



## County of Louisa

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September 21, 2005

Ms. Ellie Irons, Environmental Impact Review Program Manager  
Virginia Department of Environmental Quality  
629 East Main Street  
Richmond, VA 23219

Mr. Jack Cushing  
Environmental Project Manager for North Anna ESP Site Application  
U.S. Nuclear Regulatory Commission, Washington D.C. 20555

Mr. Michael Lesar  
Chief, Rules and Directives Branch  
Division of Administrative Services  
Office of Administration, Mail Stop T-6D59  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

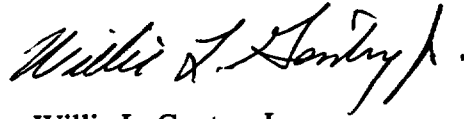
Dear Ms. Irons, Mr. Cushing, and Mr. Lesar,

Attached are some issues that were received from the Friends of Lake Anna and were presented at the Louisa County Board of Supervisors meeting on September 19, 2005.

The Board of Supervisors, as a whole, did not take action in response to these concerns at the time in which they were presented. However, we, as individual Supervisors, would appreciate a written response addressing each one of the concerns, as our constituents deserve such responses.

The concerns seem reasonable to us and as Board of Supervisor members, representing a large part of the Lake Anna residents, it is important for us to have responses to the attached concerns. Your assistance in this matter will be appreciated by both of us and by the residents of Lake Anna.

Sincerely,

A handwritten signature in cursive script, reading "Willie L. Gentry, Jr.".

Willie L. Gentry, Jr  
Vice-Chairman  
Louisa County Board of Supervisors  
Cuckoo District

A handwritten signature in cursive script, reading "Allen B. Jennings".

Allen B. Jennings  
Louisa County Board of Supervisors  
Jackson District

Attachment: As stated  
Cc: Harry Ruth

**Allen Jennings – Talking points re Lake Anna Friends Concerns with adding one water cooled nuclear reactor and one dry-cooled nuclear reactor at the North Anna plant. – 14 Sep 05**

- 1. Lake Anna Friends, which represents over 2,000 persons with petitions, letters, and Board of Directors resolutions, is not anti-nuclear and also does not have “not in my backyard sentiments”.**
- 2. Has no problem with the 4<sup>th</sup> reactor being dry air-cooled, which does not use Lake Anna water.**
- 3. Concerns with 3<sup>rd</sup> reactor proposed as water-cooled using Lake Anna water as source of coolant.**
  - a. Va. Dept of Water Resources says “inadequate supply of water in the small 342 sq mile watershed (Louisa, Spotsylvania & Orange) counties that feeds Lake Anna to provide coolant for the 3<sup>rd</sup> water cooled reactor. They would support the 3<sup>rd</sup> unit if it was dry-air-cooled.**

**The concerns with the 3<sup>rd</sup> water cooled reactor are:**

- 1. If implemented it would increase the drought cycle from 8.6 years to 2.5 years**
- 2. It would increase water conflicts with the downstream counties over the 20 year life-span of the Early Site Permit if granted.**
- 3. It would use water most likely that may be needed to accommodate the future population growth of Louisa County over the 20 year life-span of the Early Site Permit if granted.**
- 4.. It would decrease the lake level on the cold side an extra 2.6 feet for an additional 26 days per year. This in-turn could cause mud-flats in shallow portions of the Lake.**

**b. The Draft Nuclear Regulatory Commission (NRC) Environmental Impact Statement indicates the 3<sup>rd</sup> water-cooled reactor may:**

- 5... Would increase the water-flow rate an additional 60% or an extra 1.2 million gallons per minute leaving the North Anna plant. This could then increase the lake level, possibly causing property damage, on the warm side of the lake.**
- 6... Would increase the water temperature exiting the plant to 127 degrees, but has now been downgraded to 113 degrees. This is worse then a hot tub, whose manufacturers indicate you should not enter the hot tub if it is 104 degrees and if you have any cardiovascular, diabetes, high blood pressure or are pregnant, you should consult a physician. Small children are also at risk.**

**Although the water does cool as it circulates through the warm side, it estimated that the portions of the lake in the circulation pattern would increase water temperatures of approximately 5 to 6 degrees. Some folks at Aspen Hill reported 105 degrees water temperatures this summer. Some folks on the cold side reported 95 or 96 degrees this summer.**

**This could create major health problems for our constituents, increased bacteria, etc. for the 500,000 plus people who use Lake Anna for recreation on an annual basis.**

**It could also mean a drop in property values and our tax base if the general public perceived the lake as a hot tub and stopped coming...**

**Recommendations to the Board:**

**1. To consider the Coastal Zone Management Act (Virginia Department of Environmental Quality (VDEQ) publishing deadline of 22 Sep, I recommend some type of a letter or board resolution be immediately sent to Ms. Ellie Irons, at VDEQ and the NRC to:**

a. place regulatory limits regarding lake water temperatures, levels, and possibly flows through the plant being placed on Dominion's permits (both current and future). These limits should provide that the water temperatures should never exceed 104 degrees under any circumstances) or to significantly and/or permanently change current overall water levels.

b. . The board agrees that if the proposed 3<sup>rd</sup> nuclear reactor were water-cooled:

(1).. The inadequate water supply in Lake Anna would create major water conflicts with downstream counties and would not protect the citizens of Louisa County for future growth over the 20 year period of the Early Site Permit and therefore the Board cannot support this type of reactor.

(2). Any water temperature in excess of 104 degrees could make parts of Lake Anna dangerous for humans, fish and animals at certain times and make parts of Lake Anna unusable for popular recreational activities at times when these activities are most popular.

(3). Permanent changes in water levels on all or part of Lake Anna could cause substantial damage to waterside facilities and cost property owners millions of dollars and could eventually cause a decrease in property values.

(4). Increased water flows through the plant could cause increased erosion, turbulence) and should be thoroughly investigated, with the results reported to this Board before a final recommendation can be made.

c. The Board does support the concept of an additional 3<sup>rd</sup> and 4<sup>th</sup> nuclear reactor at the North Anna plant, but hopes that Dominion Resources will consider other alternative types for the 3<sup>rd</sup> reactor that will not impact the watershed or have negative impact items as defined above, which we understand are available in the U.S and Europe, such as the dry-air-cooled reactor that Dominion has proposed for the 4<sup>th</sup> reactor. We also have concerns with any site pre-construction activities permitted under the Early Site Permit for a 20 year time period until the above issues are resolved.