

**From:** Tony.Banks@dom.com  
**Sent:** Friday, July 25, 2008 5:03 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 #26

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.

This e-mail provides some of the requested information listed in NRC's June 16, 2008 letter, which included a total of 35 items. In certain instances, the file size may dictate that more than one e-mail will be needed to transmit the information. In those instances, the e-mail will clearly be identified as "x of y" to ensure accountability.

Please note that Dominion will respond to some of the information needs via e-mail, and to others by letter. In every case, Dominion's goal is 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.

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](mailto:tony.banks@dom.com)) if there are questions.

Thank you -

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

### **Information Need Request #26 (Unemployment and Workforce Trends)**

*Information regarding unemployment and workforce trends still appears to be based on 1990 and 2000 census data. What new information did Dominion review since the ESP? If none, why not? If so, what information did Dominion find and what is the basis for concluding the new information is not significant? (Chapter 2.5)*

## **Dominion Response**

Dominion reviewed several sources of information regarding unemployment and workforce trends since the North Anna ESP Final EIS (NUREG-1811) was issued December 2006. New information was deemed not significant because it remained consistent with information presented in the ESP application and would not change an NRC finding or conclusion in regard to unemployment and workflow trends.

Documentation reviewed included:

VEC Economic Information Services Division Community Profiles dated August 29, 2007 - The document contained current unemployment rates and percentages of resident workers commuting outside the county or city for Henrico County, Hanover County, and the City of Richmond. The new information is summarized in the table below:



Current percentages provided in this document are very close to those presented in the ESP application. Slight fluctuations were noted and were normal and expected over time.

Spotsylvania County 2007 Demographic Profile - New data was obtained regarding employers and unemployment in Spotsylvania County. The largest private employer is CVS, Inc with 680 employees. The largest public employer is the county school system with 3700 employees. Unemployment data is provided from 1997 to 2007 and shows that unemployment in the county has been consistent at near 2 percent for the 10-year period. These employers still exist within the county, still employ the largest number of people (although the specific numbers of employees have changed in the beneficial direction), and unemployment remains consistent with that provided in the ESP application.

Virginia Employment Commission News Release dated July 27, 2007 - Based on the reference, the unemployment rate for Richmond was 3.4 percent for June 2006, 2.8 percent for May 2007 and 3.2 percent for June 2007. The change from May to June of 2007 was attributable to the influx of students and graduates entering the job market. The unemployment rate was 5.3 percent in December 2003, which was the value used in the ESP application.

In June 2007 the national unemployment rate was 4.7 percent and the Virginia unemployment rate was 3.2 percent. The Richmond unemployment rate is commensurate with that of Virginia and lower than the national figure. The updated Richmond unemployment rate is lower than it was at the time of the ESP application, and is thus a change in the beneficial direction.

Two sources consulted online containing new information were City-Data.com and the Virginia Employment Commission Current Monthly Unemployment Rate as of June 2007. The information gathered from these sites as well as the information recorded in the ESP application is presented in the table below:



The City of Richmond continues to have the lowest median household income and highest poverty rate of the five jurisdictions evaluated as of 2005. Overall the information is consistent with that provided in the ESP application and the FEIS.

In Table 2-9 of the FEIS, Spotsylvania County had a lower unemployment rate than the current data (1.9 percent as of December 2003 vs. 2.7 percent in 2007). This change is very small and changes of such magnitude are expected over time. Other counties show improved unemployment rates and median household incomes. For example in the FEIS, the unemployment rate of Louisa County was 4.8 percent as of December 2003. This rate had decreased to 3.0 percent as of 2007.

New information in regards to Spotsylvania County was gathered from the U.S. Census Bureau Quickfacts for Spotsylvania County, Virginia, The Department of Economic Development Spotsylvania County Demographic Profile 2007 and the Spotsylvania County Employers Demographic Profile 2007. The Census Bureau indicated that the approximate population of Spotsylvania County in 2006 was 119,529, up from 90,395 provided in the ESP application from the 2000 census. The percent of residents leaving

the county for work has decreased from about 60 percent to 48 percent. These numbers differ slightly from the ESP application, but overall they are still consistent with the original findings.

Regional Economic Accounts provided by the Bureau of Economic Analysis offered new information on total full-time and part-time employment by the North America Industry Classification Systems (NAICS) industry for the City of Richmond. This reference was accessed at <http://www.bea.gov/regional/reis/action.cfm> on August 2, 2007. From the base value of 196,175 in the year 2000 indicated in Section 2.8 of the North Anna ESP FEIS, the total employment figures for the City of Richmond continued to decline to 179,881 in 2003, then rose to 182,624 in 2005. Although the 2005 workforce is roughly 7 percent lower than that of 2000, the data shows an upward trend in total employment through 2005. This is a beneficial trend.

After reviewing these sources and evaluating the new information presented, Dominion concluded that although there have been expected fluctuations in the unemployment rate and workforce since the 2000 census, there have been no major events or conditions which would change the overall trends in the region. Therefore, new information on unemployment and workforce trends released after the 1990 and 2000 census data would not have the potential to change an NRC finding or conclusion in the FEIS and was determined to be not significant.

### **Information Need Request #27 (Traffic Management Plan)**

*A commitment made at the ESP stage was to develop a traffic management plan. If one doesn't exist or is in preparation, when does Dominion anticipate developing one and will it be done in concert with studies or plans from the Virginia Department of Transportation? (Chapter 2.5)*

### **Dominion Response**

In the North Anna ESP Application Section 4.4.2.1 and Table 4.6-1, Dominion committed to develop a construction management traffic plan prior to the start of general plant construction, and in cooperation with VDOT. This plan could include approaches or mitigating actions to: increase the number of workers per vehicle above the average of 1.8; enhance the use of multi-person vans by the construction workforce; provide for offsite parking areas from which workers can be bused to the site; and encourage the use of vanpools and carpools.

In the North Anna COL Application EPP, additional mitigating actions included:

- Scheduling delivery of larger pieces of equipment or structures on off-peak traffic hours (e.g., at night) or through other transportation modes (e.g., rail)
- Avoiding delivery routes that could adversely affect sensitive areas (e.g., housing, hospitals, schools, retirement communities, businesses) to the extent possible

- Repairing any damage to public roads, markings, or signs caused by construction activities to pre-existing condition or better
- Consider/coordinate, if necessary, with DOT and local planning authorities the upgrading of local roads, intersections, and signals to handle increased traffic loads

During new and significant information review for this issue, updated information was provided that VDOT and the surrounding communities have road improvement plans which would facilitate traffic management around the North Anna site. As would be expected there are state and local budgetary constraints to meet schedules. Dominion would include as part of its traffic management plan, discussions with VDOT and the surrounding communities which would include road improvement schedules. This would be done in concert with other project construction development plans and scheduling.

### **Information Need Request # 28 (Orange County water and sewer)**

*The New and Significant process identified updated water/sewer data for all counties surrounding the NAPS site except Orange County. At the time the New and Significant process was completed for this subject area, was new data available? If it was available, what was the rationale for not including it in the evaluation process? (Chapter 2.5)*

### **Dominion Response**

New data regarding water and sewer systems in Orange County was not available in May 2007 when Dominion conducted a review for new and significant information. The 2006 Orange County Comprehensive Plan was amended in September 2007. The amended Orange County Comprehensive Plan does not provide any new data pertaining to the need to increase current water and sewer system capacities; the plan does, however, identify long-term goals for expansion of existing water and sewer facilities as needed to accommodate population growth.

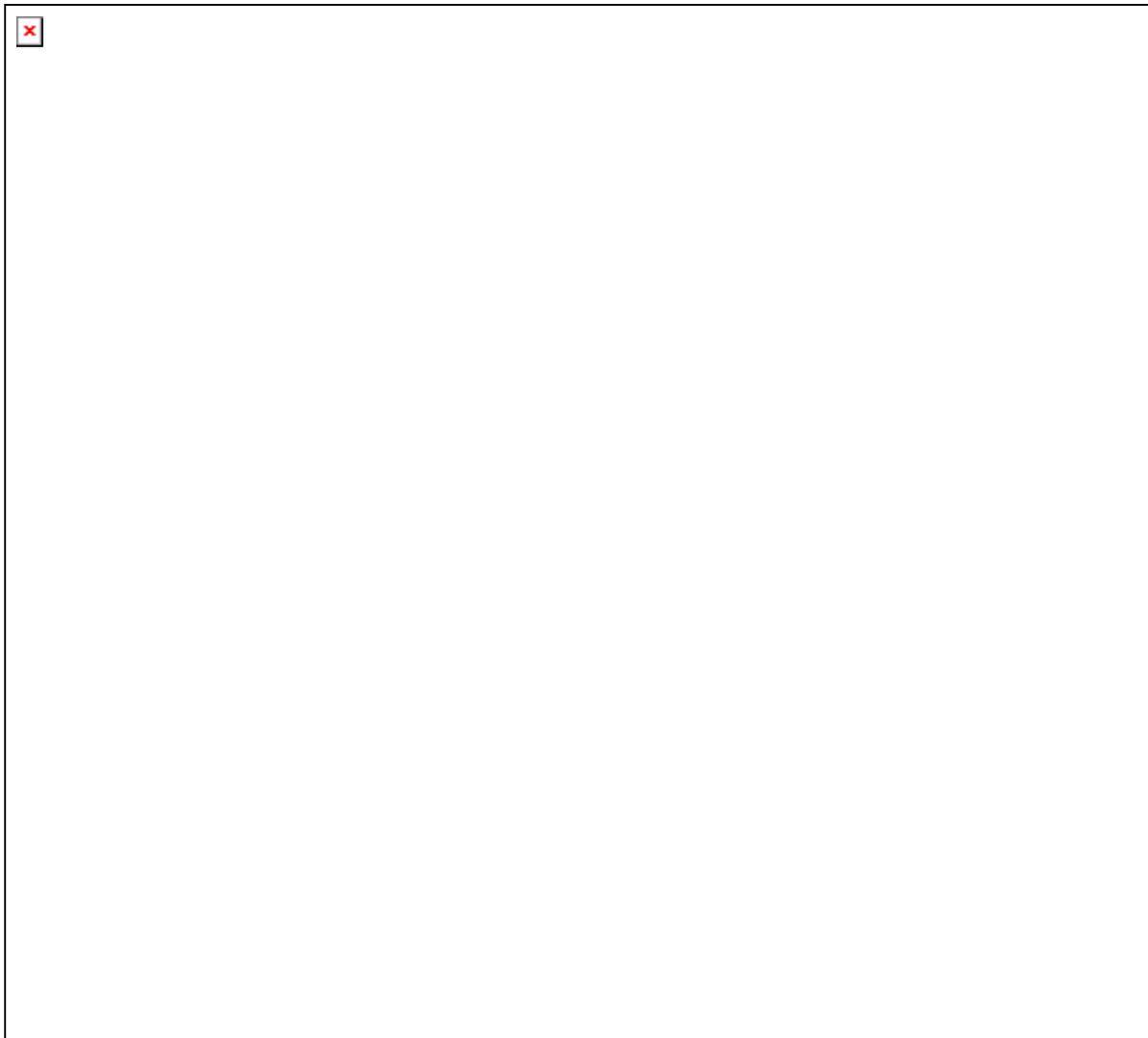
### **Information Need Request #29 (Housing)**

*What new information is available since the ESP on housing stock, housing vacancies, and housing rental rates in Louisa, Orange, and Spotsylvania counties? Discuss how this information does or does not affect any conclusions reached in the ESP? (Chapter 2.5)*

### **Dominion Response**

In preparing the North Anna COL Application, Dominion reviewed several references containing new information on housing in Louisa, Orange, and Spotsylvania counties.

The U.S. Census Bureau website's American Fact Finder provided new information on the number of housing units available in Spotsylvania County, Henrico County and the city of Richmond for 2006. There has been an increase since 2000 in the total number of housing units in all three areas as well as an increase in the number of available housing units. The number of occupied units in Spotsylvania and Henrico counties has increased while the number of occupied housing units in the city of Richmond has decreased. The new data (2006) follows the housing trend identified for these areas in the North Anna ESP FEIS (NUREG-1811) Table 2-18 from 1990 through 2000 as shown in the table below:



This increase in homes will make more housing units available for construction and permanent employees associated with Unit 3. According to information provided by

GEH, the number of construction workers required for one ESBWR at North Anna is estimated to be 2,500-3,500. A comparison of the most recent vacant housing census data information with that of 2000 as provided by the Census Bureau, indicates that housing remains available in sufficient numbers to support the construction of Unit 3.

The FEIS reported that Louisa County was adding 350 to 400 homes per year. Updated information on building permit data was obtained from the Louisa County Community Development Director in July 2007. According to this source, more than 400 single-family housing permits have been issued each year since 2004. The number has fluctuated, as would be expected, with approximately 700 units in 2004, 800 in 2005, 600 in 2006 and if 2007 trends continue, approximately 550 new building permits could be expected. These changes represent higher numbers than reported in the FEIS, and indicate an overall positive trend.

City-Data.com contained new information as of July 3, 2007 for Spotsylvania County regarding the average price of a residential house. In the FEIS, the average price for a residential house is stated at around \$215,000 based on 2000 Census data. The new data shows that the average housing price is \$229,600. Although this is \$14,600 (6.7 percent) higher than the FEIS, such an increase in residential real estate prices is not unexpected.

Based on the knowledge of Dominion staff with a general understanding of the area and local economy, no significant changes in the area were identified that would affect an NRC finding or conclusion regarding cost of rental.

After reviewing new information, Dominion concluded that although there have been variations in the housing availability and pricing data from that presented in the ESP application, these variations are to be expected and there have been no major or substantial changes. Most of the fluctuations are in the beneficial direction and would continue to provide positive socioeconomic impacts. As a result of this review, the new information was deemed not significant and would not affect an NRC finding or conclusion.

### **Information Need Request # 30 (Commuting Routes)**

*Describe any efforts that have been made to collect traffic counts, level of service data, and attempts made to determine whether construction traffic may exceed the existing capacity of the main commuting routes into the North Anna site. The routes in question are U.S. Highway 33 and 522 and state routes 22, 208, 606, 618, 652, and 700. Discuss how this information would or would not affect any conclusions reached in the ESP. (Chapter 2.5)*

### **Dominion Response**

The North Anna ESP Application identifies U.S. Highway 522 and State Routes 208, 618, 652 and 700 as having a level of service (LOS) designation of B. Route 606 has been designated a LOS generally of D or better. In July 2007, Dominion contacted the Virginia Department of Transportation (VDOT) regarding new and/or updated information on traffic counts and LOS information for these commuting routes leading to the North Anna site. VDOT responded in August 2007 that it did not have specific information on the LOS for these routes. In addition, no new traffic counts had been completed since the completion of the North Anna ESP Application.

Road improvements for U.S. Highways 33 and 522 and State Routes 22, 208, 606, 618, 652, and 700 are recommended in The Louisa County Draft Comprehensive Plan of 2001 and the Spotsylvania County Approved 2002 Comprehensive Plan. Traffic resulting from additional people commuting to the North Anna site would increase on these routes but would be alleviated with the implementation of a construction traffic management plan prior to the start of general plant construction and road improvements outlined in the comprehensive county plans. The Louisa County Comprehensive Plan was updated in 2006. This plan does not provide any new information on the schedule or funding of the recommended road improvements and is consistent with the conclusions provided in the North Anna ESP Application.

### **Information Need Request # 33 (New Elementary School)**

*With the reduced number of operational workers at NAPS Unit 3, how does this alter any plans for construction of a new elementary school in Louisa County? (Chapter 5.8)*

### **Dominion Response**

The number of operational workers at NAPS for Unit 3 was reduced from the original estimate in the ESP application of 720 people to approximately 500 people in the COL application. As of August 2007 approximately 31 percent of the current number of workers at the NAPS site reside in Louisa County.

The Louisa County public school system has been planning construction for a new elementary school in response to growth in the area for several years. There was an increase in Louisa County school enrollment from 3,926 to 4,361 students from 1997 to 2006. The new elementary school is currently scheduled to open in November 2009. Dominion is expecting to add approximately 500 full-time employees to support the operations of NAPS Unit 3. The permanent employees will be hired progressively over a period of two to three years. Despite a potential reduction in school enrollment due to a reduced number of operational workers at North Anna, the population growth that has been occurring in the area and is expected to continue would still substantiate a need for the new school. Therefore, the reduction in operational workers at the NAPS site will not affect the plans for construction of the new elementary school in Louisa County.

**CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and/or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.**

---

### E-mail Properties

Mail Envelope Properties (OF9F662FDA.8D802F67-ON85257491.006D9697-85257491.0073A166)

Subject: NAPS Unit 3 COL Application - NRC's Environmental Review Supplemental Information Needs #26

Sent Date: 07/25/2008 5:03:35 PM

Received Date: 07/25/2008 5:03:35 PM

From: Tony.Banks@dom.com

Created By: Tony.Banks@dom.com

#### Recipients:

Alicia.Williamson@nrc.gov (Alicia Williamson)

Tracking Status: None

Laura.Quinn@nrc.gov (Laura Quinn)

Tracking Status: None

bill.sandusky@pnl.gov (Sandusky, William F III)

Tracking Status: None

Thomas.Kevern@nrc.gov (Thomas Kevern)

Tracking Status: None

Joseph.Hegner@dom.com (Joseph.Hegner@dom.com)

Tracking Status: None

Regina.Borsh@dom.com (Regina.Borsh@dom.com)

Tracking Status: None

Joyce.Livingstone@dom.com (Joyce.Livingstone@dom.com)

Tracking Status: None

Tony.Banks@dom.com (Tony.Banks@dom.com)

Tracking Status: None

Post Office:

dom.com

Files	Size	Date & Time
-------	------	-------------

MESSAGE 63418 07/25/2008  
ATT00001.gif 5789  
ATT00002.gif 12586  
ATT00003.gif 25879

Options

Expiration Date:

Priority: olImportanceNormal

ReplyRequested: False

Return Notification: False

Sensitivity: olNormal

Recipients received: