From: "Harry Ruth" <HC.RUTH@LOUISA.NET>
To: "North Anna ESP Comments" <North_Anna_Comments@NRC.GOV>, "Jack Cushing (NRC)" <JXC9@NRC.GOV>, "Andrew Kugler (NRC)" <AJK1@NRC.GOV>, "Nitin Patel (NRC)" <NXP1@NRC.GOV>
Date: Mon, Jul 24, 2006 11:11 AM
Subject: Resend - Lake Lake Anna partial list (2) of North Anna ESP concerns

Dear Ms. Irons (VDEQ) and Mr. Cushing (NRC),

I am resending the attached VDEQ & NRC letter - Partial Concerns (2) re Roads, Schools, Safety Report w-North Anna ESP Rev 6 dated 15 June 2006, so it is entered into the official Nuclear Regulatory Commission deata base within the NRC public comment period for the North Anna ESP. See below for initial email sent on 15 June 06.

15 June 2006

Attached please find a letter that identifies comments and concerns with Dominion's Application Revision 6 for the North Anna ESP and also the NRC Safety Report.

These are only a partial list of concerns/comments identified thus far as a result of a brief and cursory look at the large volume of materials available to us for review. we thought it prudent to bring these concerns/comments to your attention soonest so both the NRC and VDEQ has adequate time to review them.

Please do not hesitate to call if you have any questions.

Sincerely,

Harry Ruth
for the Friends of Lake Anna
C/O 230 Heather Drive, Bumpass, Va. 23024
Phone 540-872-3632

CC: "Ellie Irons (VDEQ)" <elirons@deq.virginia.gov>

Mail Envelope Properties (44C4E2F5.C91 : 14 : 64657)

Subject: Resend - Lake Lake Anna partial list (2) of North Anna ESP concerns
Creation Date Mon, Jul 24, 2006 11:10.AM
From: "Harry Ruth" <HC.RUTH@LOUISA.NET>

Created By: HC.RUTH@LOUISA.NET

Recipients
nrc.gov
TWGWPO03.HQGWDO01
NXP1 (Nitin Patel)

nrc.gov
OWGWPO04.HQGWDO01
AJK1 (Andrew Kugler)

nrc.gov
OWGWPO03.HQGWDO01
JXC9 (Jack Cushing)
North_Anna_Comments

deq.virginia.gov
elirons CC (Ellie Irons (VDEQ))

Post Office	Route
TWGWPO03.HQGWDO01	nrc.gov
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	deq.virginia.gov

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MESSAGE	1240	Monday, July 24, 2006 11:10 AM
TEXT.htm	3335	
VDEQ & NRC letter - Partial Concerns- (2) re Roads,Schools,Safety Report w-North Anna ESP Rev 6 - 15Jun06.doc	61952	
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FRIENDS OF LAKE ANNA, VIRGINIA

(Resubmitted during NRC public comment period to NRC & VDEQ on 24 July 2006)

15 June 2006

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

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

Reference: (1) Friends of Lake Anna letter dated 12 Jun 06, Subject Request for extension of Public Comment period re the Federal Consistency Certification of the Dominion Nuclear North Anna Application for the Early Site Permit (ESP) Review and other related items

(2) Lake Anna Observer newspaper – June 1, 2006 Public Notice for the Environmental Project Comment Period re the Federal Consistency Certification of the North Anna ESP re the Federal Coastal Zone Management Act.

(3) Friends of Lake Anna letter dated 14 June 2006: Subject Lake Anna Cooling Lagoon concerns with the North Anna ESP

(4) Friends of Lake Anna letter dated 15 June 2006: Subject Concerns with the data contained in the Dominion Letter dated April 13, 2006 in response to NRC Questions and also the North Anna ESP Application part 3 – Environmental Report Revision 6 dated April 2006

Subject: **Partial Concerns #2 with the data contained Dominion's Application for the North Anna ESP 6 dated April 2006 and the related NRC Safety Report dated Sep 2005.**

Dear Ms. Irons and Mr. Cushing,

On behalf of the 2,650 persons represented by the Friends of Lake Anna, it is requested that the following concerns with the data contained in the Dominion North Anna ESP Applications Revision 6 and the NRC Safety Report dated Sep 2005 be addressed in the U.S. Coastal Zone Management Act Federal Consistency Review and also by the Nuclear Regulatory Commission. Also please forward the concerns to the appropriate Commonwealth of Virginia department for comment if they do not come under the purview of the U.S. Coastal Zone Management Act.

These are only a partial list of concerns/comments identified thus far as a result of a brief and cursory look at the large volume of materials available to us for review. In addition, we have researched other related public documents that may have an impact on this ESP review. We thought it prudent to bring these concerns/comments to your attention soonest so both the NRC and VDEQ has adequate time to review them. Please see below for a description of each concern.

Our group, "The Friends of Lake Anna" is a citizen group whose mission is to protect Lake Anna (both main reservoir and cooling lagoons) and its surrounding landscape, together with any related concerns, within Louisa, Spotsylvania, and Orange Counties for the health, safety and welfare of current residents/users and for future generations. We are not anti-nuclear, nor do we have "not in my backyard" sentiments, but do support a wise and safe use of nuclear energy. Our goal is simply to protect Lake Anna for the 500,000 annual users and insure compliance with the law.

FRIENDS OF LAKE ANNA, VIRGINIA

Concern 1 Too many workers & residents, with a small 2 lane road (Route 652 – Kentucky Springs Road)

– Dominion plans to bring in 5,000 construction workers for a 5 year period re the new plant.
- They currently bring in about 1,000 construction workers twice a year for planned maintenance on the existing two reactors
They currently employ about 800 permanent workers
They will add about an additional 1120 permanent workers when the new 3rd and 4th reactors are activated
- Cut-A-Long Development is about 1,000 homes development is a few miles away on Route 652
. - The Waters Development is about 400 homes development is a few miles away on Route 652
- Other developments also use Route 652 – (Brandywood, Tall Pines, Tara Woods, Aspen Hill, Both Waters, Bear Castle, Oak Landing, Pine Harbor, Pine Point, Overton Fork, Seclusion Shores, Ruth Estates, Lakewood Landing, Oakleigh 1 & 2, Cuckoo's Nest, Plum Tree, Long Acres, Edgewood Bay, Noah's Landing, etc.)
- New truck facility for stones/concrete on Route 700 (adjoining route) will also use Rt 652.

- *Discussion*: Proffers should be made by Dominion and/or Federal Government to widen Route 652 since this nuclear energy is a national priority *Prior to beginning of any new construction* or we will experience a traffic nightmare. Note that if/when the ESP is granted, that pre-construction activities (clearing the site, building support buildings, adding railroad spurs, etc) .can begin. So this issue cannot wait until the Construction and Operating License Phase. It takes many years to plan and fund road construction.

Concern 2 – Emergency Evacuation surrounding the entire lake in Louisa, Spotsylvania and Orange Counties. Only 2 lane roads surround the lake.

Because of the recreational aspects of the lake, most of the 500,000 annual users of the lake and residents have boats and boat trailers. Many vacationers during the summer pull large camping trailers. These facts coupled with the large residential developments currently and planned surrounding the lake in Louisa, Spotsylvania and Orange Counties would create a traffic nightmare if there was a nuclear accident or terrorist attack that necessitated an emergency evacuation. Note that both Louisa and Spotsylvania Counties are in the top 100 fastest growing counties in the U.S.

Discussion: Pro-offers should be made by Dominion and/or Federal Government to widen all roads surrounding the lake prior to the beginning of any new construction or we may experience many deaths if residents and users around the lake tried to flee in a panic situation as a result of a nuclear accident or terrorist attack.

Most of the roads are simply small winding 2 lane roads. There are only a few local small gas stations to provide fuel. As more nuclear reactors are added, the risk of terrorist attacks and the possibility of a nuclear accident increase.

The applicant, state and federal governments should work together to ensure that the public is not put in harms way. They jointly should increase the road width's, etc. prior to any new construction beginning as a result of the ESP or COL that accommodates the emergency evacuation of 7,000 to 8,000 Dominion employees/construction workers together with all the local residents and recreational users of the lake.

Concern 3 Major influx of new persons to Louisa, Spotsylvania, and Orange Counties will result in need for new schools

See concern 1 above for new worker numbers. Since this construction project for unit 3 is projected to be 5 years in length, most of the 5,000 construction workers and 1,120 new employees will most likely relocate to either Louisa or Spotsylvania counties since they are the closest to the power plant construction site. A few new workers

may locate in Orange County which is a greater distance away.

- **Discussion:** This major influx of new residents to Louisa, Spotsylvania and Orange Counties will have a major impact on school requirements. Since the nuclear plant may be a national priority, then possibly school construction grants can be provided by the Federal government to assist with new school construction. The current residents and taxpayers of the area should not be expected to fund new schools as a result of this major construction project.

Concern 4 – Using the North Anna River/Lake Anna for any future water needs of Louisa and Spotsylvania Counties.

Discussion: Both Louisa and Spotsylvania Counties have been designated in the top 100 fastest growing in the U.S. Both counties rely on wells and septic tanks for the majority of their water supply. With the major increased growth projected and demand for water resources, it would be reasonable to project that one or both counties may look to Lake Anna (the 3rd largest lake in the state) as a water source for drinking water and public use. How will the new 3rd and 4th reactors (if built) diminish either counties ability to use the lake as a future water source for pubic water consumption?

Concern 5 - Dominion is planning on constructing cooling towers that will be between 150 and 180 feet (15 - 18 stories) in height. These cooling towers will have huge fans that are planned to emit noise levels at about 65 decibels 24 hours a day – 7 days a week. These cooling towers will emit plumes of water/ steam/ fog formation which can create fog/icing conditions in the vicinity an average of 70 hours per year (or if 3 hours per day this equates to 23 extra days a year of fog and/or icing conditions on the adjoining roadways)

Discussion: Eugene Grecheck, Dominion V.P. on Jan 6, 2006 briefed the public, the press, and VDEQ reps at a stakeholders meeting at the power plant, that the new towers would not exceed 75 feet tall for wet/dry units and 50 feet for dry units only. This application requesting towers up to 180 feet tall is a break of the public's trust by Dominion. If we can't believe a senior vice president within Dominion, who can we believe? Current trees in area are approximately 50 feet to 75 in height, with a few going up to about 100 feet. Noise travels long distances if not distorted by various barriers (trees, buildings, etc.). Louisa Noise Ordinance says no more then 55DP (at night) in residential neighborhoods. *It is requested that the cooling towers be no higher then 80 feet (equivalent of an 8 story building) to mitigate the noise and also provide an esthetically pleasing profile of the adjoining skyline.* In addition, the noise created by the cooling tower fans should not exceed 55 decibels. The towers should not exceed 80 feet so they blend in with the treeline. The water/fog plumes coming up from the towers will detract rural peaceful setting of the lake, without having 18 story towers which would be an eyesore. What type of mitigation can be done to avoid any traffic problems on adjoining roadways as a result of the fog and icing conditions approximately an extra 23 days a year?

Concern 6 – Possibly raising the lake level 6 to 12 inches to retain more water in the lake so it would help in times of drought.

Discussion: Louisa, Spotsylvania and Orange Counties have thousands of adjoining landowners on Lake Anna. Raising the lake level would create major hardships and destruction of private property to all adjoining landowners and businesses that have piers, boathouses, launching ramps, bulkheads, etc. It would also destroy many lake front business locations.

FRIENDS OF LAKE ANNA, VIRGINIA

Concern 7 – Water levels, water flows, water temperatures

It is unclear from the many various documents: the ESP application, NRC requests for additional information and Dominion responses to determine exactly what the impact on both the cold side and cooling lagoons water level's, water flows, and water temperatures are when the 3rd and 4th reactors are activated.

The documents do not reflect common every day language that can easily be understood. They also do not use the common Fahrenheit degrees for all temperatures. In some cases they use C, (which requires the public to convert to Fahrenheit degrees. In other cases they use a notation of thermal heat added to the water without any regard to what this means to Fahrenheit degree temperatures. Dominion and the NRC should standardize the use Fahrenheit degrees so the public can easily understand its impact in all ESP and COL documentation.

It appears that these various uses of F, C, and Thermal heat added methods that impact the water temperature are used to deceive and confuse the public.

It is also designated that the water cooling towers will create a discharge of "blowdown" water into the existing discharge canal, but it does not designate any limiting temperature of the water. It also does not designate how the flow rate when combined with the existing 2 million gallons per minute currently discharged may impact the private residence boat houses, piers, etc. in the cooling lagoons.

It is unclear on exactly how many inches/feet the entire lake will drop at what times of the year as a result of the increased water usage for the cooling towers. Will this increase water usage create any problems with the entire watershed and possibly increase drought cycles?

Concern 8 – Too many supplemental confusing documents, using inconsistent terminology to insure that all items have been reviewed to protect the public's interest. There are also many supplemental Requests for Information and Responses from Dominion with in some cases unclear responses. The NRC is planning to issue a supplemental draft environmental and supplemental draft safety report. How is the public going to keep track of all these changes?

Discussion:" There is over 1,000 pages of data to review in too short a time period to insure that all the Louisa, Spotsylvania, Orange County residents and the 500,000 annual recreational users of the Lake are protected.

This is also complicated by the fact that both the Va. Dept of Environmental Quality and the Nuclear Regulatory Commission have different public comment periods. It is not easily understood who has jurisdiction over what concerns.

It is recommended that both the state and federal agencies have one only joint hearing and invite all associated federal and state departments that may play a role in this major project, so the public is not confused on whom to report what issues to and expect a reasonable response.

This is also true within the NRC who issues a Safety Report, without having any public involvement and appears to be inconsistent in some cases with the Environmental Report

The planned issuance of a supplemental safety and supplemental environmental report will only add to the confusion of many thousands document pages. How can you expect the public to keep track of what is the current version of the application vs. the RAI's, vs. the responses vs. supplemental reports, etc. ?

FRIENDS OF LAKE ANNA, VIRGINIA

Concern 9 - NRC Safety report not reviewed by Commonwealth of Virginia Departments or the public

Discussion: Why is the public or the Commonwealth of Virginia departments not involved in reviewing the NRC's Safety Report? There should be a draft safety report public comment period, similar to the ESP process, so the public and state agencies have a chance to review and comment on the NRC's safety findings. Safety is one of the public's main concerns with any federal project.

Where is the spent nuclear fuel kept and when are plans to move it offsite? Emergency Evacuations? Terrorist Attacks? Melt-down of nuclear reactor? Release of nuclear by-products into the atmosphere? Reasonable safety concerns with wet and dry cooling towers? Education of the public for safety precautions taken? Where is water taken from the North Anna river for the plant – how does this major flow of water (approximately 2 million gallons per minute) endanger the safety of the fish swimming and people recreating in the area? How safe will the proposed 180 feet towers be for aircraft flying in the area? How safe will it be to drive on adjacent roadways with more fog and ice on adjoining roadways when the cooling towers are in operation? How safe is the temperature and water quality of the cooling waters ejected into the discharge canal and eventually into the lake's circulation pattern where 99% of the water stays within the lake and used by the public for recreation? How safe is the water when it is heated 14 to 18 degrees F – does this increase the bacteria count??

There are those sections that should definitely be reviewed by the Va. Dept of Water Resources, Fish & Game together with Transportation Dept and inaccurate statements in the safety report that should be corrected. For example, the Safety Report has a Hydrology section (2.4), which is one of main topics of concern for the commonwealth and the public. In the Emergency Planning section 13.3 the report indicates that the applicant stated that the road network surrounding the NAPS site, which includes the ESP site, can adequately accommodate anticipated vehicular traffic. This statement simply is not true in any sense of the word (see concern 1 above). The report also identifies that there will be minimal population growth in the area through 2065 (almost 40 years into the future). Currently both Spotsylvania and Louisa counties are in the top 100 fastest growing counties in the U.S.

There are many other examples within the Safety Report that should undergo the public review, with a public hearing and comment period. Why is the NRC afraid to let the public review this document prior to its publication? After publication, it will be used as a source of justification for many items because the NRC and federal government approved all the data within the safety report and therefore it must be correct. We respectfully request that this process be changed so that both the commonwealth and the public are invited to review and comment on this important document prior to publication.

Thank you in advance for your kind consideration of our concerns/comments. We will continue to review the voluminous documents and provide comments/concerns as we find them. Additional concerns with the water temperature, water quality, consideration of spent nuclear fuel, etc. are still under review. Each of these items and others will be addressed in separate correspondence after we have had sufficient time to review each. If you have any questions, please do not hesitate to call. I'll look forward to your response.

Sincerely,

Harry Ruth
For the Friends of Lake Anna
C/O 230 Heather Drive, Bumpass, Va. 23024
Phone 540-872-3632

FRIENDS OF LAKE ANNA, VIRGINIA

CC: U.S. Representative Eric Cantor (7th District) (via email – Lloyd.Lenhart@mail.house.gov)
Senator R. Edward Houck, 17th District of Virginia (via email – ehouck@adelphia.net)
Senator Ryan McDougal, 4th District of Virginia (via email – district04@sov.state.va.us
Delegate Christopher Peace, 97th District of Virginia (via email – delcpeace@house.state.va.us
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