

PMNorthAnna3COLPEmails Resource

From: Alicia Williamson
Sent: Friday, July 11, 2008 9:08 AM
To: Sandusky, William F III
Cc: Richard Raione
Subject: FW: Recreation on Lake Anna to be studied as part of Instream Flow Methodology Study & COL(2)
Attachments: FOLA-LACA-LABARA-request to NRC re IFIM (recreation study) & COL Environmental Study 3rd reactor on 10 Jul 08.doc; FOLA-LACA-LABARA- Presentation to VDEQ & DCR re IFIM Study & 3rd reactor on 1Jul08.doc; Lake Anna level task force - analysis of VDEQ 21Nov06 letter re IFIM study - 25Jun08.doc

From: Harry Ruth [mailto:HC.RUTH@LOUISA.NET]
Sent: Thursday, July 10, 2008 8:16 AM
To: Alicia Williamson; Michael Masnik; Christopher Cook; Francis Cameron; Thomas Kevern
Cc: Barbara Crawford (Cuckoos Nest); Dale Jones (LABARA); Dale Jones 2 (LABARA); Doug Smith (LACA); George & Gerry Heino; Ken Remmers; Director David Paylor (VDEQ); Ellen Gilinsky (VDEQ - Water); Michael Murphy (VDEQ); Bryant Thomas (VDEQ); Ellie Irons (VDEQ); Russell Baxter (Dep Dir DCR); Robert Munson (Dept of Cons. & Recreation)
Subject: Recreation on Lake Anna to be studied as part of Instream Flow Methodology Study & COL

To: Nuclear Regulatory Commission (via email)
Attention: Ms. Alicia Williamson (Project Manager – North Anna – 3rd Reactor)
Info: Mr. Michael Masnik (Biologist)
Mr. Christopher Cook (Hydrologist)
Mr. Francis (Chip) Cameron (Legal)
Mr. Thomas Kevern (Safety)

Dear Nuclear Regulatory Commission,

1. Please include the 3 attachments to this email as a supplement to our May 10, 2008 presentation. It is requested that this supplemental data be included and evaluated during the Construction and Operating License (COL) Environmental Study, the Coastal Zone Management Act (CZMA) conditional certification of the Early Site Permit (ESP) and also as an enforceable ESP condition for the proposed 3rd reactor at North Anna. The 10 Jul 08 letter to the NRC references the 25 June 08 analysis and the 1 Jul 08 presentation to VDEQ and DCR re the IFIM study.

We need the NRC's assistance to insure that total impact to recreation on Lake Anna is analyzed as part of the current In-stream Flow Incremental Methodology (IFIM) study being conducted as defined in the 21 Nov 06 VDEQ letter (DEQ 05-079F) to Dominion Resources. The declining water levels at Lake Anna as a result of the cooling method that will evaporate up to 24 million gallons per day proposed for the 3rd reactor may have serious health, safety and welfare impacts to the citizens of Virginia and Lake Anna visitors. The declining water levels may also have serious economic impacts to Louisa, Spotsylvania and Orange Counties in addition to the Commonwealth of Virginia resulting in millions of dollars of lost tax revenue. These requests are made recognizing that the IFIM study is part of the ESP conditional certification under the Coastal Zone Management Act (CZMA) and also as an enforceable permit condition of the Early Site Permit (ESP) as defined by the NRC. Both of these are federal programs/processes and are subject to the National Environmental Policy Act (NEPA)

2. Also please include as part of our 10 July 08 letter, the 14 pages that will be faxed separately to Alicia Williamson that are identified as Reference 7 in the Lake Anna Lake Level Task Force letter to the NRC.

3. Thank you in advance for your consideration. Please do not hesitate to call or email if you need any additional data.

Sincerely,

Harry Ruth
Friends of Lake Anna

230 Heather Drive, Bumpass, Va. 23024
Phone 540-872-3632

Doug Smith
Lake Anna Civic Assoc.

4147 Chalk Level Rd, Louisa, VA
Phone 540-894-9094

Dale Jones
Lake Anna Boating and Recreation

2561 Peach Grove Rd, Louisa, Va.
Phone 540-967-9523

Hearing Identifier: NorthAnna3_Public_EX
Email Number: 179

Mail Envelope Properties (Alicia.Williamson@nrc.gov20080711090700)

Subject: FW: Recreation on Lake Anna to be studied as part of Instream Flow
Methodology Study & COL(2)
Sent Date: 7/11/2008 9:07:48 AM
Received Date: 7/11/2008 9:07:00 AM
From: Alicia Williamson

Created By: Alicia.Williamson@nrc.gov

Recipients:
"Richard Raione" <Richard.Raione@nrc.gov>
Tracking Status: None
"Sandusky, William F III" <bill.sandusky@pnl.gov>
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	3876	7/11/2008 9:07:00 AM
FOIA-LACA-LABARA-request to NRC re IFIM (recreation study) & COL Environmental Study 3rd reactor on 10 Jul 08.doc	78402	
FOIA-LACA-LABARA- Presentation to VDEQ & DCR re IFIM Study & 3rd reactor on 1Jul08.doc	77890	
Lake Anna level task force - analysis of VDEQ 21Nov06 letter re IFIM study - 25Jun08.doc	44098	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

10 July 2008

To: Nuclear Regulatory Commission (via email)

Attention: Ms. Alicia Williamson (Project Manager – North Anna – 3rd Reactor)

Info: Mr. Michael Masnik (Biologist)
Mr. Christopher Cook (Hydrologist)
Mr. Francis (Chip) Cameron (Legal)
Mr. Thomas Kevern (Safety)

Subject: Recreation on Lake Anna to be studied as part of Instream Flow Methodology Study & COL

Reference: (1) Our 10 May 2008 presentation to you re the Environmental Impact Statement for the 3rd proposed reactor at the North Anna Plant

(2) Dominion Nov 10, 2006 letter to NRC (Serial 06-1004 ESP/LTB Docket 52-008) requesting an Instream Flow Incremental Methodology (IFIM) study be added to their ESP application as a permit condition.

(3) NRC's Nov 14, 2006 letter to Dominion agreeing to include the IFIM study as an enforceable permit condition.

(4) VDEQ 21 Nov 06 letter (DEQ 05-079F) to Dominion Resources providing direction for the IFIM study (this is included as Attachment D (item 9) in our 10 May 08 presentation to you.

(5) Lake Anna Lake Level Task Force presentation to the Virginia Dept of Environmental Quality (VDEQ) and Virginia Department of Conservation and Recreation (VDCR) on 1 Jul 08 (email copy attached)

(6) Lake Anna Lake Level Task Force analysis of VDEQ's 21 Nov 06 letter to Dominion re the IFIM study (email copy attached)

(7) Six attachments to the 1 Jul 08 VDEQ & VDCR presentation (will be faxed to Alicia Williamson (301-415-5397) for further NRC distribution). .

(8) Richmond Times Dispatch newspaper articles (1) June 1, 2008 – A deep thirst – Virginia hands localities a tall order: Plan now for future Water Needs and (2) June 3, 2008 – Experts Urge Wiser Use of Water

Dear Nuclear Regulatory Commission,

1. Overview. Please see the above referenced (2 thru 8) data as a supplement to our May 10, 2008 presentation. It is requested that this supplemental data be included and evaluated during the Construction and Operating License (COL) Environmental Study, the Coastal Zone Management Act (CZMA) conditional certification of the Early Site Permit (ESP) and also as an enforceable ESP condition for the proposed 3rd reactor at North Anna.

We need the NRC's assistance to insure that total impact to recreation on Lake Anna is analyzed as part of the current In-stream Flow Incremental Methodology (IFIM) study being conducted as defined in the 21 Nov 06 VDEQ letter (DEQ 05-079F) to Dominion Resources. The declining water levels at Lake Anna as a result of the cooling method that will evaporate up to 24 million gallons per day proposed for the 3rd reactor may have serious health, safety and welfare impacts to the citizens of Virginia and Lake Anna visitors. The declining water levels may also have serious economic impacts to Louisa, Spotsylvania and Orange Counties in addition to the Commonwealth of Virginia resulting in millions of dollars of lost tax revenue. These requests are made recognizing that the IFIM study is part of the ESP conditional certification under the Coastal Zone Management Act (CZMA) and also as an enforceable permit condition of the Early Site Permit (ESP) as defined by the NRC. Both of these are federal programs/processes and are subject to the National Environmental Policy Act (NEPA).

2. Lake Anna Lake Level Task Force– The Lake Anna Lake Level Task Force simply wants to protect Lake Anna for its 1,000,000 plus annual users and insure compliance with the law. We support the addition of the 3rd reactor at the North Anna plant, but want to ensure that all environmental issues are taken care of prior to the issuance of a Combined Operating License since the lake was constructed for both cooling of the North Anna Plant and also the enabling legislation set forth very clearly that Lake Anna was also created as a recreational lake for the public to enjoy. One use is no more important than the other.

3. Declining water levels at Lake Anna causing unsafe conditions resulting in increased boating accidents will cause people to stay away from the lake and in turn cause decreasing property values and loss of business income – all of which will reduce Louisa, Spotsylvania and Orange County's income significantly. Also, when the water level declines greater than 2 feet from the normal 250 MSL, the lake becomes unusable for approximately 50% of the lake resident boaters because they cannot get their boats into the water. In addition, the lack of water at the dry fire hydrants at many lake communities due to the decreased water levels will dramatically increase the risk of fire damage to Lake Properties.

4. As stated in VDEQ's 21 Nov 06 letter to Dominion (Reference 5), the recreational impacts to Lake Anna as a result of the proposed 3rd reactor's cooling method must be analyzed as part of the current IFIM study being conducted as part of the CZMA conditional certification of the ESP and also as an enforceable permit condition of the ESP. **(Please see reference 6 for analysis).**

5. In a Nov 10, 2006 letter **(see reference 7)**, from Dominion to the NRC, Dominion requested as a permit condition in the Early Site Permit that a commitment should be included to conduct a comprehensive Instream Flow Incremental Methodology study (IFIM) to be completed prior to the issuance of a combined construction and operating license for a proposed Unit 3. "to address potential impacts of the proposed Units 3 and 4 upon the fishes and other **aquatic resources of Lake Anna** and down stream waters" (emphasis added).

Note that the dictionary definition of "AQUATIC" is (1) Of or in water (an aquatic environment) (2) Taking place in or on the water (3) Sports performed in or on the water. This would include boating, water skiing, swimming & other forms of water recreation and related social and businesses that support those activities.

6. In a Nov 14, 2006 letter **(see reference 7)**, from the NRC to Dominion referring to the Nov 10, 2006 Dominion letter stated "The NRC herein agrees to include this proposed condition as an enforceable permit condition, should the agency approve the North Anna ESP application and ultimately issue a permit". The NRC letter quoted the same condition for the IFIM study. "to address potential impacts of the proposed Units 3 and 4 upon the fishes and other **aquatic resources of Lake Anna** and down stream waters" (emphasis added).

Note that both the 10 Nov 06 Dominion letter and 14 Nov 06 NRC letters referenced above are enclosures to the 21 Nov 06 VDEQ letter.

7. It is noted that both the CZMA and ESP processes are U.S. federal laws/processes and as such are subject to the National Environmental Policy Act (NEPA) requiring public participation.

8. VDEQ, by incorporating DCR's comments and letters into its own letter and stating affirmatively that the impacts of construction and operation of Reactors #3 and #4 upon the recreational aspects of both Lake Anna and the rivers downstream must be addressed, has clearly set forth a mandate to Dominion to accomplish a complete Lake Anna recreation study as a part of the comprehensive IFIM study that Dominion requested be included as a ESP permit condition and the NRC agreed. This requirement was also one of the conditional certifications for the ESP granted under the CZMA. The IFIM study plan commissioned by Dominion does not adequately address all the recreational impacts to Lake Anna as required by the 21 Nov 06 letter and the ESP permit condition. . We request that NRC corrects this condition.

9. Dominion/VEPCO also recognizes the major impact that declining water levels would have on Lake Anna and its Recreation. Please see the December 30, 1988 letter (reference 7) from the Vice President of Virginia Power (Nuclear) to a representative of Spotsylvania County which indicates "Access to the lake by adjoining landowners is permitted and there is an exclusive agricultural and recreational right of use in the deed agreements". "Lake Anna supports a healthy and productive aquatic ecosystem and has become an important fishery resource. A lowering of the normal pool level could have an impact on the general ecology of the lake by a loss of shoreline habitat or changes in certain water quality parameters" "Lake Anna has provided substantial recreational and commercial benefits to the surrounding counties through the development of several marinas, campgrounds, a State Park, and many private homes. All existing shoreline uses were developed with the 250 ft. MSL normal pool elevation as a design criteria. A change in the normal pool would severely impact piers, boat ramps, and all current lake access users. Also, bottom obstructions, such as stumps and rocks, would become more of a hazard to boaters with a lowering of the normal pool level." (emphasis added)

In a June 8, 1990 letter to the Spotsylvania County Administrator (see reference 7), the Dominion/VEPCO Water Quality Manager stated "We have an additional constraint to maintain the lake level at 250 ft., msl due to commitments to local residents". "we reiterate the reasons given in the December 30, 1988 letter as to why Virginia Power cannot agree to Spotsylvania County water withdrawal project: Loss of surface area for heat exchange of the condenser discharge water. Impact on hydroelectric operation. Effect on aquatic resources. Impact to recreational and commercial uses." (emphasis added)

10. The Environmental Protection Agency also recognizes in a Jul 06, 1990 letter to the Department of the Army Corps of Engineers (see reference 7) indicates "Furthermore, the owners of the lots bordering the lake have certain legal rights, contained in their property deeds, to use the lake for recreational purposes". (emphasis added)

11. IFIM Areas of concern identified in Jan & Feb 08. After attending a Dominion IFIM study briefing on 8 Jan 08, one of the task force members, FOLA, sent emails to both VDEQ and DGIF on 10 Jan, 31 Jan, 19 Feb and 23 Feb 08 identifying areas of concern with the IFIM study. These concerns included declining water levels in Lake Anna during our increasing frequency of droughts occurring recently and the effect that the cooling method selected for the 3rd reactor will have on many items at Lake Anna, including recreation that should be analyzed during the IFIM study. Unfortunately, only DGIF responded to the 10 and 31 Jan emails, but neglected to address all of the concerns and simply said the “IFIM study addresses impacts of the proposed plant only on downstream habitat and aquatic resources. It does not address any in lake issues such as water level fluctuations.” As of today, VDEQ has never sent a reply email to the concerns in any of the FOLA emails, and neither DGIF nor VDEQ replied to the 19 Feb and 23 Feb 08 emails requesting public participation and meetings to discuss the concerns which are required under the National Environmental Policy Act (NEPA). On 1 July 08 we met with Director David Paylor of VDEQ and Deputy Director Russell Baxter of (VDCR) to discuss the above concerns. **(See References 5, 6, 7 & 8).** We are awaiting their formal response.

12 NEPA Public Involvement with the IFIM study. The National Environmental Policy Act. (NEPA) requires Federal agencies to consider environmental effects that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. Since both the ESP and CZMA processes involve federal laws/permits, both require that NEPA policies be followed. NEPA requires agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions. Two major purposes of the NEPA environmental review process are: (1) better informed decisions and (2) citizen involvement, both of which should lead to implementation of NEPA’s policies. The NEPA analysis should take into account the potential impacts of the proposed action and investigate alternative actions.

13. Completion Date of IFIM study. Since the IFIM study only has to be completed prior to the Construction and Operating License being granted by the NRC (estimated to be in 2010/2011) and the ESP is valid for 20 years, there is sufficient time to conduct a complete recreation study as part of the comprehensive IFIM study of the 13,000 acres of Lake Anna, the state park and surrounding areas to identify all the impacts to the public, surrounding counties and the Commonwealth of Virginia as a result of declining water levels that will be caused by the cooling method being proposed for the 3rd reactor.

The results of the Lake Anna and downstream IFIM study will impact all future generations of the public. The impacts to Lake Anna recreation, public safety and health, fishes and wildlife concerns that will be caused by the 3rd reactor cooling method are enormous. According to the NRC Environmental Impact Statements and Safety Reports (based on Dominion submitted data), the drought cycles will be doubled and the lake levels will decline an additional approximately 1.5 inches per month during each drought over and above the existing lake level decline during a drought with only units 1 and 2 operating. All of these additional lake level declines caused by the proposed 3 unit cooling method must be fully analyzed in the IFIM study which is required as a permit condition in the Early Site Permit and also a part of the conditional certification of the ESP with the Coastal Zone Management Act.

14. Economic Impact of Declining Water Levels: The following is an example of the economic impact to declining water levels to just one county (Louisa county), out of the three that border Lake Anna. As you may be aware, Lake Anna is designated by the Louisa County Board of Supervisors as one of the top three growth areas in Louisa County. The Lake Anna area occupies only 3.5% of the county's land, while the lake residents contribute about 36% of the residential real estate tax revenue for the County of about \$9.5 million in 2007. Lake Anna property owners register their cars, boats and airplanes in Louisa County resulting in an additional \$1 million plus in personal property tax to Louisa. Very few county resources are required from the homeowners since most are retirees, who have no children in the school system or live elsewhere. In addition, the lake businesses and surrounding Louisa County businesses benefit significantly from the over 1,000,000 annual visitors to the lake that patronize many of the various Louisa County businesses. Lake Users comprise homeowners & their guests in over 170 sub-divisions around the lake and the over 1,000,000 annual visitors who patronize Louisa Restaurants, Grocery Food Stores, Auto Supply stores, Construction firms, Realtors, Marina's etc.,. These Louisa Businesses, through commercial real estate taxes, property taxes, business taxes & sales taxes generate much additional revenue for Louisa County. Some have estimated that the gross lake related income to Louisa County from Residential and Commercial Real Estate, Residential and Commercial Personal Property Taxes, plus the various Louisa County Business taxes may well exceed \$12 million a year.

15. Summary

It is important to remember that the enabling legislation defined that Lake Anna was built for two purposes: (1) cooling of nuclear reactors and (2) a major recreational lake for millions of Virginians to use. One use is no more important than the other. And one use, e.g. cooling of the reactors cannot be allowed to destroy the lake's recreational use. It is important to bear in mind that when Lake Anna was created, neither Dominion nor any governmental body, whether federal, state or local, discouraged the public from purchasing land and building homes around the entire lake. Therefore it is both the local, state and federal government's responsibility to those homeowners and other recreational users of the lake, as well as fish, clams/mussels and wildlife to protect them from any potential adverse impacts of the North Anna Power Station.

It is imperative that VDEQ, VDCR and the NRC embark on an aggressive program to correct the current oversight with the IFIM Study for Lake Anna and have a complete Recreation Study for the 13,000 acre lake accomplished as part of the current IFIM study as defined in VDEQ 21 Nov 2006 letter as part of the commonwealth's social and legal responsibility under NEPA, an ESP Permit Condition. This is one of the conditions defined in the CZMA conditional certification of the ESP. The recreation study should analyze all the potential environmental, social and economic effects that the proposed cooling method for the 3rd and 4th reactors will have on Lake Anna, including impacts of the declining water levels on boating safety, fire hazard safety with no water at the dry hydrants, human health problems caused by heated water and the economic loss to businesses.

We also believe that the North Anna project for the 3rd reactor as currently proposed will use up to an additional 24 million gallons per day of Lake Anna water. The safety, human health, erosion, ecosystems, etc. items described in sub-paragraphs 2 (a) through (o) of the **reference 1** (presentation to NRC – 10 May 2008) must be fully evaluated and the NRC as part of the Nuclear Regulatory Commission (NRC) Construction and Operating License (COL) Environmental Impact Statement phase. The accumulative environmental impacts caused by the projected annual low water levels in Lake Anna as a result of the 3rd reactor cooling method are very significant and therefore mitigation efforts for alternative cooling methods and other items to minimize the impacts of declining water are required.

There are alternative cooling methods that are used by one or more of the 29 other countries that have built an additional (non-U.S.) 335 nuclear reactors throughout the world and have developed extensive technology during the last 35 years during which time the U.S has not built any nuclear reactors. These new alternative cooling methods that use no or very little water could be used for the 3rd reactor thereby not causing the lake level declines. This is what Dominion has proposed for the 4th reactor.

The NRC should require Dominion to perform additional studies considering new or different cooling technologies that could reduce the proposed lake water evaporation of the current wet/dry cooling method selected. It should be noted that buried in the Dominion submitted Safety Report “North Anna 3 Combined License Application – Part 2 Final Safety Analysis Report – Nov 2007 – Page 2-134” for the COLA, they state that “while in the MWC mode, the dry tower fans may be turned off to provide additional electric output during hours of peak demand”. This means the evaporation rates are increased to wet cooling only, further increasing the lake water evaporation rate most likely during the summer months. The MWC evaporation rate of up to 24 million gallons per day is the equivalent of over 800 gallons a day for each of the 30,000 persons that live in Louisa County at a time when the Virginia Drought Monitoring Task Force is urging “Wiser Use of Water” (**See Reference 8**). The complete cooling methodology and anticipated operating procedures for the 3rd reactor and associated impacts should be in the environmental impact report and not buried in the safety report where the public has no input or opportunity to comment on its creation which may be a violation of NEPA.

We could achieve a win-win situation for all if an alternative cooling method was selected for the 3rd reactor and additional mitigating factors were instituted. Boaters, swimmers and other recreational lake users lives and health would not be put at risk caused by the additional consumption of water of the 3rd reactor cooling method. Dominion would build their 3rd reactor, Louisa County would benefit from the increased utility tax revenue, Louisa, Spotsylvania and Orange County businesses would not lose valuable customers due to low lake water levels, the fire departments could use their dry fire hydrants and the safety of Louisa, Spotsylvania and Orange County residents would not be challenged and the State Park would continue to thrive. In addition, Louisa County’s estimated tax revenue from Lake Anna sources of over \$12 million annually from residential, personal property and business taxes would not be reduced, as well as Spotsylvania and Orange County tax revenues, as a result of declining water levels at the lake.

There are mitigating features that can also be taken to minimize the impact to the lake. For example, raising the lake level 3 inches during the winter, so that during the summer droughts, it will supplement lake level’s for two additional months, as the lake level will decline an additional 1.5 inches per month using the proposed wet/dry cooling method. Another is adjusting the procedures for releasing water over the dam when the lake level is less than 250 MSL. Note that NRC records indicate that from 1978 through 2003 that Lake Anna has been under 250 MSL 62.7% of the time due to the combined effects of reduced inflows and evaporative effects of Units 1 & 2 only.

The previous Jan 8, 08 Dominion IFIM study information briefing did not provide for public input to modify the study. Furthermore the Dominion study plan does not provide for public involvement. We ask that the public participate in all phases (including project definition, project milestones, project conclusions and recommendations) of the IFIM study. The public should participate in the recreation aspects to be conducted at Lake Anna and downstream waters as part of the current IFIM study being conducted as a result of CZMA conditional certification of the ESP and an ESP permit condition that was requested by Dominion and approved by the NRC. Please advise if you need any additional information. Thank you in advance for your consideration.

Sincerely,

Harry Ruth
Friends of Lake Anna
230 Heather Drive, Bumpass, Va. 23024
Phone 540-872-3632

Doug Smith
Lake Anna Civic Assoc.
4147 Chalk Level Rd, Louisa, VA
Phone 540-894-9094

Dale Jones
Lake Anna Boating and Recreation
2561 Peach Grove Rd, Louisa, Va.
Phone 540-967-9523

Email Attachments:

Reference - (5) Lake Anna Lake Level Task Force presentation to the Virginia Dept of Environmental Quality (VDEQ) and Virginia Department of Conservation and Recreation (VDCR) on 1 Jul 08 (email copy attached)

Reference (6) Lake Anna Lake Level Task Force analysis of VDEQ's 21 Nov 06 letter to Dominion re the IFIM study (email copy attached)

Fax transmission:

Reference (7) Six attachments to the 1 Jul 08 VDEQ & VDCR presentation will be faxed to the NRC Attention: Alicia Williamson (Fax 301-415-5397 for further NRC distribution).

CC: (via email w/o reference 7 six attachments)

David Paylor - (Director -VDEQ)
Ellen Gilinsky (VDEQ – Water Div)
Michael Murphy (VDEQ)
Bryant Thomas (VDEQ – No. VA)
Ellie Irons (VDEQ – CZMP)
Russell Baxter (Dep Dir – DCR)
Robert Munson (DCR)

**Presentation to: Virginia Department of Environmental Quality
 Virginia Department of Conservation and Recreation**

Re the Instream Flow Incremental Methodology (IFIM) study for Lake Anna and other Environmental Items to be reviewed for the 3rd Reactor at the North Anna Power Plant, Louisa, Va.

Dear Virginia Department of Environmental Quality and Department of Conservation and Recreation

1. The Lake Anna Lake Level Task Force needs the help of the Virginia Department of Environmental Quality (VDEQ) and Department of Conservation and Recreation (DCR) to insure that total impact to recreation on Lake Anna is analyzed as part of the current In-stream Flow Incremental Methodology (IFIM) study being conducted as defined in the 21 Nov 06 VDEQ letter (DEQ 05-079F) to Dominion Resources. In addition we also request your assistance to resolve each of the environmental items identified in the attachment (**attachment A**) (presentation to NRC – 10 May 2008) that may have serious health, safety and welfare impacts to the citizens of Virginia and Lake Anna visitors if Lake Anna water levels decline. The declining water levels may have serious economic impacts to Louisa, Spotsylvania and Orange Counties in addition to the Commonwealth of Virginia resulting in millions of dollars of lost tax revenue. These requests are made recognizing that the IFIM study is part of the conditional certification for the Early Site Permit (ESP) and also the Coastal Zone Management Act (CZMA) both of which are federal programs and are subject to the National Environmental Policy Act (NEPA).

2. **Lake Anna Lake Level Task Force**– The Lake Anna Lake Level Task Force consists of representatives from three Lake Anna citizen organizations: (1) The Friends of Lake Anna (FOLA), (2) Lake Anna Civic Association (LACA) and (3) Lake Anna Boating and Recreation Association (LABARA). All three of these organizations have the common interest to protect the Lake Anna environment (both main reservoir and cooling lagoons) and its surrounding landscape for the health, safety and welfare of current residents/users and for future generations. We simply want to protect Lake Anna for its 1,000,000 plus annual users and insure compliance with the law. We support the addition of the 3rd reactor at the North Anna plant, but want to ensure that all environmental issues are taken care of prior to the issuance of a Combined Operating License since the lake was constructed for both cooling of the North Anna Plant and also the enabling legislation set forth very clearly that Lake Anna was also created as a recreational lake for the public to enjoy. One use is no more important than the other.

3. Economic Impact of Declining Water Levels: The following is an example of the economic impact to declining water levels to just one county (Louisa county), out of the three that border Lake Anna. As you may be aware, Lake Anna is designated by the Louisa County Board of Supervisors as one of the top three growth areas in Louisa County. The Lake Anna area occupies only 3.5% of the county's land, while the lake residents contribute about 36% of the residential real estate tax revenue for the County of about \$9.5 million in 2007. Lake Anna property owners register their cars, boats and airplanes in Louisa County resulting in an additional \$1 million plus in personal property tax to Louisa. Very few county resources are required from the homeowners since most are retirees, who have no children in the school system or live elsewhere. In addition, the lake businesses and surrounding Louisa County businesses benefit significantly from the over 1,000,000 annual visitors to the lake that patronize many of the various Louisa County businesses. Lake Users comprise homeowners & their guests in over 170 sub-divisions around the lake and the over 1,000,000 annual visitors who patronize Louisa Restaurants, Grocery Food Stores, Auto Supply stores, Construction firms, Realtors, Marina's etc.,. These Louisa Businesses, through commercial real estate taxes, property taxes, business taxes & sales taxes generate much additional revenue for Louisa County. Some have estimated that the gross lake related income to Louisa County from Residential and Commercial Real Estate, Residential and Commercial Personal Property Taxes, plus the various Louisa County Business taxes may well exceed \$12 million a year.

Declining water levels at Lake Anna causing unsafe conditions resulting in increased boating accidents will cause people to stay away from the lake and in turn cause decreasing property values and loss of business income – all of which will reduce Louisa, Spotsylvania and Orange County's income significantly. Also, when the water level declines greater than 2 feet from the normal 250 MSL, the lake becomes unusable for approximately 50% of the lake resident boaters because they cannot get their boats into the water. In addition, the lack of water at the dry fire hydrants at many lake communities due to the decreased water levels will dramatically increase the risk of fire damage to Lake Properties.

4. Concerns with cooling method proposed for 3rd reactor. We have several concerns, primarily with the cooling method proposed for the 3rd reactor which will use up to 24 million gallons a day of Lake Anna water as defined by Dominion in their submittal to the NRC for the ESP and cause declining water levels. Please see the attached presentation (**attachment A**) made to the Nuclear Regulatory Commission on 10 May 2008 that addresses each of our concerns that are a composite of all concerns from the three organizations (FOLA, LACA and LABARA) and are generally supported by over 6,400 persons and businesses represented in (**attachment c of the NRC attachment A notebook**) of the NRC presentation with petitions, emails, together with letters from property owner associations and lake organizations. (See below for additional information re concerns with IFIM study)

5. *The recreational impacts to Lake Anna as a result of the proposed 3rd reactor's cooling method must be analyzed as part of the current IFIM study being conducted as part of the CZMA conditional certification of the ESP.*

a. The Lake Level Task force has analyzed VDEQ's 21 November 2006 letter (DEQ 05-079F) to Dominion (see attachment B) and concluded:

Although it is not as clear, crisp and defined in one central location within the letter, it is obvious that if you follow the above trail:

1. VDEQ did not have sufficient information about the impacts to resources on Lake Anna and downstream and the conditional Va. Coastal Zone Program certification was based on a complete IFIM study being conducted by Dominion under the guidance of VDEQ and DGIF.

2. The IFIM study was to include a recreation study of both Lake Anna and downstream since they both will be impacted by the North Anna project and DCR is one of the state agencies responsible for administering the Virginia Coastal Zone Programs enforceable policies to protect the recreational aspects of any project. DCR specifically said in its August 9, 2006 letter (subject: DEQ-06-125F:USNRC-Early Site Permit, North Anna) (**see Attachment C**) “DCR is concerned about the added impact the two new generators may have on the recreational use of the lake and on the quality of the recreational experience the visitors to Lake Anna State Park will have.” It is clear a recreation study of Lake Anna was to be included. DCR made comments re Lake Anna and the significant investment they had in the state park and all the recreation that occurs on Lake Anna. As a result VDEQ has defined that it must be part of the ESP IFIM study.

3. In a Nov 10, 2006 letter (**see Attachment D**), from Dominion to the NRC, Dominion requested as a permit condition in the Early Site Permit that a commitment should be included to conduct a comprehensive Instream Flow Incremental Methodology study (IFIM) to be completed prior to the issuance of a combined construction and operating license for a proposed Unit 3. “to address potential impacts of the proposed Units 3 and 4 upon the fishes and other **aquatic resources of Lake Anna** and down stream waters” (emphasis added).

4. In a Nov 14, 2006 letter (**see Attachment E**), from the NRC to Dominion referring to the Nov 10, 2006 Dominion letter stated “The NRC herein agrees to include this proposed condition as an enforceable permit condition, should the agency approve the North Anna ESP application and ultimately issue a permit”. The NRC letter quoted the same condition for the IFIM study. “to address potential impacts of the proposed Units 3 and 4 upon the fishes and other **aquatic resources of Lake Anna** and down stream waters” (emphasis added).

Note that both the 10 Nov 06 Dominion letter and 14 Nov 06 NRC letters referenced above are enclosures to the 21 Nov 06 VDEQ letter.

5. It is noted that both the CZMA and ESP processes are U.S. federal laws/processes and as such are subject to the National Environmental Policy Act (NEPA) requiring public participation.

6. VDEQ, by incorporating DCR's comments and letters into its own letter and stating affirmatively that the impacts of construction and operation of Reactors #3 and #4 upon the recreational aspects of both Lake Anna and the rivers downstream must be addressed, has clearly set forth a mandate to Dominion to accomplish a complete Lake Anna recreation study as a part of the comprehensive IFIM study that Dominion requested be included as a ESP permit condition and the NRC agreed. This requirement was also one of the conditional certifications for the ESP granted under the CZMA. The study plan commissioned by Dominion does not adequately address all the recreational impacts to Lake Anna as required by the 21 Nov 06 letter and the ESP permit condition. . We request that VDEQ corrects this condition.

b. Dominion/VEPCO also recognizes the major impact that declining water levels would have on Lake Anna and its Recreation. Please see the attached December 30, 1988 letter (attachment F) from the Vice President of Virginia Power (Nuclear) to a representative of Spotsylvania County which indicates “Access to the lake by adjoining landowners is permitted and there is an exclusive agricultural and recreational right of use in the deed agreements”. “Lake Anna supports a healthy and productive aquatic ecosystem and has become an important fishery resource. A lowering of the normal pool level could have an impact on the general ecology of the lake by a loss of shoreline habitat or changes in certain water quality parameters” “Lake Anna has provided substantial recreational and commercial benefits to the surrounding counties through the development of several marinas, campgrounds, a State Park, and many private homes. All existing shoreline uses were developed with the 250 ft. MSL normal pool elevation as a design criteria. A change in the normal pool would severely impact piers, boat ramps, and all current lake access users. Also, bottom obstructions, such as stumps and rocks, would become more of a hazard to boaters with a lowering of the normal pool level.” (emphasis added)

In a June 8, 1990 letter to the Spotsylvania County Administrator (see **attachment G**), the Dominion/VEPCO Water Quality Manager stated “We have an additional constraint to maintain the lake level at 250 ft., msl due to commitments to local residents”. “we reiterate the reasons given in the December 30, 1988 letter as to why Virginia Power cannot agree to Spotsylvania County water withdrawal project: Loss of surface area for heat exchange of the condenser discharge water. Impact on hydroelectric operation. Effect on aquatic resources. Impact to recreational and commercial uses.” (emphasis added)

c. The Environmental Protection Agency also recognizes in a Jul 06, 1990 letter to the Department of the Army Corps of Engineers (see attachment H) indicates “Furthermore, the owners of the lots bordering the lake have certain legal rights, contained in their property deeds, to use the lake for recreational purposes”. (emphasis added)

6. IFIM Areas of concern identified in Jan & Feb 08. After attending a Dominion IFIM study briefing on 8 Jan 08, one of the task force members, FOLA, sent emails to both VDEQ and DGIF on 10 Jan, 31 Jan, 19 Feb and 23 Feb 08 identifying areas of concern with the IFIM study. These concerns included declining water levels in Lake Anna during our increasing frequency of droughts occurring recently and the effect that the cooling method selected for the 3rd reactor will have on many items at Lake Anna, including recreation that should be analyzed during the IFIM study. Unfortunately, only DGIF responded to the 10 and 31 Jan emails, but neglected to address all of the concerns and simply said the “IFIM study addresses impacts of the proposed plant only on downstream habitat and aquatic resources. It does not address any in lake issues such as water level fluctuations or PCB sources”. VDEQ has never sent a reply email to the concerns in any of the FOLA emails, and neither DGIF or VDEQ replied to the 19 Feb and 23 Feb 08 emails requesting public participation and meetings to discuss the concerns which are required under the National Environmental Policy Act (NEPA).

7. NEPA Public Involvement with the IFIM study. The National Environmental Policy Act. (NEPA) requires Federal agencies to consider environmental effects that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. Since both the ESP and CZMA processes involve federal laws/permits, both require that NEPA policies be followed. NEPA requires agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions. Two major purposes of the NEPA environmental review process are: (1) better informed decisions and (2) citizen involvement, both of which should lead to implementation of NEPA's policies. The NEPA analysis should take into account the potential impacts of the proposed action and investigate alternative actions.

8. Completion Date of IFIM study. Since the IFIM study only has to be completed prior to the Construction and Operating License being granted by the NRC (estimated to be in 2010/2011) and the ESP is valid for 20 years, there is sufficient time to conduct a complete recreation study as part of the comprehensive IFIM study of the 13,000 acres of Lake Anna, the state park and surrounding areas to identify all the impacts to the public, surrounding counties and the Commonwealth of Virginia as a result of declining water levels that will be caused by the cooling method being proposed for the 3rd reactor.

The results of the Lake Anna and downstream IFIM study will impact all future generations of the public. The impacts to Lake Anna recreation, public safety and health, fishes and wildlife concerns that will be caused by the 3rd reactor cooling method are enormous. According to the NRC Environmental Impact Statements and Safety Reports (based on Dominion submitted data), the drought cycles will be doubled and the lake levels will decline an additional approximately 1.5 inches per month during each drought over and above the existing lake level decline during a drought with only units 1 and 2 operating. All of these additional lake level declines caused by the proposed 3 unit cooling method must be fully analyzed in the IFIM study which is required as a permit condition in the Early Site Permit and also a part of the conditional certification of the ESP with the Coastal Zone Management Act.

9. Summary

It is important to remember that the enabling legislation defined that Lake Anna was built for two purposes: (1) cooling of nuclear reactors and (2) a major recreational lake for millions of Virginians to use. One use is no more important than the other. And one use, e.g. cooling of the reactors cannot be allowed to destroy the lake's recreational use. It is important to bear in mind that when Lake Anna was created, neither Dominion nor any governmental body, whether federal, state or local, discouraged the public from purchasing land and building homes around the entire lake. Therefore it is both the local, state and federal government's responsibility to those homeowners and other recreational users of the lake, as well as fish, clams/mussels and wildlife to protect them from any potential adverse impacts of the North Anna Power Station.

It is imperative that both VDEQ and the DCR embark on an aggressive program to correct the current oversight with the IFIM Study for Lake Anna and have a complete Recreation Study for the 13,000 acre lake accomplished as part of the current IFIM study as defined in VDEQ 21 Nov 2006 letter as part of the commonwealth's social and legal responsibility under NEPA, an ESP Permit Condition. This is one of the conditions defined in the CZMA conditional certification of the ESP. The recreation study should analyze all the potential environmental, social and economic effects that the proposed cooling method for the 3rd and 4th reactors will have on Lake Anna, including impacts of the declining water levels on boating safety, fire hazard safety with no water at the dry hydrants, human health problems caused by heated water and the economic loss to businesses.

We also believe that the North Anna project for the 3rd reactor as currently proposed which will use up to an additional 24 million gallons per day of Lake Anna water. The safety, human health, erosion, ecosystems, etc. items described in sub-paragraphs 2 (a) through (o) of the **attachment A** (presentation to NRC – 10 May 2008) must be fully evaluated by each of the counties surrounding the lake; many of the Virginia departments (including VDEQ, DCR, DGIF and others) and the NRC as part of the Nuclear Regulatory Commission (NRC) Construction and Operating License (COL) Environmental Impact Statement phase. The accumulative environmental impacts caused by the projected annual low water levels in Lake Anna as a result of the 3rd reactor cooling method are very significant and therefore mitigation efforts for alternative cooling methods and other items to minimize the impacts of declining water are required.

There are alternative cooling methods that are used by one or more of the 29 other countries that have built an additional (non-U.S.) 335 nuclear reactors throughout the world and have developed extensive technology during the last 35 years during which time the U.S has not built any nuclear reactors. These new alternative cooling methods that use no or very little water could be used for the 3rd reactor thereby not causing the lake level declines. This is what Dominion has proposed for the 4th reactor.

We could achieve a win-win situation for all if an alternative cooling method was selected for the 3rd reactor and additional mitigating factors were instituted. Boaters, swimmers and other recreational lake users lives and health would not be put at risk caused by the additional consumption of water of the 3rd reactor cooling method. Dominion would build their 3rd reactor, Louisa County would benefit from the increased utility tax revenue, Louisa, Spotsylvania and Orange County businesses would not lose valuable customers due to low lake water levels, the fire departments could use their dry fire hydrants and the safety of Louisa, Spotsylvania and Orange County residents would not be challenged and the State Park would continue to thrive. In addition, Louisa County's estimated tax revenue from Lake Anna sources of over \$12 million annually from residential, personal property and business taxes would not be reduced, as well as Spotsylvania and Orange County tax revenues, as a result of declining water levels at the lake.

There are mitigating features that can also be taken to minimize the impact to the lake. For example, raising the lake level 3 inches during the winter, so that during the summer droughts, it will supplement lake level's for two additional months, as the lake level will decline an additional 1.5 inches per month using the proposed wet/dry cooling method. Another is adjusting the procedures for releasing water over the dam when the lake level is less than 250 MSL. Note that NRC records indicate that from 1978 through 2003 that Lake Anna has been under 250 MSL 62.7% of the time due to the combined effects of reduced inflows and evaporative effects of Units 1 & 2 only.

Lake Anna was originally planned for both residential development and recreation around the total 13,000 acre lake in addition to providing cooling water for reactors. Other alternative cooling methods that do not cause the lake level to decline or require further mitigation for water levels impacts will preserve this beautiful lake resource for future generations and not cause millions of dollars in lost tax income to Louisa, Spotsylvania and Orange Counties and the Commonwealth of Virginia.

The previous Jan 8, 08 Dominion IFIM study information briefing did not provide for public input to modify the study. Furthermore the Dominion study plan does not provide for public involvement. We ask that the public participate in all phases (including project definition, project milestones, project conclusions and recommendations) of the IFIM study. The public should participate in the recreation aspects to be conducted at Lake Anna and downstream waters as part of the current IFIM study being conducted as a result of CZMA conditional certification of the ESP and an ESP permit condition that was requested by Dominion and approved by the NRC. Please advise if you need any additional information. Thank you in advance for your consideration.

Sincerely,

Harry Ruth
Friends of Lake Anna
230 Heather Drive, Bumpass, Va. 23024
Phone 540-872-3632

Doug Smith
Lake Anna Civic Assoc.
4147 Chalk Level Rd, Louisa, VA
Phone 540-894-9094

Dale Jones
Lake Anna Boating and Recreation
2561 Peach Grove Rd, Louisa, Va.
Phone 540-967-9523

Attachments:

- A. Notebook presented to NRC on 10 May 08 with four sections
- B. Lake Level Task force analysis of VDEQ's 21 November 2006 letter (DEQ 05-079F)
- C. Aug 9, 2006 letter from DCR to VDEQ subject Early Site Permit, North Anna
- D. Nov 10, 2006 letter from Dominion to NRC – re North Anna Early Site Permit application
- E. Nov 14, 2006 letter from NRC to Dominion – re North Anna Early Site Permit application
- F. December 30, 1988 letter from the Vice President of Virginia Power (Nuclear)
- G. June 8, 1990 letter from the manager of Dominion/VEPCO Water Quality Manager to Spotsylvania County
- H. July 6, 1990 Environmental Protection Agency letter to the Department of the Army Corps of Engineers

Handouts:

- (1) Lake Anna Map (Dec 2007) - (177 subdivisions)
- (2) Lake Anna Guide – 2008
- (3) Lake Anna Connections – (Spring/Summer 2008)
- (4) Lake Anna Island (Yacht Club/Hotel Rooms/Condo's/Indoor Swimming/Restaurant)
- (5) Lake Anna Real Estate (spring 2008)

1. Subject: Analysis of Va. Dept of Environmental Quality (VDEQ) November 21, 2006 letter to Dominion Virginia Power company (DEQ 05-079F) as it pertains to an Instream Flow Incremental Methodology (IFIM) Recreation Study of Lake Anna required as part of the Coastal Zone Management (CZMA) review of Dominion's Early Site Permit (ESP) for the North Anna Plant concerning the addition of a 3rd and 4th nuclear reactor and the 2 conditional certifications that Dominion received for the ESP. It is noted that both the CZMA and ESP processes are U.S. federal laws/processes and as such are subject to the National Environmental Policy Act (NEPA).

2. Overview: The author of the letter (Richard Weeks) did not put all the data related to the recreational issues to be addressed in the IFIM Study at Lake Anna in one central location within the letter, therefore to ascertain the full requirements for the recreation study one must look at various places. Analysis notes are placed after each of the places quoted in the letter to provide additional data. The page number of the quote within the letter is included in each of the following comments. Other pertinent data related to the Recreation Study for both Lake Anna and downstream that was supposed to be addressed in the IFIM study is included in this analysis.

3. The following state agencies administer the enforceable policies under the Virginia Coastal Resource Management Program (See bottom of Page 2):

- a. Department of Environmental Quality
- b. Department of Game and Inland Fisheries
- c. Department of Conservation and Recreation
- d. Department of Health
- e. Marine Resources Commission

4. Conditional Concurrence (Page 4, 5 & 6)

a. "Based on the ***comments submitted by the agencies administering the Enforceable Policies of the VCP***, we concur that this proposal is consistent with the VCP provided that the following two conditions, discussed in more detail below, are satisfied." (emphasis added) (Page 4 – bottom of page)

b. "The second condition listed above is necessary due to the provisions of the NRC's regulations pertaining to the extent of the information that must be included in an ESP application. During the course of our review of this project, **we found that the information provided to us in the consistency certification and the NEPA documents was not sufficient in all instances** for a complete evaluation of coastal effects as they pertain to both the activities that would be authorized under the ESP and the activities that would result if one or both of the new nuclear reactors units are constructed and placed into operation. **Complete information about the coastal effects associated with the construction and operation of the new nuclear units described in the referenced project was unavailable to us concerning protection of aquatic and other resources in Lake Anna and downstream.**" (emphasis added) (Page 5 bottom of Page)

Lake Anna Lake Level Task Force - analysis of VDEQ's 21Nov06 letter to Dominion re the IFIM study to be conducted as part of the conditional certification for the Early Site Permit.

Note the above clearly indicates that the VCP did not have sufficient information in all instances to do an evaluation. It also clearly indicates that the information they did not have is related to the protection of aquatic and other resources in Lake Anna and downstream. These other resources include recreation in Lake Anna as described later in this letter.

c. *"Dominion Nuclear North Anna, shall conduct a comprehensive In-stream Flow Incremental Methodology (IFIM) Study, designed and monitored in cooperation and consultation with the Virginia Department of Game and Inland Fisheries (VDGIF) and the Virginia Department of Environmental Quality, to address potential impacts of the proposed Units 3 and 4 upon the fishes and other aquatic resources of Lake Anna and downstream waters." (Page 6 – top of page)*

d. **"The IFIM Study discussed above will also need to address the recreational issues described in DCR's comments."** *(emphasis added) (Page 6 – 3rd paragraph – also see Page 16 – 2nd paragraph)*

Please also see "Advisory Policies" section below for additional comments from DCR about this Advisory Policy of the VCP.)" *(emphasis added) (Page 6 – 4th paragraph – also see Page 16 – 1st paragraph)*

Note: The above clearly indicates that IFIM study being conducted by Dominion must also include a "Minimum In-stream **recreation** study and the IFIM study is part of the Early Site Permit conditional certification. It must also address the recreational issues described in DCR's comments contained in the Advisory Policies section (See Pages 15 & 16 quote below). Also note that as indicated above that the VCP did not have sufficient information about the Lake Anna resources. When talking to Bob Munson from the DCR, Bob indicated that a recreation study consists of evaluating all the impacts to recreation on a project as a result of water level declines, including fishing, boating, jet ski's, canoeing, lake services (marina's, community businesses, real estate, construction, etc.) impacts to the State Park, its beaches, boat launching facilities and other facilities at the State Park, etc.

d. DCR'S comments contained in the Public Recreation Areas (see Pages 15 & 16)

□ (1) DCR comment 1 – “We received comments from the Virginia Department of Conservation and Recreation (DCR) regarding Public Recreation Areas. In its earlier comments on the Draft Environmental Impact Statement for the referenced project, DCR recommended that a minimum in-stream flow recreation study be conducted to determine what the discharge rates should be from Lake Anna to support recreational boating on the North Anna River. DCR stated that an air-cooled Unit 3 would have no impacts upon water-related recreation.”

(2) DCR comment 2 – re Lake Anna – “According to DCR, Lake Anna supports a significant amount of recreational activity from people getting to the lake from public and private lands. Lake Anna State Park is a particular example of the public investment in facilitating public use of the Lake. DCR stated that the proposed new generating facilities may deplete the water available for other uses and those impacts of those facilities upon the lake temperature, particularly in the summer months, can affect the downstream fishery.”

(3) DCR comment 3 – “DCR further commented that the North Anna River is a spectacularly scenic and remote canoeing river with excellent fishing. Between State route 601 and U.S. Route 301, the North Anna River is heavily used because it presents some of the most beautiful and remote paddling opportunities in the mid-Atlantic region. During periods of low rainfall, releases from the Lake Anna Dam are less than what is needed to support recreational boating on the River. DCR further recommended that the discharge rates from the Lake Anna Dam should be adequate to meet minimum in-stream flows needed for recreational boating from State Route 601 to U.S. Route 301.”

(4) VDEQ's direction at the end of the above DCR's comments: **“The scope of the IFIM Study discussed above will also need to address the recreational issues described in DCR's comments.”** (emphasis added) (Page 16 – 1st & 2nd paragraphs)

Note: The above DCR's comments which were partially extracted from an August 9, 2006 letter (**see attachment C**) clearly relate to both Lake Anna and downstream and VDEQ reconfirmed that the recreational issues defined in the DCR comments must be part of the overall IFIM study discussed in the beginning of the letter. The DCR letter further comments that “DCR is concerned about the added impact the two new generators may have on the recreational use of the lake and on the quality of the recreational experience the visitors to Lake Anna State Park will have”.

F. Summary – Although it is not as clear, crisp and defined in one central location within the letter, it is obvious that if you follow the above trail:

1. VDEQ did not have sufficient information about the impacts to resources on Lake Anna and downstream and the conditional Va. Coastal Zone Program certification was based on a complete IFIM study being conducted by Dominion under the guidance of VDEQ and DGIF.

2. The IFIM study was to include a recreation study of both Lake Anna and downstream since they both will be impacted by the North Anna project and DCR is one of the state agencies responsible for administering the Virginia Coastal Zone Program enforceable policies to protect the recreational aspects of any project. DCR specifically said in its August 9, 2006 letter (subject: DEQ-06-125F:USNRC-Early Site Permit, North Anna) "DCR is concerned about the added impact the two new generators may have on the recreational use of the lake and on the quality of the recreational experience the visitors to Lake Anna State Park will have." It is clear a recreation study of Lake Anna was to be included. DCR made comments re Lake Anna and the significant investment they had in the state park and all the recreation that occurs on Lake Anna. As a result VDEQ has defined that it must be part of the ESP IFIM study.

3. It is noted that both the CZMA and ESP processes are U.S. federal laws/processes and as such are subject to the National Environmental Policy Act (NEPA).

4. VDEQ, by incorporating DCR's comments and letters into its own letter and stating affirmatively that the impacts of construction and operation of Reactors #3 and #4 upon the recreational aspects of both Lake Anna and the rivers downstream must be addressed, has clearly set forth a mandate to Dominion to accomplish this as part of the ESP CZMA Conditional Certification IFIM study. The study plan commissioned by Dominion does not adequately address the recreational impacts to Lake Anna as required by the 21 Nov 06 letter. We request that VDEQ correct this condition.