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

Subject: **Concerns with the data contained in the Dominion Letter dated April 13, 2006 in response to NRC Question and also the North Anna ESP Applications part 3 – Environmental Report Revision 6 dated April 2006**

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 Letter dated April 13, 2006 in response to NRC Questions and also the North Anna ESP Applications part 3 – Environmental Report Revision 6 dated April 2006 be addressed in the U.S. Coastal Zone Management Act Federal Consistency Review and also by the Nuclear Regulatory Commission.

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 an adequate time to review them. Please see below for a description of each concern. We have identified either the NRC question number or the Dominion Revision 6 Application number for each concern/comment.

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.

Concerns/Comments re Letter from Dominion in response to NRC questions dated April 13, 2006:

1. Will there be a joint Coastal Management and NRC public hearing on this major revision to the ESP Application by Dominion for the North Anna Units 3 and 4 including DEQ, Fish and Game, Health Department, and surrounding counties?

2. Question 6 Human Health -- At the stakeholders meeting with Dominion, VDEQ, VDH, LACA, and FOLA on May 16, 2006, no mention was made of how Dominion would communicate to local landowners information to existing risks. We do not agree with this approach of "informing only". What corrective actions will Dominion take to correct the situation if a health problem occurs? Discussion was held concerning measuring for PAM to set up a baseline. Will NRC/VDEQ require this baseline?

3. Question 10b 100% load vs 96% average.-- In the summer months when the lake levels are lowest, evaporation highest and plant operations are closest to 100%; this value of 100% should be used. In EC mode I see in table 3.1-9 16,700 GPM maximum and not 8707 or 9070 GPM. Explain?

4. Question 10e Lake Levels – Dominion provided the results of a study to NRC and VDEQ dated March 31, 2006. We have not seen this study. Can we have a copy of this study and letter? Since Dominion has decided not to change the existing lake level, can we assume that the lake levels will be 7 inches lower than normal with unit 3 running in times of low flow or droughts?

5. Question 16f Lake Level -- Can we assume that raising the lake level is a dead issue. It keeps coming up and Dominions response is that it is no problem, but they are not proposing it at this time. When will they propose it?

6. Question 16j Other locations for ESP Dominion states that North Anna was ranked the highest when compared to the four possible locations. Please provide the criteria for the "weighting factor"?

7. Question 17 Bald Eagle nest within 3 miles of North Anna Discharge Canal . On April 27, 2006 FOLA representatives met with Fish and Game's predatory bird expert (Jeff Cooper). A bald eagle's nest at coordinates N38.03.718 W77.50.803 was sited in a northern red oak tree. This is within 3 miles of the NAP. Also on May 18, 2006 the Section 312 Evaluation, Federal Consistency team had a tour of the Lake Anna "Cooling Lagoons" as hosted by FOLA. In attendance were the NOAA Evaluation Team, DEQ, DGIF, LACA, and Dominion. During the tour of the cooling lagoons adjacent to the discharge canal location , a bald eagle was seen with a fish in it claws flying just overhead. This was proof positive that the bald eagles are within three miles of the NAP.

Concerns/Comments re North Anna ESP Application Part 3 Environmental Report Revision 6 April 2006

1. Section 2.3.1.1 Make-up water minus Blowdown discharge equals 37.2 cfs (38.8 cfu @ 100%). This evaporation loss of make –up water is almost equal to the discharge from the dam at 40 cfs. The removal of 49.6 cfs (51.7 cfs @ 100%) for make-up water is a huge amount of water from the reservoir. Current Lake Anna storage to 250 ft msl is 305,000 acre- feet or 99,400 million gallons of water. With 4246 cfs (1.9 million gallons per minute) discharge from Plant 1 and 2 (reference par 3.4.2.2 page 3-3-68) plus 51.7 cfs added from plant 3 for a total of 4297.7 cfs (1.93 million gallons per minute), the entire lake volume is pumped every 36 days or about once a month.

2. Table 2.3-7 is misleading. Why is the temperature from 2002 through 2005 ignored. The results would be different if this data was included. All other data in the report includes data for more years than this temperature. Dominion's data for 2005 show temperatures up to 103.6 degrees F in August.

3. Figures 2.3-4 and 2.3-5 show the discharge show the spillway curves. Can you explain how you set 40 and 20 cfs from the curves which show a minimum setting of about 2500 cfs for 250 msl for a 2 foot gate opening.

4. Par 3.1.2.2 **New Unit Description** Please explain in detail "An operating unit or group of modules..... The structure would consist of between 1 and 8 reactors or reactor modules structured around a common support operations.... Are plants 1 and 2 structured like this now? Will there be up to eight concrete domes for each plant?

5. Same section as 4. Unit 3 combined wet and dry cooling towers will be 180 ft tall. We were told the height would be much lower about 60 feet tall. During a formal presentation to the public and press by Eugene S. Grecheck, Vice President- Nuclear Support Services on January 6, 2006, we were told the cooling towers would be less than 75 feet tall for wet/ dry units and 50 feet for the dry only unit.. Why did this change to 180 feet? Unit 4 dry towers will be 150 feet tall. These heights are too tall. The cooling towers should not exceed the 80 foot height of the tree lines surrounding the NAP for shielding them from view and noise abatement.

6. Table 3.1-1 Number of people to operate plants 3 and 4 only is 1160 people. During construction what is the maximum number of people including operation type on board (ie max at any one time)? Could the indicated 5,355 construction workers overlap the 1160 operations people? How would this large increase in work force and their families effect the traffic patterns on existing two lane roads around the lake? Particularly during the summer months when large boats and recreation trailers crowd the roads already. What would happen during an emergency evacuation caused by a terrorist attack? The roads could not handle this situation.

7. Table 3.1-9 Flow rates and evaporation rates should be based on 100% power levels and not 96% as shown. For units 1 and 2, the units run at 100% during the summer hottest months and this 100% should be used for maximum calculations when they effect water temperature, flow rates, evaporation, and lake height.

8. Table 3.1-9 Can you explain if the blowdown temperature is only 100 degrees F, how this will change the temperature at the discharge canal. If water from units 1 and 2 are 103.6 degrees F, will this blowdown water cool the maximum temperature a little.

9. Table 3.3-1 It is not clear who has the final decision as to when the unit #3 will change from Energy Conservation (EC) mode to Maximum Water Conservation (MWC) mode. I understand that after seven days of 250 msl a switch would be made. What if a rain storm is predicted? Would the change still be made? How would the public know the MWC mode is in effect. How fast can the plant change to EC mode? Does the level have to be above 250 msl for seven days to convert back to EC mode?

10. Can you explain the UHS (Ultimate Heat Sink)? Why is it there? What does it do?

11. Par. 3.4.1.3.2 page 3-3-65 The maximum intake water temperature for plants 1 and 2 is 95 degrees specified by the "Technical Requirements Manual". This says the output of the discharge canal into the cooling lagoons will be 109 degrees F. This would be unhealthy. Would the plants 1 and 2 be shut down at this point? Plants 3 and 4 would still run up to 100 degrees input temperature. Would this higher input temperature affect the blowdown or evaporation rates and water requirements (still 49.6/.96 = 51.7 cfs (23,190 gpm)? What would the discharge temperature to the cooling lagoons be at this condition?

12. Par. 5.1.1.1 page 3-5-2 The conclusion that "the change in temperature at the discharge point of the (cooling lagoons) due to operation of the new units would be negligible and would not impact the current or future recreational uses of the lake" is not true. Since the new units would not shut down until the input temperature reaches 100 degrees F, and the existing units at 95 degrees F, this would have a serious impact on the current recreational uses on the lake. Both Louisa and Spotsylvania are in the top 100 fastest growing counties in the USA. It is reasonable to project an increase in recreational activity around the lake. We do not agree that the temperature discharge from the cooling lagoons at 100 degrees F would not affect current or future recreational uses of the lake.

13. Par. 5.2.2.1.2 page 3-5-11 Since a quadratic equation was used to fit the three elevations (240, 250, 260 msl), what was the index of determinate?

14. Tables 5.2-3 and 5.2-4 Percentage of time outflow is 20 cfs will increase from 5.2 % to 7.3% with unit 3 in place. This 7.3% equals to an average of 27 days per year. Some years more. Some years less. It should be pointed out that this will most probably occur during July, August, September months. Please explain why in table 5.2-4 at elevation 248 existing units plus unit 3 is 7.0% and not 7.3%.

15. Par 5.2.2.2 page 3-5-16 We disagree with the conclusion "Potential impacts would be greatest in the reach of the North Anna River extending below the North Anna Dam to its confluence with the South Anna River". Are there any uses of the water in this area? What about the property owners around the lake who can not use their boats, docks and the water? Aren't they impacted just as much?

16. For the IHA study referenced on page 3-5-17, does the cooling towers for unit 3 take into account the EC and MWC modes. It is not clear.

17. Par. 5.2.2.5 page 3-5-20 "The discharge of heated water to the North Anna Reservoir via the (cooling lagoons) would be subject to CWA (Clean Water Act) Section 316(a) regulations which require that the thermal discharges assure the maintenance of a balanced, indigenous population of shellfish, fish, and wildlife in and on the receiving body of water. The withdrawal of cooling water from the North Anna Reservoir would meet Section 316 (b) of the CWA and the implementing regulations, as applicable." This is not in agreement with a recent ruling of the U. S Supreme Court decision (No 04-1527 S.D. Warren Company, Petitioner, v. Maine Board of Environmental Protection et al). As described in the decision, Congress passed the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters, with the national goal being to achieve water quality which provides for (1) the protection and propagation of fish, shellfish, and wildlife and (2) provides for recreation in and on the water". Dominion can not get the same variance as it currently has for existing units as well as the new unit 3 in their VPDES with this ruling. Recreational use of the discharged water must be addressed. In the June 28, 2005 letter from Dominion to VDEQ requesting "Reissuance of VPDES Permit No. VA0052451", Dominion requested "Continued 316(a) Variance for water temperature discharge" This is because they discharge water over the allowed 32 degree C maximum. Why did Dominion request eight (8) other new waivers from VDEQ. What are they and why were they requested? Would these new waivers be requested for unit 3 also? Quid-Pro-Quo, the public should receive some compensation if VDEQ and the State Water Control Board give these waivers to Dominion. Such a concession would be limiting temperatures at the discharge canal to no more than 104 degrees F. Over the entire life of the existing units this 104 degree F temperature has never been reached even in extreme drought conditions. We have seen temperatures at the discharge of the canal but what are the temperatures leaving the heat exchanger at the power plant and what are the temperatures in the Ultimate Heat Sink (UHS) and in the discharge canal itself?

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, safety aspects with local roads, impact on schools in two of the top 100 fastest growing counties in the U.S., 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,

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