# LAKE HARTWELL ASSOCIATION, INC

My name is Curtis Barton and I am here today as a representative of the Lake Hartwell Association. LHA is a group of approximately 2000 business and family members in the Hartwell Lake area. We are not a homeowners association. Our mission is to protect the water resource and influence positive growth and development around the lake. LHA has concerns about the operation of two additional nuclear reactors at the Vogtle Site which we believe must be addressed before NRC issues an operating permit for the facility.

Southern Nuclear Operating Company (SNC) is proposing to withdraw cooling water for the new reactors from the Savannah River. The two new reactors will require that up to an additional 83.2 million gallons per day be pumped from the river and 41.6 million gallons per day would be returned to the river. The balance of 41.6 million gallons per day would be evaporated in the cooling towers to the atmosphere. When fully operational, the four reactors will normally consume 3.4 % of the river flow at Drought Level 3 flow conditions (3800 cfs) and 1.5 % at average flow conditions. This consumptive use of the Savannah River will have a negative impact on the level of Hartwell Lake during drought conditions.

The Lake Hartwell Association is not opposed to the operation of nuclear generating facilities. Assuming the proposed power generation increase is required to meet

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regional demands, we believe that nuclear power generation will have the least adverse environmental impacts of the viable alternatives. If a nuclear generating plant is not constructed, a coal-fired plant, with all of the attending environmental issues, would most likely be built to satisfy these needs.

The Lake Hartwell Association believes that the reactor design for the Vogtle project must include the best available technology for reducing water consumption. Water use is critical during drought conditions and any significant consumptive use will impact lake levels as well as other critical basin water demands. Nuclear reactor technology is available which can significantly reduce water consumption for cooling purposes. SNC has proposed that Vogtle Units #3 and #4 be based on the currently certified Westinghouse AP 1000 reactor design. Areva Nuclear Power has applied for NRC design certification of their Evolutionary Power Reactor which may reduce cooling water requirements significantly (perhaps as much as 50%). Calvert Hills Nuclear Plant in Maryland has also applied for a Combined Operating License based on this design. LHA believes that, if certified, technology with the least impact on the lakes should be utilized.

The environmental studies done by SNC and the Environmental Impact Statement subsequently issued by NRC did not address impacts to the Savannah River above Augusta, Georgia. Based on drought flow conditions which have occurred in the upper Savannah River Basin over the past two years, additional water withdrawals below the reservoirs will negatively impact lake levels and will have adverse environmental impacts above Augusta. We believe that the Environmental Report prepared by SNC should be revised to include the entire Savannah River System and the Environmental

Impact Statement by NRC should also be revised. Decisions regarding an operating license should be made only after this is completed.

During the construction phase of this project, large parts of the reactors will be shipped to the site by barge on the Savannah River. The Corps of Engineers has stated earlier that dredging of the river channel will not be required. However, barge traffic will require a river flow significantly above the drought flow limits. LHA believes that during drought conditions, releases from Thurmond should not be increased to support barge traffic. This also should be addressed in the SNC Environmental Report and in the NRC Environmental Impact Statement.

LHA does not believe that reasonable decisions regarding water allocation and use can be made in the absence of factual information and data. Neither the states of Georgia and South Carolina, nor the U. S. Army Corps of Engineers have ever studied or fully assessed current and future water demands throughout the Savannah River Basin.. To satisfy these needs the following two important actions need to be taken:

1. Assessment of water needs and demands in the Savannah River Basin for the next 20 to 50 years.
2. Agreement between Georgia and South Carolina on water allocation to satisfy these demands.

A Comprehensive Water Resources Management Study prepared by the U. S. Army Corps of Engineers was to address the overall water issues in the SRB. Phase I of this

study has been completed. The second phase of the study has not been completed due to lack of funding. LHA believes that Phase II should be completed to facilitate decisions on basin water use. If SNC wishes to expedite the permitting process, LHA recommends that they fund Phase II of this study.

LHA believes that the USACE Drought Contingency Plan is inadequate to deal with current and future forecasted drought conditions in the upper Savannah River Basin. A revised plan with guidelines for operation and management of Thurmond, Russell, and Hartwell Lakes needs to be developed. This plan must include conservative assumptions for future climate change, must satisfy the needs of all current and future users, and will require adaptive management techniques. An operating permit for Vogtle Units #3 and #4 should not be issued until it is determined that adequate water is available during drought conditions or as an alternative the permit should require reactor shutdown during specified drought conditions.

In conclusion, LHA is requesting that NRC delay the issuance of any further permits for the proposed Vogtle expansion until sufficient information is available to make sound and reasonable decisions regarding the impact of the project on the Savannah River Basin and the need for mitigation of any adverse environmental impacts.