

## PMNorthAnna3COLNPEmails Resource

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**From:** Laura Quinn  
**Sent:** Friday, August 08, 2008 8:48 AM  
**To:** Tony.Banks@dom.com  
**Cc:** Alicia Williamson; Sandusky, William F III  
**Subject:** RE: NAPS3 COLA - NRC ERSI Needs #24 (Pop Growth), #25 (Pop and Recreation Around Lake Anna), #31 (Socioeconomics - Scaling), and #32 (Socioeconomics - Services)

I just reviewed your VM. Yes we did receive this email. I will check with Bill to make sure we have everything we discussed via the telecons for information needs and also to make sure he did receive this email. Do to the time difference it will probably be later today or Monday before we can confirm that we did get everything (probably later today).

Thanks  
Laura

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**From:** Tony.Banks@dom.com [mailto:Tony.Banks@dom.com]  
**Sent:** Wednesday, August 06, 2008 6:07 PM  
**To:** Alicia Williamson; Laura Quinn; Sandusky, William F III  
**Cc:** Thomas Kevern; Joseph.Hegner@dom.com; Regina.Borsh@dom.com; Joyce.Livingstone@dom.com; Tony.Banks@dom.com  
**Subject:** NAPS Unit 3 COL Application - NRC's Environmental Review Supplemental Information Needs #24 (Population Growth), #25 (Population and Recreation Around Lake Anna), #31 (Socioeconomics - Scaling), and #32 (Socioeconomics - Services) - 08/06/08 E-mail 1 o...

On May 16, 22, and 29, 2008, NRC staff and its contractor, Pacific Northwest National Laboratory (PNNL), held conference calls with representatives from Dominion to discuss a number of supplemental "information needs" to support the North Anna Power Station Unit 3 (NAPS) combined license application environmental review. Several of these information needs were identified during the environmental site audit conducted the week of April 14, 2008. Others were identified by subject matter reviewers following the audit.

Please note that Dominion has responded to some of the information needs via e-mail, and to others by letter. In every case, Dominion's goal has been to provide complete and accurate information in a timely manner. The use of both e-mail and letters to achieve this goal has been discussed with the NRC project managers.

This e-mail completes the responses for the requested information listed in NRC's June 16, 2008 letter, which included a total of 35 items.

To ensure that you have received the information, please acknowledge receipt of this transmission.

I can be contacted at (804) 273-2170 or (tony.banks@dom.com) if there are questions.

Thank you -

Tony Banks, MPH, CHMM  
Dominion  
ESP/COL Project  
Environmental Lead

## **Information Need Request #24 (Population Growth)**

*Is the information contained in the ESP regarding population growth for the surrounding region still consistent? What sources of information for future population growth in the region were consulted as part of the New and Significant Process? If that data is different than what was contained in the ESP, does that change the original conclusion regarding impact and explain why?*

### **Dominion Response**

As a part of its review to determine applicability of any new and significant information, Dominion confirmed that the information on population growth in the ESP proceeding remains consistent with current information.

The Weldon Cooper Center for Public Service updated information on their website in 2005 to provide an extensive explanation of the methodology used for population estimation. The ESP application used this methodology and base information from the 1990 and 2000 US Census to estimate population growth. As there has been no change in the formula or methodology for population estimation as described by the Weldon Cooper Center for Public Service, and since more recent US Census Bureau estimates for the North Anna COL application site vicinity did not show significant changes from the 2000 basis, the information contained in the North Anna ESP Application ER regarding regional population growth is still valid.

(See also Response to Information Need #26 Unemployment and Workforce Trends, submitted 07/25/08.)

## **Information Need Request #25 (Population and Recreation Around Lake Anna)**

*Is the information contained in the ESP documentation regarding permanent and transient population surrounding Lake Anna, annual number of anglers that use Lake Anna and annual boaters on Lake Anna still consistent?*

### **Dominion Response**

The information contained in the ESP documentation regarding permanent and transient population surrounding Lake Anna, annual number of anglers that use Lake Anna, and annual boaters on Lake Anna, was compared with new information available during preparation of the COLA-ER. This new information was deemed not significant because it would not change an NRC finding or conclusion in regard to population and recreation around Lake Anna.

The North Anna ESP Final EIS (NUREG-1811) Table 2-8 reported an estimated transient population, including annual attendance of the Lake Anna State Park, of approximately 808,300. Although database tracking and accounting practices for Lake Anna boaters and anglers from state agencies may have changed since information was provided during the ESP proceeding, data and explanation of data available regarding boaters and anglers indicates there is no significant change in the usage of Lake Anna resources. For example, the 2007 estimated transient population for the vicinity around Lake Anna was approximately 912,000. Virginia Department of Game & Inland Fisheries (VDGIF) data for 2000-2007 shows some variation in the number of state angler licenses granted, however, the overall number of licenses granted is relatively constant.

Information provided by the Virginia Department of Conservation and Recreation (VDCR) for Lake Anna State Park (2004-2007) indicated that usage of the park (which includes boating since many guests also bring boats) has increased, probably attributable to the addition of new cabins and campsites in the past three years. Although Lake Anna State Park usage is only a portion of the total transient usage of Lake Anna, the annual total number of paying campers at the park has been steadily increasing. The values below represent an approximate 50% increase in usage compared to 2000-2003 (data provided to NRC in 2004, Adams Accession #ML042790235). The increase in paying campers correlates positively with the noted increase in transient population. (According to VDCR, the paying attendance data is more reliable usage data than non-paying data. And per the ESP Application ER Section 2.5.1.3.1, "Recreational use of Lake Anna, including Lake Anna State Park, is the greatest contributor to transient population in the area.")

Lake Anna Attendance: 2004 - 2007

Year	Paying Camping	Paying Cabin	Paying Day Use	Total Paid	Non Paying Day Use	Grand Total
2007	14,324	7,642	123,218	145,184	116,837	262,021
2006	8,725	7,334	105,756	121,815	150,323	272,138
2005	200	2,705	61,743	64,648	141,632	206,280
2004	290	-	89,626	89,916	117,598	207,514

According to the 2000 U.S. Census data, 1.5 million permanent residents resided within 50 miles of the North Anna site, which includes Lake Anna. As noted in Response to Information Need #24 Population Growth, more recent US Census Bureau estimates for the North Anna COL application site vicinity did not show significant changes from the 2000 basis, therefore, the information contained in the North Anna ESP Application ER regarding regional population growth is still valid.

**Information Need Request #31 (Socioeconomics - Scaling)**

*While the estimated number of construction workers will be less than previously estimated for ESP, how does that scale the estimated number of operational workers, reduced number of vehicles on roads, property tax revenues, and available housing units? What is the basis for the scaling factor? Does that change the ESP findings regarding both adverse and beneficial impact and the basis for that determination? (Chapter 4.4)*

**Dominion Response**

Table 3.0-2 of the North Anna Unit 3 COL application compares the projected number of permanent operational workers against the estimate in the ESP application. As indicated in that Table, 500 workers are expected for Unit 3, versus 720 previously estimated for two units.

A specific scaling factor was not used in determining the estimated number of operational workers and associated impacts or need for resources to the region surrounding the North Anna site. The additional workforce at the North Anna site would represent a small percentage of the estimated 2% per year population growth rate that is identified in the 2006 Louisa County Comprehensive Plan. These workers and their families would require housing and other human services (e.g., education, transportation, emergency) in the region, and resources including water and waste treatment.

Dominion concluded that the reduction in the estimated number of construction and operational workers at the North Anna site from ESP to COL would proportionately decrease vehicular traffic and

property tax revenues, and therefore decrease demand on infrastructure and resources. The decrease in estimated impacts would not change the findings and conclusions in the North Anna ESP application.

Construction activities at the North Anna site are planned in phases. This phased approach will allow for a gradual build-up and release of workers over a several-year period of time. Dominion has estimated that approximately 20% of the construction workforce will come from outside of the region and would mostly require temporary housing. Dominion's review of the Year 2006 US Census Bureau American Community Survey shows that there are sufficient rental and permanent housing units in the region to accommodate the expected workforce at its peak.

(See also Response to Information Need #15 Socioeconomics - Workforce, submitted 08/01/08, Responses to Information Need #26 Workforce, #29 Housing, and #30 Commuting Routes, submitted 07/25/08, and Response to RAI Question ER Section 10.4-1, submitted 07/17/08.)

### **Information Need Request #32 (Socioeconomics - Services)**

*With half of the number of construction workers anticipated compared to that estimated for the ESP, what if any impact does that have on previously estimated impact on potential housing availability, availability of potable water and water disposal capability, and need for additional fire/police/medical services and educational facilities? (Chapter 4.4)*

### **Dominion Response**

A decrease in the estimated number of workers needed for construction (5,000 for two units in the ESP Application ER, versus 2,500-3,500 for Unit 3 in the COL Application ER) would result in a decreased demand on resources and services in the region. The influx of construction workers are expected to gradually increase over time based on a phased approach to construction activities planned. Upon receipt of all required approvals, a gradual release of construction workers would follow the completion of construction phases.

Approximately 80% of the anticipated construction workforce is expected to come from the 80 km (50 mi) region surrounding the North Anna site which includes Louisa, Spotsylvania, Orange and Henrico Counties, and the city of Richmond. The influx of construction workers for the North Anna site comprises a small percentage of the anticipated population growth projected in regional county comprehensive plans. A fraction of the construction workforce would live in temporary or permanent housing in Louisa County and the remainder would reside in the surrounding region. Dominion's comparison of the Year 2007 vacant housing census data with that of Year 2000 data shows housing availability is sufficient to support the anticipated North Anna Unit 3 construction workers. County comprehensive plans in the region surrounding the North Anna site identify adequate police, fire, medical, schools, libraries, and transportation resources as well as water and sewer services to accommodate population growth. The construction workforce needed for North Anna Unit 3 would have a small beneficial effect on the region through increased employment and tax revenue from the construction and operation of Unit 3. In addition, the decrease in the estimated number of construction workers would lessen the demand on local and regional resources and services. These impacts are consistent with the conclusions provided in the North Anna ESP application.

(See also Response to Information Need #31 Socioeconomics - Scaling, and Response to Information Need #28 Orange County Water and Sewer, submitted 07/25/08.)

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**Mail Envelope Properties** (Laura.Quinn@nrc.gov20080808084800)

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**From:** Laura Quinn

**Created By:** Laura.Quinn@nrc.gov

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**Post Office:**

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