Letter 1, page 1

NAD-U

From: David G. Schwartz [davidgs@ns.gemlink.com]
Sent: Saturday, July 27, 2002 12:18 PM
To: NorthAnnaEIS@nrc.gov
Subject: relicensing

NAD-U-1
NAD-U-2
NAD-U-3

I disapprove of the relicensing of the North Anna nuclear plant when the current license expires. We need to phase out all nuclear power plants because it is highly irresponsible for our generation to create the nuclear waste that generations thousands of years to come will have to continue to monitor long after our civilization has died out. This is playing God on a grand scale in an area where we have no business treading. Nuclear power is ethically untenable and morally reprehensible. We needed to have the technology for handling nuclear waste perfected decades ago, before the first plant was ever built. Most of the electrical energy we use is wasted. Strict conservation, wind, hydroelectric, solar, and geothermal could be adequate for our energy needs if we put a fraction of the financial resources into research for them that has been put into nuclear energy. Sincerely,David G. Schwartz, M.D.

Letter 2, page 1

VIRGINIA ELECTRIC AND
RICHMOND, VIRG

July 30,

Chief
Rules and Directives Branch
Mailstop T-6D 59
United States Nuclear Regulatory Commissi
Washington, DC 20555-0001

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
NORTH ANNA POWER STATION UNITS 1 AND 2
LICENSE RENEWAL APPLICATION
RESPONSE TO REQUEST FOR COMMENT ON THE DRAFT PLANT-SPECIFIC SUPPLEMENT 7 TO THE GENERIC ENVIRONMENTAL IMPACT STATEMENT

In a letter dated April 19, 2002, the NRC provided Virginia Electric and Power Company (Dominion) a draft supplement environmental impact statement (SEIS) regarding license renewal of North Anna Power Station, Units 1 and 2. This draft SEIS is the draft plant-specific Supplement 7 to NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants and was provided for review and comment. Attached are our comments on the draft SEIS.

Dominion considers the draft SEIS to be an accurate and factual representation of the environmental conditions associated with plant operation during the license renewal period. Furthermore, we concur with the conclusions of the NRC that any environmental impacts associated with license renewal would be of small significance and that any adverse environmental impacts of license renewal would be smaller than those of other reasonable energy alternatives. Dominion specifically concurs with the NRC's topic discussions and conclusions presented in the draft SEIS.

Should you have any questions regarding this submittal, please contact Mr. J. E. Wroniewicz at (804) 273-2186.

Very truly yours,

Leslie N. Hartz
Vice President – Nuclear Engineering

Attachment

Commitments made in this letter: None

Attachment

License Renewal – Response to Request for Comment
Draft Plant-Specific Supplement 7 to the GEIS
Serial No. 02-320

North Anna Power Station, Units 1 and 2
License Renewal Application

Virginia Electric and Power Company
(Dominion)

Comment 1:

Section 1.5 Compliance and Consultations

NAD-V-1

Page 1-9, Line 8:

Draft GEIS Statement:

Table 1-1 indicates that the US Fish & Wildlife Service Migratory Bird Treaty Act Permit expired December 31, 2001.

Dominion Comment:

Depredation Permit Number MB705136-0 was renewed effective 4/22/02, and expires 3/31/03. It is suggested that this update be reflected in Table 1-1.

Comment 2:

Section 2.1.5 Non-radioactive Waste Systems

NAD-V-2

Page 2-12, Line 34:

Draft GEIS Statement:

The statement is made that, "An onsite solvent shop recycles paint."

Dominion Comment:

The following correction is suggested as a replacement: "An onsite paint shop recycles solvent."

Comment 3:

Section 2.1.5 Non-radioactive Waste Systems

NAD-V-3

Page 2-13, Line 2:

Draft GEIS Statement:

The statement is made that, "Non-radioactive liquid waste produced … (e.g., water treatment activities, stormwater runoff, housekeeping wastes) are sampled and treated …"

Dominion Comment:

The statement is not accurate without exception. It is suggested that "housekeeping wastes" be deleted from this statement since there are waste disposal processes in which not all "housekeeping wastes" are sampled.

Comment 4:

Section 2.2.3 Water Quality

NAD-V-4

Page 2-17, Line 29:

Draft GEIS Statement:

It is stated that "The US EPA has authorized VDEQ to implement NPDES within the State." .

Dominion Comment:

It is suggested that the statement read "The US EPA has **delegated** implementation of NPDES to VDEQ within the **Commonwealth of Virginia.**" to reflect the actual federal-to-state relationship.

Comment 5:

Section 2.2.4 Air Quality

NAD-V-5

Page 2-18, Line 14:

Draft GEIS Statement:

It is stated " ... the annual average wind power rated as 1 on a scale of 1 to 7 (Elliott, et al. 1987).

Dominion Comment:

It is suggested that the following words be inserted " ...on a scale of 1 to 7, **with 1 being the lowest** ..." prior to the reference callout.

Comment 6:

Section 2.2.5 Aquatic Resources

NAD-V-6

Page 2-22, Lines 21-22, Table 2-2:

Draft GEIS Statement:

The slippershell mussel (Alasmidonta viridis) is given as a Federal-listed species.

Dominion Comment:

Based on a 2002 review of the Virginia Fish & Wildlife Information Service web site for the slippershell mussel, this species only occurs in the extreme western part of the Commonwealth of Virginia. It is not considered to occur in streams in counties adjacent to Lake Anna, immediately upstream or downstream North Anna River, or in counties crossed by North Anna transmission line corridors. Table 2-1 of the License Renewal Application Environmental Report does not list this species as a species of concern, and the description of this species within the SEIS implies it is of potential concern for the area in which North Anna Power Station is located. It is therefore requested that this species be deleted from the SEIS.

Comment 7:

Section 2.2.6 Terrestrial Resources

NAD-V-7

Page 2-24, Table 2-3, and Page 2-25, Lines 4-7:

Draft GEIS Statement:

The sensitive joint-vetch is listed in Table 2-3 and discussed on Page 2-25, yet stated "It is not known to occur at North Anna or the transmission line rights-of-way.".

Dominion Comment:

Based on a review of the Virginia Fish & Wildlife Information Service web site for the sensitive joint-vetch, this species is only located along tidally-influenced fresh waters. This is not the case for North Anna, near Lake Anna, nor for any transmission line corridors for North Anna Power Station. The description of this species within the SEIS implies it is of potential concern for the area in which North Anna Power Station is located. It is therefore requested that the listing and discussion of this species be deleted from the SEIS.

Comment 7:

Section 2.2.8.1 Housing

NAD-V-8 Page 2-28, Line 50:

Draft GEIS Statement:

It is stated that "Louisa County is currently updating its plan (VEPCo 2001b)."

Dominion Comment:

Louisa County approved an updated Louisa County Comprehensive Plan in September 2001, referenced on Page 2-51, Lines 33-34. This statement should be updated accordingly.

Comment 8:

Section 2.2.8.1 Housing

NAD-V-9 Page 2-30, Table 2-7:

Draft GEIS Statement:

Table 2-7 is titled "Population Growth ... 1980-2010". Population data includes Richmond City & County.

Dominion Comment:

It is suggested the title read "**Estimated** Population Growth ...". Population data given in Table 2-7 varies from the License Renewal Application Environmental Report due to the inclusion of Richmond City & County. Richmond **County** is not located in the population zone for consideration.

Comment 10:

Section 2.2.8.2 Public Services, Water Supply

NAD-V-10 Page 2-30, Lines 21-22:

Draft GEIS Statement:

It is stated that Henrico County provides water to approximately 80,215 customers.

Dominion Comment:

The License Renewal Application Environmental Report stated 74,000 customers, and the Draft SEIS references the ER. We cannot substantiate the source of the SEIS number and suggest that the number be revised to reflect the LRA ER identified number of customers, or the source of the SEIS number specified.

Comment 11:

Section 2.2.8.2 Public Services, Water Supply

NAD-V-11 Page 2-30, Line 30:

Draft GEIS Statement:

It is stated that the maximum capacity of the City of Richmond is 128 MGD.

Dominion Comment:

The License Renewal Application Environmental Report stated the maximum capacity at 132 MGD. We cannot substantiate the source of the SEIS number and suggest that the number be revised to reflect the LRA ER number, or the source of the SEIS number specified.

Comment 12:

Section 4.6.1 Aquatic Species

NAD-V-12 Page 4-42, Line 23:

Draft GEIS Statement:

It has been determined that impacts "... would be SMALL, ..."

Dominion Comment:

It is requested that the following words be added to the above sentence to be consistent with Endangered Species Act wording and Surry Draft SEIS conclusion statements: " ... would be SMALL **and would not be adversely affected**, ...".

Comment 12:

Section 4.7.1 Evaluation of Potential New and Significant Information Received from the FWS Chesapeake Bay Field Office

NAD-V-13 Page 4-44, Lines 24-27:

Draft GEIS Statement:

It is written that the NRC staff will inform VEPCo of comments provided by FWS and recommend further dialogue.

Dominion Comment:

It is requested that this statement be changed to reflect recent discussions regarding this issue and the final course of action as determined by the NRC staff. We recommend that the April 30, 2002 correspondence from NRC to FWS be referenced for completeness.

Comment 14:

Section 5.2.6.1 VEPCo Evaluation

NAD-V-14 Page 5-22, Line 32:

Draft GEIS Statement:

There is a "?" provided in the APE formula.

Dominion Comment:

The question mark "?" should be a "delta symbol" in the APE formula.

Comment 15:

Section 5.2.6.1 VEPCo Evaluation

NAD-V-15 Page 5-23, Line16:

Draft GEIS Statement:

It is written that "This higher value is primarily due to the high frequency of SGTRs ...".

Dominion Comment:

It is requested that the words "frequency of" be replaced with "**contribution to CDF from**".

Comment 16:

Section 8.2.3.1 Once-Through Cooling System

NAD-V-16 Page 8-35, Lines 24-35:

Draft GEIS Comment:

It is written that "Approximately 200 ha (500 ac) would be needed for the construction of the new plant."

Dominion Comment:

Since the initial Final Environmental Statement for North Anna Power Station was written for four units, it should be summarized that no additional land may be needed for construction of a new plant.

Comment 17:

Section 9.1.2 Irreversible or Irretrievable Resource Commitments

NAD-V-17 Page 9-6, Lines 20-21:

Draft GEIS Statement:

It is written that "The most significant resource commitments related to operation during the renewal term are the fuel and the permanent storage space."

Dominion Comment:

It is our presumption that "permanent storage space" refers to a national repository. In light of recent federal government actions regarding spent fuel disposition, it is requested that this statement be changed to reflect federal direction, and add the word "**offsite**" to the phrase "permanent storage space" to be consistent with the phrase "permanent offsite storage space" in Line 18.

July 24, 2002

ER 02/407

Chief, Rules Review and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 21555-0001

Attention: Andrew Kugler

Re: NUREG-1437, Draft Supplement 7 to the Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants - North Anna Power Station, Units 1 and 2

Dear Sir:

The U.S. Department of the Interior (Department) has reviewed and offers the following comments on the referenced draft document. Please give these comments careful consideration in completing the final Supplement.

General Comments

The Department shares a common goal with the U.S. Nuclear Regulatory Commission (NRC) to bring the North Anna Nuclear Power Station into compliance with current environmental regulations. To this end, a representative of the U.S. Fish and Wildlife Service's (FWS) Chesapeake Bay Field Office visited the site on May 21, 2002, to help the NRC identify, assess, avoid, and mitigate any adverse environmental impacts. With the advances in human understanding of ecological relationships, it is appropriate and useful that Federal and state natural resource agencies periodically review site conditions in order to maintain the highest level of environmental protection. Since the North Anna Power Station came online in 1978, Dominion Energy Company (parent company of Virginia Electric and Power Company) and the NRC have initiated measures for the protection of the natural resources around the Power Station, lake, and river areas.

NAD-W-1 *The FWS has determined that the North Anna operations and minor refurbishment may have potential to adversely affect area natural resources. The federally threatened bald eagle, Haliaeetus leucocephalus, does not appear to be affected, but a scientific approach should be maintained to evaluate and document any mortalities. Similar records for other migratory bird impacts should be maintained and any mortality reported to the FWS.*

NAD-W-2 *Regarding aquatic species, potential impacts include the cooling water intake, discharge, and dam that provide the impounded cooling water. The rotating screens of the cooling water intake at the Power Station provide nearly unimpeded water intake, but the biota are likely to incur high mortality as a result of entrainment and impingement. There is probably less mortality associated with the cooling water discharge, but the effects on fish behavior and ecology are potentially damaging. Another fisheries impact is the Lake Anna Dam. While downstream fish passage maybe acceptable, the blockage of upstream migrations of American eel, and possibly anadromous fish during high flow seasons, should be corrected during this relicensing. The FWS offers the following comments on topics where the environmental standards have improved and new information is available.*

Specific Comments

NAD-W-3 *The FWS agrees that the potential is low for the North Anna Power Station to adversely affect the bald eagle, a federally threatened species. Our primary concern is for the incidental mortality to migratory birds associated with the transmission lines. In the event of migratory bird mortality, Virginia Electric and Power Company should complete a Raptor Incident Report for the FWS and the appropriate state agencies.*

NAD-W-4 *The North Anna facility lacks a component of the cooling water intake system that Virginia Electric and Power Company has developed at the Surry Power Station. The traveling mesh screens at the Surry Power Station include a spray wash system that removes the biota from the screens and returns them to the James River. The North Anna facility utilizes a similar technology for the screens, but fails to provide the mechanism to return the biota unharmed back to the Lake. The traveling screens and wash system at Surry clearly minimize aquatic impacts more than the North Anna facility, which discards the impinged biota into a disposal bin. A similar process, such as at Surry, could be developed to minimize the aquatic impacts by returning the impinged biota safely back to the Lake. To further minimize the impacts, we recommend replacing worn or damaged screens with mesh less than or equal to one millimeter wide and adopting entrance velocities less than or equal to 0.5 feet per second (Gowan, C. and G. Garman 1999).*

NAD-W-5 *The cooling water discharge is an additional potential hazard to fish. Unlike the Surry Power Station that discharges to the mouth of the tidal James River, the North Anna Station discharges into a series of open canals that flow back to the Lake. While the thermal discharge is likely to have a greater effect in the colder months, the increased temperatures in the summer could also have an adverse effect on fish behavior and ecology in the Lake.*

NAD-W-6 *The Lake Anna Dam provides cooling water for the Power Station, but also blocks migratory fish moving upstream from the North Anna River. Anadromous, catadromous, and freshwater fish move upstream to spawn in the spring, and possibly need the habitat at other times of the year, when fish are searching for forage, refuge, or suitable habitats. American eel are well known for their migrations and are present downstream of the Dam. The Atlantic States Marine Fisheries Commission's plan recommends restoring eels to their historical habitat and increasing their abundance in habitats where they currently reside. River herring are likely to have historically ascended to the habitat upstream of the Dam during natural flow conditions. In addition to restoring fish to their historical or preferred habitats, freshwater mussel populations are distributed in a watershed by the movement of mussel host fish species common to the North Anna River. The mussels and host fish will both benefit from fish passage.*

Summary Comments and Recommendations

The Department recommends that the NRC adopt the following recommendations in order to maintain optimum protection of fish and wildlife resources at North Anna Power Station:

1. *Maintain an efficient recording and reporting system for migratory bird mortality at the North Anna Power Station;*

2. *Develop a method to return impinged fish, on the cooling water intake screens, back to the Lake. The intake screen should be replaced with mesh size of one millimeter or less wide with intake water velocities less than 0.5 feet per second;*

NAD-W-7 3. *Determine the impacts from the thermal discharges on fish distribution, spawning, and feeding. The specific study design should be developed with the North Anna Power Station staff, FWS, and other interested parties; and*

NAD-W-8 4. *Assess the upstream movement of fish to the Dam with continuous sampling of water quality, flow, and species composition from February 1 to November 30. The specific study design should be developed with the North Anna Power Station Staff, FWS, and other interested parties.*

We appreciate the opportunity to review the draft environmental document and provide comment on natural resource protection. If you have any questions regarding these comments, please contact David W. Sutherland of the Service's Chesapeake Bay Field Office by phone at (410) 573-4535, or by e-mail at David_Sutherland@fws.gov.

Sincerely,

Michael T. Chezik

THE TOWN OF LOUISA

Incorporated 1873

Post Office Box 531
219 East Main Street
Louisa, Virginia 23093

Telephone: (540) 967-1400
Facsimile: (540) 967-9580
e-mail: info@louisatown.org

June 25, 2002

Mr. Andrew Kugler
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Mr. Kugler:

I regret that I will be unable to attend the NRC's public meeting held today in Louisa County on the license renewal proposal for North Anna Nuclear Power Station, Units 1 and 2. Therefore, I am writing this letter to offer my support on behalf of their proposal.

NAD-Y-1
NAD-Y-2

Throughout Dominion Virginia Power's twenty year history in Central Virginia they have proven themselves good corporate citizens – financially as well as environmentally. Since 1966 Dominion Virginia Power has paid more than $170 million in property taxes to Louisa County. In 2001 alone, they contributed $10.99 million to the County's economy. Although it may seem like it, it is not the money alone that counts. North Anna employs 825 people from the surrounding communities. They demonstrate their commitment to the community through active and frequent involvement.

NAD-Y-3

NAS-Y-4

North Anna Power Station commitment to the environment is above reproach. Nuclear energy itself does not produce any of the air emissions associated with fossil-fueled generation plants, thus nuclear generation helps to protect the environment. The company's conservation efforts focus on protecting and enhancing fish populations as well as migratory birds through policies, procedures and permits obtained from the Unites States Fish and Wildlife Service. As good stewards to the environment Dominion biologist regularly monitor the health of fish populations with no harmful results found. As I perceive it, North Anna Nuclear Power Station is environmentally safe, environmentally sound and environmentally responsible.

NAD-Y-5

Dominion Virginia Power is committed to safety at North Anna Power Station. They plan it into all aspects of work activity. Safety work practices are reinforced through training and continuous improvement measures.

NAD-Y-6

North Anna Power Station plays an essential role in meeting the Commonwealth's energy needs. It produces approximately 17 percent of the electricity used by fellow Virginians, that is the equivalent to lighting up some 450 homes across the Old Dominion. For nine consecutive years

NAD-Y-7

North Anna Power Station has been recognized as among the lowest-cost producers of nuclear-generated electricity in the United States. The North Anna station plays a crucial role in

providing low-cost energy that makes Virginia attractive to business. The continued operation of North Anna Power Station is critical to the development of a robust, competitive retail electric market in Virginia.

Thank you for allowing me the opportunity to provide these comments in support of the license renewal for Units 1 and 2 at North Anna Power Station. If you should have questions or comments please, do not hesitate to contact me at (540) 967-1400. I am

Respectfully,

George E. Morrison, III
Town Manager

cc: Mr. Philip L. Sparks
Senior Manager State & Local Affairs
Dominion