, 11% for renewable energy, and 8% for energy efficiency and conservation."

Several years ago, UGA professor and ecologist Dr. Eugene Odum, the father of Ecology in the US, stated that he believed that conservation by itself could save about 50% on our energy expenditures.

p. 377- "But a 2002 study by the Nuclear Control Institute found that the plants were not designed to withstand the crash of a large jet traveling at the impact speed of the two hijacked airliners that hit the World Trade Center.

"This is not surprising because in 1982 the US Nuclear Regulatory Commission ruled that owners of nuclear power plants did not have to design the plants to survive threats such as suicidal airliner crashes. According to the NRC, requiring such construction would make nuclear electricity too expensive to be competitive."

All environmental problems, whether we are talking about endangered species, pollution or energy use can be traced to our failure to recognize that **SUSTAINABILITY IS THE KEY WORD**. The **four** principles of sustainability are:

p. 24 " **(1) RELIANCE ON SOLAR ENERGY, (2) BIODIVERSITY, (3) NUTRIENT RECYCLING, AND (4) POPULATION CONTROL.**"

**Our failure to recognize and frame our approaches to environmental problems without recognition of these principles is going to leave us up the proverbial creek (or the Savannah River?) without a paddle. As the founder of the Sierra Club, naturalist John Muir stated that when we try to pick out anything by itself we find it connected to everything else in the universe.**