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**Date:** 8/24/2006 6:51:38 AM  
**Subject:** Comments on SDESP for Dominion for North Anna Units 3 and 4

Enclosed are the written comments I have made for the ESP request by Dominion for North Anna unit 3 and 4.

Thank you of the opportunity to voice our opinion.

Also at the NRC Public meeting on August 15, 2006, a question was asked as to how many temperature sensor locations does Dominion have? I responded with 12. After checking with Dominion, they have only 11. This does not include the LACA Water Quality readings or VDEQ's

Kenneth Remmers

**Federal Register Notice:** 71 FR 39372  
**Comment Number:** 28

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Mr. Jack Cushing  
Environmental Project Manager for North Anna ESP Site Application  
U.S. Nuclear Regulatory commission (NRC),  
Washington D.C. 20555  
(via email to [JXC9@NRC.GOV](mailto:JXC9@NRC.GOV) and [North\\_Anna\\_Comments@NRC.GOV](mailto:North_Anna_Comments@NRC.GOV))

Ms. Ellie Irons,  
Environmental Impact Review Program Manager  
Virginia Department of environmental Quality (VDEQ)  
629 East Main Street, Richmond, Va. 23219  
(via email to [elirons@deq.virginia.gov](mailto:elirons@deq.virginia.gov))

Subject: Comments on the Draft Supplemental Environmental Impact Statement (EIS)  
and Federal Consistency Certification on the Early Site Permit for North Anna Nuclear  
Power Plant.

Dear Mr. Cushing and Ms. Irons,

**My Name is Kenneth Remmers and I reside at 2301 Waterside Drive, Bumpass, VA. My credentials are that I am the Lake Anna Civic Association's (LACA) Water Quality Chairman. I am also the Waterside Property Owners Association (WPOA) President of whom I am representing today.**

**1. WPOA.** WPOA is a small community on the reservoir side of Lake Anna near the dam. Our community is in favor of the expansion of the current North Anna Nuclear power plants only if the project is handled in a way so as not to destroy health, safety, and welfare of the current residents, users, and future generation at Lake Anna. Dominion (formerly VEPCO) has been a good steward of the lake over the years. I request that all the environmental issues identified by LACA and FOLA with the addition of two new plants with respect to water, water temperatures, lake level, noise, and health and welfare be resolved; then an NRC Early Site Permit and a VDEQ Federal Consistency Certification can be issued.

**2. Concerns and Inconsistencies.**

- a) **Pre-lake water flows.** The SDEIS on page 2-10 Section 2.6 Water, states "the historical pre-dam minimum flows [usually less than 5cfs during dry summer months]" is in conflict the Department of Game and Inland Fisheries (DGIF) where they state in their letter dated July 7, 2006 that "pre-lake during dry conditions in late summer is a minimum of 12cfs flow. This is found in table 1 of the letter. This is a large difference and the effects are important relative to the amount of water flow into the watershed. The difference needs to be resolved.
- b) **Use of Sprayers in the Discharge Canal.** The existing NAPS units use a spray pond for an Ultimate Heat Sink (UHS). Why is it so difficult to add sprayers to the discharge canal to reduce peak water temperatures when necessary to keep the discharge temperature below 104 F?
- c) **Water Level and Temperature for Plant Operations.** Unit 3 is stated to operate until the water level drops to 242 feet lake level and water temperature at

the reservoir inlet of 100 F. Why does page 5-39 say 243.5 feet for unit 3 and 245.2 feet for NAPS units 1 and 2? It also states those units 1 and 2 can operate up to an inlet temperature of 95 F. These temperatures far exceed the variance granted in the VPDES permit. Controls on this temperature need to be delineated in the permit.

- d) **Chemicals added to Blowdown Water.** Blowdown from unit 3 would be 12.9cfs at 100 F for 100% reactor power. Chemicals will be added including Phosphates. This combined with the temperature could affect the algae bloom. Phosphates should not be used. Are the 100 F temperature tied in with the maximum inlet water temperature or is there some heat transfer from the cooling towers heating this water to this temperature?
- e) **Third unit Cooling with Air Cooled Towers.** Other plants overseas use this technique. Why can't Dominion use this method for unit 3 as well as unit 4? Why doesn't Dominion step up to the plate and use this method for unit three?
- f) **Cost Savings with Reduced Intake Size with Cooling Towers.** Dominion states that the addition of cooling towers will add 200 million dollars to the 2.5 billion needed to construct the each plant. The original intake was 150 feet long and 200 feet wide and required dredging and shoreline reshaping. The current intake will be significantly smaller. It would be 70 feet long by 70feet wide with no modification to the shoreline. What is the cost differential for this smaller intake versus the increased cost for cooling towers? This was not discussed by Dominion.
- g) **Duration for Flow over the Dam 20cfs.** NRC concludes (page 5-11) that the discharge at 20cfs will increase from 6% to 11% of the time if unit 3 operates as proposed. This equates to 40 days versus 22 days currently. Dominion stated in their presentation that the 20cfs discharge would go from 5.2 to 7%. Please explain the difference.
- h) **Temperature Data.** Temperature data used by Dominion even in the updated revisions of the submittals do not reflect the current temperatures of the last few years. That data shows the discharge canal temperatures have reached 104.6 F. This is above the hot tub limits set by governmental regulators. Sprayers in the discharge canal or other alternative cooling methods could alleviate this problem during the hottest weeks at minimum cost.
- i) **Unit 4.** Not enough attention has been given to unit 4 and its dry cooling. The NRC needs to address this issue and Dominions answer that "new technology in the next 10 to 15 years will solve the problem" is not acceptable. Since the ESP is good for 20 years, why not include unit 3 with this same technology, a technology currently used by overseas where they have no local water source? Please explain this new technology and state why it will not be available for unit 3. Is Dominion ready to go for a COL for unit 3 right away? I think the public is due an answer on this question. Why should Dominion cover up what their intentions are?

Please contact Kenneth Remmers, President WPOA, Address, 2301 Waterside Dr., Bumpass, VA 23024 Phone 804-448-9784 for any additional information that you may need.

Sincerely,

Kenneth Remmers, President WPOA



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