

June 24, 2004

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Dominion Energy, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: ISSUANCE OF ENVIRONMENTAL SCOPING SUMMARY REPORT
ASSOCIATED WITH THE STAFF'S REVIEW OF THE APPLICATION BY
DOMINION NUCLEAR NORTH ANNA, LLC FOR AN EARLY SITE PERMIT FOR
THE NORTH ANNA ESP SITE

Dear Mr. Christian:

From November 24, 2003, through January 9, 2004, the Nuclear Regulatory Commission (NRC) staff conducted a scoping process to determine the scope of the NRC staff's environmental review of the application for an early site permit (ESP) for the North Anna ESP site, submitted by Dominion Nuclear North Anna, LLC (Dominion) by letter dated September 25, 2003. As part of the scoping process, the NRC staff held a public environmental scoping meeting in Mineral, Virginia on December 8, 2003, to solicit public input regarding the scope of the review. The scoping process is the first step in the development of an environmental impact statement for an ESP at the North Anna site.

The NRC staff has prepared the enclosed Environmental Scoping Summary Report identifying comments received at the December 8, 2003, environmental scoping meeting and by letters and electronic mail. In accordance with 10 CFR 51.29(b), you are being provided a copy of the scoping summary report. The transcript of the meeting can be found as an attachment to the meeting summary issued on January 13, 2004. The meeting summary is available electronically for public inspection in the NRC Public Document Room located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland or from the Publicly Available Records component of NRC's document management system (ADAMS) under accession number ML040140627. ADAMS is accessible at <http://www.nrc.gov/reading-rm/adams.html>, which provides access through the NRC's Public Electronic Reading Room (PERR) link. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's PDR Reference staff at 1-800-397-4209, or 301-415-4737, or by e-mail to pdr@nrc.gov.

D. Christian

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The next step in the environmental review process is the issuance of the draft environmental impact statement, which is scheduled for October 2004. Notice of the availability of the draft environmental impact statement and the procedures for providing comments will be published in an upcoming *Federal Register* notice. If there are any questions concerning this matter, please contact me at (301) 415-2828.

Sincerely,

/RA/

Andrew J. Kugler, Senior Project Manager
Environmental Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 52-008

Enclosure: As stated

cc w/encl: See next page

D. Christian

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OFFICIAL AGENCY RECORD

**Environmental Impact Statement
Scoping Process**

Summary Report

**North Anna Early Site Permit
Louisa County, Virginia**

June 2004



**U.S. Nuclear Regulatory Commission
Rockville, Maryland**

Introduction

On September 25, 2003, the U.S. Nuclear Regulatory Commission (NRC) received an application from Dominion Nuclear North Anna, LLC (Dominion) for an early site permit (ESP) for a location identified as the North Anna ESP site and adjacent to the North Anna Power Station, Units 1 and 2. The site is located in Louisa County, Virginia, approximately 10 km (6mi) northeast of the town of Mineral. An early site permit is an approval of a location for the siting of one or more nuclear power facilities, which is a separate licensing action from the filing of an application for a construction permit or combined license for such a facility. An early site permit application may refer to a reactor's (or reactors') characteristics rather than a detailed reactor design.

As part of the application, Dominion submitted an environmental report (ER) prepared in accordance with the requirements of 10 CFR Part 51 and 10 CFR Part 52. 10 CFR Part 51, Subpart A, contains the NRC requirements for implementing the National Environmental Policy Act (NEPA) of 1969, as amended. In addition, the NRC follows the Council on Environmental Quality (CEQ) regulations to the extent set forth in 10 CFR Part 51. NRC regulations related to early site permits are contained in 10 CFR Part 52, Subpart A. The ER must focus on the environmental effects that would be created by construction and operation of a reactor, or reactors, which have characteristics that fall within the postulated site parameters. It must also include an evaluation of alternative sites to determine if there is an obviously superior alternative to the proposed site.

The NRC staff is preparing an environmental impact statement (EIS) that will include an evaluation of the environmental impacts of the proposed action, the environmental impacts of alternatives to the proposed action, including the no action alternative, and alternatives available for reducing or avoiding adverse environmental effects. The proposed action is the approval of the North Anna site within the existing North Anna Power Station (NAPS) site as suitable for the construction and operation of new nuclear power generation facilities (new units). The proposed action does not include any decision or approval to build new units, which are matters that would be considered only upon filing of an application for a combined license (COL). While the proposed action is the approval of the North Anna ESP site for one or more nuclear power generating facilities, the Commission has determined, as set forth in 10 CFR 52.18, that the EIS will focus on the environmental effects of construction and operation of a reactor or reactors, which have characteristics that fall within the postulated site parameters.

In addition, if an ESP application contains a site redress plan, the permit holder may perform certain activities described in 10 CFR 50.10(e)(1) without further authorization if the EIS documents that there is reasonable assurance that the activities would not result in any significant environmental impact that cannot be redressed. The impacts of the activities described in 10 CFR 50.10(e) for the North Anna ESP site are addressed in the Dominion ER, and will be considered during the staff's review.

In accordance with 10 CFR Part 52, an applicant for an ESP need not provide an analysis of the need for power or the benefits of the proposed action. Additionally, the Commission determined that the ER need not discuss any aspect of storage of spent fuel in reactor facility storage pools or independent spent fuel storage installations. This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Decision, as codified in 10 CFR 51.23. Finally, the Commission has determined that an application for an

ESP need not address alternative energy options. This determination is documented in a June 2, 2003, letter from the NRC to Dominion (ADAMS Accession Number ML031480470), and in proposed changes to Part 52 published in the Federal Register on July 3, 2003 (68 Fed. Reg. 40025).

The staff is conducting its review of the Dominion early site permit application in accordance with Review Standard RS-002, *Processing Applications for Early Site Permits*. The review standard draws from the previously published NUREG-0800, *Standard Review Plans for the Review of Safety Analysis for Nuclear Power Plants*, and NUREG-1555, *Standard Review Plans for Environmental Reviews for Nuclear Power Plants*.

On November 24, 2003, in accordance with 10 CFR 51.26, the NRC initiated the scoping process by publishing a Notice of Intent in the *Federal Register* (68 Fed. Reg. 65961). The Notice of Intent, notified the public of the staff's intent to prepare an EIS on the ESP application. Through the notice, the NRC also invited the applicant; Federal, Tribal, State, and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at a public meeting and/or submitting written suggestions and comments no later than January 9, 2004.

The public scoping meeting was held at the Louisa County Middle School in Louisa, Virginia, on December 8, 2004. The NRC announced the meeting in local newspapers (The Richmond Times-Dispatch, The Daily Progress, The Free Lance Star, The Central Virginian), issued press releases, and distributed flyers locally. Approximately 80 members of the public attended the meeting. This session began with NRC staff members providing a brief overview of the ESP process and the NEPA process. Following the NRC's prepared statements, the meeting was opened for public comments. Twenty-nine (29) attendees provided either written statements or oral comments that were recorded and transcribed by a certified court reporter. The transcript of the meeting can be found as an attachment to the meeting summary, which was issued on January 13, 2004. The meeting summary is available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PAR) component of NRC's document system (ADAMS) under accession number ML040140614. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room) (Note that the URL is case-sensitive).

The scoping process provides an opportunity for public participation to identify issues to be addressed in the EIS and highlight public concerns and issues. The Notice of Intent identified the following objectives of the scoping process:

- Define the proposed action which is to be the subject of the EIS.
- Determine the scope of the EIS and identify significant issues to be analyzed in depth.
- Identify and eliminate from detailed study those issues that are peripheral or that are not significant.
- Identify any environmental assessments and other EISs that are being prepared or will be prepared that are related to, but not part of the scope of the EIS being considered.
- Identify other environmental review and consultation requirements related to the proposed action.

- Indicate the relationship between the timing of the preparation of the environmental analyses and the Commission's tentative planning and decision-making schedule.
- Identify any cooperating agencies
- Describe how the EIS will be prepared, and include any contractor assistance to be used.

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and all written material received, and identified individual comments. The transcripts can be found under accession number ML040140634. Two letters and three emails containing comments were received during the scoping period. All comments and suggestions received orally during the scoping meeting or in writing were considered. Each set of comments from a given commenter was given a unique alpha identifier (commenter ID letter), allowing each set of comments from a commenter to be traced back to the transcript, letter, or email in which the comments were submitted.

Comments were consolidated and categorized according to the topic within the proposed EIS or according to the general topic if outside the scope of the EIS. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for the comment.

The subject areas the comments were grouped into are:

1. General concerns related to the ESP Process
2. General comments in support of NRC's ESP Process
3. Comments expressing support for the North Anna ESP
4. Comments expressing opposition to the North Anna ESP
5. Comments concerning Air Quality
6. Comments concerning Aquatic Ecology
7. Comments concerning Ground Water Use and Quality
8. Comments concerning Surface Water Use and Quality
9. Comments concerning Socioeconomics
10. Comments concerning Human Health
11. Comments concerning Uranium Fuel Cycle and Waste Management
12. Comments concerning Postulated Accidents
13. Comments concerning Site Redress
14. Comments concerning Alternatives
15. Comments concerning the Safety Review for the ESP, including Safeguards and Security and Emergency Preparedness
16. Comments outside the scope of Early Site Permitting including Cost of Power, Need for Power, Operational Safety, and Other issues
17. General comments in support of Nuclear Power
18. General comments in opposition to Nuclear Power

Table 1 identifies the individuals providing comments and the Commenter ID letter associated with each person's set(s) of comments. The Commenter ID letter is preceded by NASC (short for North Aнна scoping). For oral comments, individuals are listed in the order in which they spoke at the public meeting. Accession numbers indicate the location of the written comments in ADAMS.

TABLE 1 - Individuals Providing Comments During Scoping Comment Period

Commenter ID	Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #
NASC-A	Paul Gunter	Nuclear Information and Resource Service	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-B	Ernie Reed	Citizen and teacher from Charlottesville	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-C	Alexis Zeigler	Citizen of Charlottesville	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-D	Donal Day	Citizen of Charlottesville	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-E	Dave Ritter	Public Citizen Critical Mass Energy and Environment Program	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-F	Dewey Keeton	Citizen of Louisa County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-G	Lou Zeller	Blue Ridge Environmental Defense League	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-H	Brian Buckley	Citizen of Louisa	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-I	Gene Grecheck	Vice President, Nuclear Support Services	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-J	Bill Borduin	Lake Anna Civic Association	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-K	Jerry Rosenthal	Concerned Citizens of Louisa County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-L	Terry Jones	Member First Baptist Church and Louisa County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-M	Dan Holmes	Piedmont Environmental Council	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-N	Abhaya Thiele	Resident of Buckingham County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-O	Bill Murphey	Resident Louisa County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-P	Marione Cobb		12/8/03 Scoping Meeting Transcript (ML040140634)

Commenter ID	Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #
NASC-Q	Brianne Boylan		12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-R	Olivia Ryan	Resident Louisa County and Lake Anna	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-S	James Griffis	Retired Presbyterian Pastor living at Lake Anna	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-T	Sam Forrest	Citizen Greensprings	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-U	Steve Montgomery	Citizen Louisa, employee North Anna	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-V	Page Kemp	Citizen Louisa County, employee North Anna	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-W	Bill Streit	Resident Louisa County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-X	Alex McGee	Resident Albermarle Co., previously of Louisa Co.	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-Y	Amzic Sullivan	Resident Green County	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-Z	Jon Kessler	Resident Charlottesville, past resident Louisa	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-AA	Ian Burke		12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-BB	Bob Bishop	Nuclear Energy Institute	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-CC	Brendan Hoffman	Public Citizen, Washington DC	12/8/03 Scoping Meeting Transcript (ML040140634)
NASC-DD	Carrie Girstantas	Citizen Louisa County	12/12/03 - email (ML040140310)
NASC-EE	Aviv Goldsmith	Citizen Spotsylvania, VA	12/21/03 - email (ML040060329)
NASC-FF	Frank W. Harsen, Jr	Director Department of Public Utilities, Hanover County	1/7/04 - letter (ML040130744)
NASC-GG	Diane Curran	Harmon, Curran, Spielberg & Eisenberg, LLP	1/9/04 - email/letter (ML040230548)
NASC-HH	Unsigned		1/8/04 - letter (ML040230552)

North Anna Early Site Permit (ESP) Public Scoping Meeting Comments and Responses

The comments and suggestions received as part of the scoping process are summarized and discussed below. Parenthetical numbers after each comment refer to the Commenters ID letter and the comment number. Comments can be tracked to the commenter and the source document through the ID letter and comment number listed in Table 1. Comments are grouped by category.

The preparation of the EIS will take into account all the relevant issues raised during the scoping process. The draft EIS will be made available for public comment. The comment period for the draft EIS will offer the next opportunity for the applicant; interested Federal, Tribal, State, and local government agencies; local organizations; and members of the public to provide input to the NRC's environmental review process. The comments received on the draft EIS will be considered in the preparation of the final EIS. The final EIS, along with the staff's Safety Evaluation Report (SER), will provide much of the basis for the NRC's decision on the North Anna early site permit.

1. General Concerns Related to the ESP Process

Comment: It seems a little bit like a charade that we're going through and that the real issues were eliminated right at the beginning. We can't talk about -- or the environmental impact statement is not going to talk about alternative sources or about demand. (NASC-C 2)

Comment: I understand that this meeting is about the early site permit and it seems to me with so many things taken off the table to be considered, it seems to have bifurcated the process . . . I think what is important, I mean the fact of the matter is that this process is somewhat bifurcated, we know that the North Anna facility was built for four nuclear power plants. And in fact only two built. In fact, we've learned a lot, our sensitivity to things environmental has been increased. And, in fact, the world has changed since that time. (NASC-D 4)

Comment: With regards to another Nuclear Plant in Louisa County, I expect [NRC to write] a (1) thorough Environmental Impact Statement (EIS), [that covers the] (2) Needs Requirement for new Electricity [and], (3) Evaluation of Alternative Electricity Sources. (NASC-DD 1)

Comment: One of the [scoping meeting presentation] slides [identified] issues that need not be considered in an early site permit and environmental review [including], need for power, cost of power and alternative energy source. I was wondering...at what point in the process before plant construction will these issues be considered? And will the public have an opportunity to comment on them and question NRC's methodologies and conclusions? And more specifically, will these opportunities exist before a third party, not asking the NRC how did you come to these conclusions? (NASC-E 1)

Response: *The NRC staff will prepare an Environmental Impact Statement (EIS) in accordance with the requirements of 10 CFR 52.18 and 10 CFR Part 51. In its review, the staff will focus on the environmental effects of construction and operation of a reactor or reactors, which have characteristics that fall within the postulated site parameters. In addition, the EIS*

will set forth the NRC staff's determination on whether there is an obviously superior alternative to the proposed site. Although the Final Environmental Statement (FES) for the two existing North Anna Units discussed four units, this review will be based on current and future information. The EIS need not address the benefits of reactor construction and operation, including the need for power, as discussed in 10 CFR 52.18 and the NRC's "Environmental Standard Review Plan," NUREG-1555, Appendix A. In addition, as discussed in a June 2, 2003, letter from NRC to Dominion (ADAMS Accession Number ML031480470), and in proposed changes to Part 52 published in the Federal Register on July 3, 2003 (68 Fed. Reg. 40025), consideration of alternative energy sources need not be included in the applicant's environmental report.

In the case of the North Anna application, Dominion chose not to include consideration of alternative energy sources, and therefore, such matters will not be included in the EIS. If Dominion should apply for a construction permit or combined license (COL) at some time in the future, the issues of need for power and alternative energy sources will be evaluated at that time, as required to satisfy the National Environmental Policy Act (NEPA). In addition, the cost of power would be considered in the environmental review of the construction permit or COL application. The review of such an application will include the development of another EIS with its associated opportunities for comment, and there would be an opportunity to intervene in the proceeding on the application.

Comment: The scoping should also address national security and disaster preparedness in addition to the issues already listed. (NASC-EE 1)

Comment: Whether effects on the environment would be reduced if Dominion alternatively implemented some or all of the above-mentioned applications as security countermeasures to any act of terrorism that would seek to target an expanded nuclear power station site for the purpose of creating widespread radiological catastrophe. (NASC-GG 1)

Response: *The Safety Evaluation Report (SER) prepared for the ESP application will evaluate issues related to emergency planning (see 10 CFR 52.18), including consultation with the Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA). In addition, the staff will document in the SER whether the site characteristics are such that adequate security plans and measures can be developed (See 10 CFR 100.21). These matters, however, are safety issues that are beyond the scope of the staff's environmental review. In addition, the Commission has determined that terrorism is not predictable and is not inevitable consequence of a proposed licensing action, and that an EIS is not an appropriate format to address the challenges of terrorism. Accordingly, the EIS need not discuss these matter. Nonetheless, the NRC staff will evaluate reasonably foreseeable socioeconomic impact of the proposed action resulting from security measures.*

Comment: I understand that we're currently within a window of opportunity for petitioning the NRC to intervene. And the environmental review is part of that process. Does the safety evaluation report become available to the public in a time frame that allows them to review it for the intervention or possible intervention? (NASC-A 1)

Comment: It would only seem fair that a process that is an open process provide the opportunity for the public to be fully aware of not only the environmental report but the NRC

safety evaluation report. ...And it's a bit alarming to us that based on the inability of the staff to provide a timely response for the public to gain those necessary insights, that we're denied the opportunity from the get go. (NASC-A 2)

Comment: I think that the public should be concerned that only half the information is going to be readily available prior to the closing of the comment -- or of the opportunity to intervene. After that the bar [to intervene] is raised for the public. And those special considerations and criteria in fact will make it more difficult to enter contentions based on the staff's findings that may not have been as readily transparent in the licensee's application. And I think that, again, I'll just state my own bias is that the bar has been raised very high for the public in order to, first of all, and most importantly as part of streamlining this process, to discourage the public from filing intervention. (NASC-A 3)

Comment: In the intervention process, is the public allowed to cross-examine and have a process of discovery of the types of analysis, for example, with the lake levels and the droughts and how the agency arrived at those conclusions? (NASC-A 4)

Comment: I just wanted to reiterate I believe that the period for intervention needs to be extended...[to accommodate publication of] the safety evaluation report. (NASC-CC 4)

Comment: I would just propose that in the interest -- in the public interest that the deadline for submitting public contentions just be moved forward indefinitely until these documents [Safety Evaluation Report and Environmental Impact Statement] are available. (NASC-E 2)

Comment: I can say that there's quite a substantive difference between submitting public comments within the public comment period...versus having the actual quasi-legal process that includes contention and adjudication [is] where the comments can really make a difference. And that's what people really care about, so that therein is the reason behind our request to indefinitely extend the period for submitting contentions based on the lack of a SER and the draft environmental impact statement at this point in time. (NASC-E 4)

Comment: [Regarding] The safety review process, I think that there is a timing issue [for the opportunity to petition for a hearing] there that has been addressed, and I'd like to see that date for comment extended. (NASC-Z 2)

Response: *Commenters expressed a concern that they would not have an opportunity to review the staff's SER and EIS before filing their petitions to intervene in the hearing on the ESP application. In addition, one of the commenters, indicated that intervention in the proceedings on the application is the most meaningful way for the public to participate in the environmental review process.*

The Commission's rules of practice in 10 CFR Part 2 require that petitions to intervene be submitted within a specified period after a Notice of Hearing for the application is published in the Federal Register. This means that any petition to intervene needs to be based on the information provided in the ESP application. The staff issued a notice that the ESP application was available on October 16, 2003 (68 Fed. Reg. 59642). Under the NRC's rules of practice then in effect, the opportunity to intervene was scheduled to expire on January 2, 2004. Potential interveners had roughly 2-1/2 months to review the application and file a petition to intervene.

In a letter dated December 12, 2003 (ADAMS Accession Number ML033580505), the NRC staff responded to those commenters who asked that the period to intervene be extended by identifying the applicable requirements and the time for filing petitions to intervene. On a separate but related issue, the Commission, on January 14, 2004, amended 10 CFR Part 2 "NRC Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders" see 69 Fed. Reg. 2182. The new rule became effective on February 13, 2004. In a memorandum and order issued on March 2, 2004 (ADAMS Accession Number ML040620405), the Commission directed that the North Anna ESP proceeding be conducted under the newly promulgated hearing procedures in 10 CFR Part 2. The Commission's memorandum and order also provided that petitioners to intervene in the proceeding would have 60 days to submit contentions (i.e., contentions were due by May 3, 2004). The petitioners had more than six months to examine the application and formulate contentions by the May 3, 2004, filing date.

Comment: One of my concerns about the new NRC regs is that in that environmental review that is now going on, there's still a 20 year window, I understand, until the actual licensing or construction permits have to actually be manifest, and that comments that are accepted now may be resolved prior to the actual reviewing of those specific details that can have so many direct implications with the environment. And certainly I question the process if that in fact is the case, and if it's not, what reservations do we have to be able to comment on those specifics and not have the more general comments at this time resolved and closed for environmental comment? (NASC-B 1)

Comment: Does the NRC make the determination whether the environmental issues [evaluated during the ESP process] have been resolved [when evaluating an application to build a plant]?...The NRC, you're the agency that decides if the issue has been resolved sufficiently? (NASC-B 2)

Response: *In its EIS, the NRC staff will review the impacts of the proposed construction and operation of new nuclear units based on the information provided in the application and on information obtained from other sources. The staff will document the bases for its conclusions in the EIS and in the early site permit, if approved. If a later application for a construction permit or a combined license references an ESP, the environmental review of that application will focus on whether the design of the facility falls within the parameters specified in the ESP and any other significant environmental issue not considered in any previous proceeding on the site (see 10 CFR 52.89). In addition, an intervenor in the proceeding for the construction permit or combined license may file a contention that a reactor does not fit within one or more of the site parameters included in the ESP. An intervenor may also file a petition that alleges either that the site is not in compliance with the ESP or that the terms and conditions of the ESP should be modified (see 10 CFR 52.39).*

Comment: One, in order to apply for an early site permit, what requirements did Dominion Virginia Electric Power have to put forth in order to initiate this process, what they were required to do? (NASC-B 3)

Response: *The required contents of an application for an ESP are delineated in 10 CFR 52.17. These requirements address both the site safety and the environmental aspects of the application. In addition, the Review Standard, RS-002, "Processing Applications for Early Site Permits," provides guidance regarding the staff's approach for reviewing the environmental impacts addressed in an ESP application. This guidance implements Commission regulations related to ESP applications and informs external stakeholders of applicable review criteria.*

Comment: Are there any fees involved? (NASC-B 5)

Response: *Fees are assessed for the NRC's review in accordance with 10 CFR 170.21 and the applicant is charged the full cost of the review.*

Comment: If I wanted to apply for a early site permit, what would I have to do? (NASC-B 6)

Response: *The requirements for applying for an ESP are contained in 10 CFR Part 52.*

Comment: My understanding is in this particular process, this siting process, the government is picking up the tab for half of the costs, which is a real large amount of money. And I would think that it would be the applicant who should bear the full cost of the process. (NASC-N 5)

Response: *The NRC does not promote nuclear power and does not fund the applicants' activities. On the other hand, the U.S. Department of Energy (DOE) has a mission that includes promoting the development of energy sources to meet the country's needs. DOE has agreed to provide funding for half of the cost of the ESP application to the first three applicants, up to a total of \$10 million per application. DOE also provides subsidies for the development of other potential energy sources for the future (e.g., fuel cells).*

Comment: I notice among the [scoping meeting presentation] slides early on there was a phrase "petition to intervene versus commenting on the scoping." Is that two different things? Can you explain that to me? (NASC-C 1)

Response: *A "petition to intervene" refers to an opportunity for an individual to become involved in the hearing before the Atomic Safety and Licensing Board (ASLB) on the ESP application. The hearing process is implemented pursuant to the Atomic Energy Act of 1954, as amended, and 10 CFR Part 2. At the same time the Commission was offering an opportunity to intervene in the North Anna ESP proceeding before the ASLB, the staff was conducting scoping for its environmental review pursuant to the National Environmental Policy Act and 10 CFR Part 51. The intervention process and environmental scoping process are two separate processes that were occurring simultaneously. The hearing process is an adjudicatory process and any individual seeking to participate in it needed to file a petition to intervene by January 2, 2004. This period was later extended to May 3, 2004. The scoping portion of the environmental review is intended to identify those issues that should be considered in the EIS. For the North Anna ESP environmental review, the scoping comment period ended on January 9, 2004. However, public involvement will also play a significant role in subsequent environmental review activities.*

Comment: The one question that -- earlier comments about if this application is granted, that the company can then bank this license, this environmental license for 20 years, something like that?...My question is, is that a contract? I mean, can that license then be revoked for some reason in that intervening period? (NASC-D 3)

Response: *If an ESP is issued, the NRC has various enforcement actions available to it with respect to the permit as defined in 10 CFR Part 52 and other applicable NRC regulations. This would include actions up to and including revocation.*

Comment: I, too, only learned of this meeting rather late. And I think maybe perhaps all parties involved could have done, perhaps, a little bit better job of informing of this opportunity. (NASC-D 10)

Comment: So I would like to encourage the NRC to contact the public newspapers, contact the local activists, contact the schools. ...if this is a public process, there should be more people here. There have been very valid comments offered tonight, but there aren't very many people here. And I think it's really the responsibility of the NRC to do a much better job of getting it out to the community in a layperson friendly format, not just a little box in the bottom of the paper or a press release sent to the newspaper that gets buried. (NASC-N 1)

Comment: My question is what type of module or type of plans do we have in preparation to notify the public? I think we could do a better job of getting information out to the public about those safety health issues. ...We are the people and we need to know what's happening before anything else is done. (NASC-L 4)

Response: *The NRC staff used a number of methods to attempt to inform the public about the scoping meeting. We provided information on the meetings in local newspaper ads, public service announcements, and on websites for the three nearby counties. We also contacted known interested organizations including the Lake Anna Civic Association and the Concerned Citizens of Louisa, and placed posters in various locations near the North Anna site. The staff appreciates the concern raised by the commenters and will continue to look for ways to improve public notification of these meetings.*

Comment: I heard on the radio tonight on the way here that there would be no record of the public hearing tonight. I'm sure that must be incorrect. I think they were talking about the pre-meeting. Could you clarify that in terms of what would be on the record here tonight from what people have to say. (NASC-G 1)

Response: *The staff is not certain what the radio station intended in its statement, but a transcript was prepared for all of the discussions during the scoping meeting. The radio station may have been referring to the informal open house which preceded the public meeting. Discussions during the open house were not recorded as comments.*

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] we wanted to know who makes decisions, what agencies make decisions and has control over some of these issues. (NASC-J 2)

Response: *The NRC decision will be whether to grant the ESP. However, even if the ESP is approved, Dominion is still required to obtain all other necessary permits from State and other Federal agencies before it can proceed with any pre-construction activities. Examples of these other permits that may be needed include a National Pollutant Discharge Elimination System (NPDES/VPDES) permit from the Virginia Department of Environmental Quality or a dredging permit (Clean Water Act, Section 404) from the U.S. Army Corps of Engineers.*

2. Support for the ESP Process

Comment: In my view, it is most important for there to be an answer that this is a suitable facility or not as soon as possible. The process that the NRC embarked on, and I happened to be involved from 1987 on, was to try to analyze and develop a process that would be more efficient and more effective in terms of resources of people, in terms of technology, in terms of enabling decision makers to come to their best possible decision. (NASC-BB 1)

Comment: So because of that [the vulnerability in the energy supply and the price volatility in the gas market], we think that the continuation of the option to build additional nuclear units is absolutely vital to be able to provide us at least an alternative to the continued reliance on the additional natural gas generation. (NASC-I 5)

Comment: Under the new [permitting] process all of those questions [relating to viability of the site] are answered ahead of time. Now that's good for us, it's good for the public, it's good for the nation because we're not -- for us, obviously, we can make a decision that says that once we go through this licensing process, we have assurance that if we follow the terms of the license then we can indeed operate it. It's certainly good for the public because you have the ability to do your commenting before larger amounts of money are spent on building the plant. And it's certainly good for the country because we're not utilizing resources in an inefficient way. So we think the process has a lot of good positive steps in it because it melds the opportunity for public involvement along with some certainty in the process. ...Under the new system, it should take less time which means we can bring that process a little bit closer to when we actually need the power. (NASC-I 7)

Comment: I appreciate Chip and the NRC for coming and talking, and having this type of process for us to do it. And we do need to be looking at legal process and other stuff so that Dominion understands our concerns and not just Dominion, [but also] the NRC and the government. (NASC-K 4)

Comment: I support this process tonight, that you could come out and talk about this early site permit and your comment[s]. I appreciate those. (NASC-V 1)

Response: *These comments provide only general information in support of NRC's ESP process and will not be evaluated further.*

3. Support for North Anna's ESP Application or Dominion and its Employees

Comment: I have the utmost trust and respect for my fellow employees performing the work at the stations with regard to any and all safety measures. (NASC-HH 2)

Comment: I think that this process and Dominion's exercise of it, its leadership in going forward in this area is a very important and positive step for evaluating in a conscientious way how their responsibilities for future energy supply can be achieved. (NASC-BB 5)

Comment: First, our goal in this is to maintain the option for the construction of a possible nuclear plant in the future. As I'm sure you've heard, we have no plans at this time to build a plant, an additional unit at the North Anna site. But what this allows us to do is work through the regulatory process,...what we're really looking at here is maintaining the option, going through the process to see if the site is suitable for additional nuclear units without actually making a

commitment. And we have not made a decision as to whether we will indeed go forward with an order. (NASC-I 1)

Comment: We have a long experience with operating nuclear reactors. ... And this is something that we take pride in terms of our ability to operate these units safely and economically. (NASC-I 2)

Comment: Promoting environmental stewardship is also something that we [Dominion] take very seriously. There are many, many environmental rules and regulations that we are required to follow and we have a very strict corporate policy of strict compliance with those regulations. (NASC-I 3)

Comment: We have a very positive reputation that many of you may be familiar with, even around the North Anna site, for enhancements that we made for fish, for wildlife, for the water quality. And the responsibility that we have or the way we see it, is that not only do we have a responsibility for maintaining and enhancing the environment, but we also have a responsibility for local economic contributions through the provision of energy. And that is something that we take very seriously, and we will continue to do that. (NASC-I 8)

Comment: Now for over 25 years North Anna's been here. We've made great strides to be good neighbors. We pride ourselves in being able to get information to you. The Information Center, of course, at the site is always available for anyone that's interested in what's happening. (NASC-I 10)

Comment: Dominion has been extremely cooperative [in providing information to the Lake Anna Civic Association]. We have received more information, more cooperation on anything that we've asked for. And, you know, people fear what you don't understand. But the more knowledge you gain, the easier it is for you to comprehend exactly what some of these issues are all about. The application was a good submittal. It has a tremendous amount of data. (NASC-J 8)

Comment: As far as the early site permit, I feel very comfortable with this. I mean, I'm planning to live here. I'm going to retire in three years, which I probably shouldn't be saying right now, but anyway my wife and I live here, and we plan to live here. (NASC-U 1)

Comment: And the safety record and just what we're doing to protect the environment. Because this is our county, and I'm proud of it. And I hope we can continue to protect it. (NASC-U 2)

Comment: And I guess in general, I just want to let you know that I'm really proud that I work there. And from living in Louisa all my life, I've seen unbelievable changes in this country. (NASC-U 3)

Comment: But I tell you as a member of the staff at North Anna Power Station, I personally and I know all the employees at North Anna are committed to nuclear safety at that site. We want to make sure we operate it safely. We want to make sure the employees are safe. We want people in the public to be safe. (NASC-V 2)

Comment: We're also focused on environmental safety. And I believe if you look at the operating record at North Anna, what we have done, we have helped the air quality and the

environmental quality around the North Anna Power Station. I know we all are committed to that and we will continue to be committed to environmental safety at North Anna. (NASC-V 3)

Comment: I do support the early site permit process. And I hope it's [North Anna ESP] approved by the Nuclear Regulatory Commission. (NASC-V 4)

Comment: And I'd also like to thank the workers at the plant for keeping the plant as safe as possible. (NASC-Z 1)

Response: *These comments provide only general information in support of the North Anna ESP, Dominion, and its employees or the existing plants and will not be evaluated further.*

4. Opposition to the North Anna ESP

Comment: Please don't build this nuclear reactor and respect ourselves and our children, and their children. (NASC-AA 7)

Comment: But what's telling about the statement is only large scale technology that can meet future demand, it's the only large scale technology that they would have control over; that's the difference. That's the reason they want to do this. And I think that's the reason we should oppose it. (NASC-C 5)

Comment: I do appreciate the process that people are able to come and speak, and that's why I want to add my voice to others who have spoken in opposition to this project. (NASC-W 1)

Response: *These comments provide only general information in opposition to the North Anna ESP, or the construction and operation of a reactor at the site, and will not be evaluated further. The NRC will carefully review the application against its regulations that are intended to protect public health and safety and the environment.*

5. Air Quality

Comment: You should know that nuclear energy does not emit greenhouse gases. That is of grave concern to many who study and worry about environmental future. (NASC-BB 4)

Response: *This information will be considered in the staff's evaluation of air quality impacts in the EIS. The results of the analysis will be presented in Chapter 4 of the EIS.*

6. Aquatic Ecology

Comment: The EIS for the North Anna nuclear power station is therefore required to address all of the following environmental impacts, including but not limited to: 3. All impacts on Lake Anna arising from the increased impingement and entrainment of fish, fish spawn, other aquatic life and nutrients arising from the increased reactor cooling water intake for any proposed additional nuclear power units. (NASC-GG 2)

Comment: One of the areas that the Lake Anna Civic Association should be looking at is the impact of not only fish but spawn of fish and how that impacts the future populations of fish in the Lake Anna area. (NASC-A 6)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] natural environments such as fish and plant life. (NASC-J 5)

Comment: What impact would this [additional water use] have on wildlife and fish species in and surrounding the lake, and on the North Anna River downstream? (NASC-M 3)

Response: *The NRC staff will evaluate aquatic and terrestrial impacts during its evaluation of the ESP application, and the results of the analysis will be presented in Chapter 4 in the EIS.*

Comment: There were two studies that just came out in early summer of this year. One was prepared by the New York State Department of Environmental Protection looking at the Hudson River and it was a detailed study that looked at both the thermal pollution and the entrainment and impingement of fish on and through the Indian Point units 2 and 3 nuclear power station as well as a couple of much smaller fossil fuel facilities. ...Another study we'd like to provide you with is from the State of California, the Central Coastal Water Region, that's the equivalent to the DEP for the coastal water regions of California where they looked at the impingement and entrainment of fish in Diablo Cove, which is the receiving water for Diablo Canyon's 1 and 2 nuclear power stations. (NASC-A 11)

Response: *The NRC staff will consider the results of these two studies in preparing its evaluation of the aquatic impacts of the ESP. The results of the analysis will be presented in Chapter 4 of the EIS.*

Comment: We currently have problems with contaminants in the fish in Lake Anna that we're unsure where the contaminants are coming from. The way I understand it, the checks and balances of the NRC or the plant itself in the checking of these fish have long since ceased. And Lake Anna Civic Association now are monitoring the lake. Is this going to be something that's going to happen again?...I've read the plant was regulating and checking on the fish population. And they stopped at some point in time and its just [a] concern of mine because what's bad for the fish is bad for me. ...Since the lake was created for the nuclear plant, it seems to me that they should be checking on this fish population and monitoring the water at all times. ...For all contaminants. (NASC-F 1)

Response: *The human health impacts related to radioactive effluent releases from any new nuclear plants will be evaluated in the EIS. NRC regulations require strict monitoring of radioactive effluent releases. In addition, new plants are commonly required to perform special monitoring of aquatic and terrestrial species for some period of time after a new plant commences operation. With respect to effluents that are not radioactive, the Virginia Department of Environmental Quality (VDEQ) would regulate the release of such effluents to Lake Anna. The VDEQ would specify whatever monitoring requirements it deems necessary. These requirements would normally be included in the NPDES/VPDES permit.*

7. Groundwater Use and Quality

Comment: I actually heard tonight that even ground water would be considered [as a possible cooling water source]. Since this additional source would be necessary for the operation of the facility, why is it suggested in the permit that this issue be addressed during the COL application and not in the EIS? Consider the difficulties in bringing the additional water to the [plant] and the fact that this is an essential piece for operation, we urge NRC to consider addressing this issue now during the EIS process rather than later with the construction permitting processes. (NASC-M 6)

Response: *The NRC will evaluate cooling system impacts in the EIS. This portion of the review would include the impacts associated with the cooling tower makeup-water source for Unit 4. The results of this analysis will be presented in Chapter 4 of the EIS.*

8. Surface Water Quality and Use

Comment: The County [Hanover] wishes to ensure that any environmental impact review evaluates the changes to Lake Anna releases and related impacts on County facilities, its citizens and other instream and offstream beneficial uses of the North Anna and Pamunkey Rivers that will result from the construction and operation of an additional reactor. Such a review should also determine the appropriate and necessary minimum Lake Anna release to protect these uses. (NASC-FF 1)

Comment: Downstream users have designed their water intake and wastewater discharge systems around this 40cfs low flow condition, and cannot get by with less water. And, increasingly more stringent regulations affect the ability to operate at the 40 cfs [cubic feet per second]. (NASC-FF 2)

Comment: Although this is a different permit and permitting process, many of the prior [historical] comments [related to water availability] are applicable from an environmental perspective and should be included in the scope of an environmental impact statement. (NASC-FF 3)

Comment: The EIS for the North Anna nuclear power station is.... required to address the following environmental impacts, including but not limited to: 1. All impacts on the water levels in Lake Anna arising from increased intake of reactor cooling water for the operation of any proposed new nuclear power units 2. All impacts on the aquatic environment of Lake Anna arising from the increase in thermal discharge of reactor cooling water as result of the operation of additional nuclear power units. [and].... 4. All impacts arising from the increase in the routine discharge of chemicals, heavy metals, cleaning solvents, biocides and radioactive isotopes into Lake Anna arising from the operation of additional nuclear power units. (NASC-GG 3)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] Water issues. They consist of thermal changes, volume, flow and lake level. (NASC-J 1)

Comment: It's our understanding that the additional reactors would increase the water use of the facility dramatically. It's been estimated that the evaporative loss could be as high as 41 million gallons per day. ...Will this affect the flow rates downstream from the lake and the dam, and downstream users of the river? (NASC-M 1)

Comment: The temperature changes are addressed in great detail in the application itself. And the temperature concerns are real, but I believe there are reasonable solutions to them. (NASC-O 4)

Comment: I wanted to address was the lake level concerns for units 3 and 4. ...So one observation is that [some]one should examine the agreement between Dominion Power and the State of Virginia on the matter of water released over the dam. (NASC-O 5)

Comment: What I understand is that Virginia Power or Dominion Power has submitted a sort of an envelope that describes the potential impact of this new project....we just experienced, of course, a serious drought in Central Virginia followed by a year of abundant rainfall. But I wanted to know how you approached issues of drought; whether or not when you do that, you just sort of look at the historical record and then make extrapolations of what you can expect in terms of meeting the demands for water that this new project might have. ...So in other words history, the recent history as well as more distant history plays a major role in projecting forward? (NASC-D 1)

Comment: One other environmental issue I wanted to mention was as far as drought and water issues, ...I would encourage when the water issues are examined, that more severe droughts are considered, certainly than the one a couple of years ago, recently. Even worse than any on record, I would suggest being considered. (NASC-Z 4)

Comment: Flows into the lake may not be sufficient to meet the demands of the expansion. Within the early site permit it is noted that the makeup water may have to be taken from another source if all units were to continue operation during low flow periods. What is the estimated amount of additional water needed to meet the demand of the facility during these low flow periods? And what are the possible sources under consideration? (NASC-M 4)

Comment: Another point, on page 3-5-8 of the early site permit application under the heading "Water Use Impacts" there appears the sentence "The impacts of adding new unit four would depend on specific heat dissipation systems selected and would be evaluated in the COL application." Again, we urge NRC to request the data necessary from the applicant to determine the impacts. If we are determining the feasibility of new reactors, it seems reasonable to know these impacts with the completion of an EIS. (NASC-M 7)

Comment: During this drought it [the lake level] went down five feet. And if there's a third unit in operation, it would go down to about 7 feet below. ...What can one do about that? One recommendation has been to make up this evaporative loss from other water sources. ...The second recommendation is that Dominion start looking now into other sources of water. That is, most of the time no additional water makeup would be needed. But there would be times where it would be very good for public relations to be able to make up the evaporative loss, mainly during times of drought. (NASC-O 6)

Comment: And so toward the fourth unit, we would like to recommend very strongly that Dominion look into getting additional water from another source, it could be from another river, it could be from the cities, they're processing more, that sort of thing. But to have an external source of water to make up for the loss for the fourth unit. (NASC-O 7)

Response: *Surface water impacts of the types described in the comments will be evaluated by the NRC staff in Chapter 4 of the EIS.*

9. Socioeconomics

Comment: The EIS for the North Anna nuclear power station is required to address all potential socio-economic impacts from the elevated national security requirements and countermeasures to protect a larger target of terrorism with the expansion of the nuclear power station site including the indefinite and possibly permanent closure of Lake Anna to public access for sporting, recreation and other means of community economic livelihood. (NASC-GG 4)

Comment: We've also committed tonight to provide you with an ongoing and increasing list of lake closures and restrictions to public right of way to lakes around nuclear power stations because of security reasons. (NASC-A 12)

Response: *The NRC staff will evaluate socioeconomic impacts of the proposed action in Chapter 4 of the EIS, including any reasonably foreseeable impacts resulting from security measures.*

Comment: And as we look at this from those of us who live here and who plan on living here, and want our children to live here, we have to look at our property values. Putting a new nuclear plant out there has no chance of doing anything but reducing property values around the lake. (NASC-K 3)

Comment: It's our understanding that the additional reactors would increase the water use of the facility dramatically. It's been estimated that the evaporative loss could be as high as 41 million gallons per day. ...What impact would this have on the residents of the lake and their continued recreational use? (NASC-M 2)

Comment: So the one question that had to be asked was what's the public reaction to the change in the lake level as a function of height below 250? And the answer is people start to get concerned when it goes down three feet. (NASC-O 2)

Comment: Now for the fourth unit, we're talking about evaporative loss of around 23,900 gallons per minute, or about 54 cubic feet per second. It's all opinion, but there is no way that this can be taken from the input to Lake Anna without having the lake level drop, you know, beyond what is considered by useful use for the people around the lake. (NASC-O 3)

Comment: I'm also glad for the school building and the thousands of taxes that Virginia Power pays to Louisa County so we citizens didn't have to build it alone. I'm glad for the influence it has made in the past 25 years in Louisa County. I'd like to see it continue. (NASC-S 2)

Comment: In the business I ran here, many customers were Dominion Power employees, so I am definitely aware of the economic value of the plant being here. (NASC-X 1)

Response: *The NRC staff will evaluate the socioeconomic impacts of the proposed action in Chapter 4 of the EIS, including impacts related to taxes, property values, and recreational use of the lake.*

10. Human Health

Comment: The EIS for the North Anna nuclear power station is.... required to address all impacts on the public health and environment arising out of the increase in routine and accidental radioactive emissions to the air and to the water as the result of the operation of additional nuclear power units. The analysis should consider work by Dr. John Gofman, showing that low-level radiation, at levels considered to be safe for medical use, is a significant contributor to deaths from heart disease and cancer. See Radiation from Medical Procedures in the Pathogenesis of Cancer and Ischemic Heart Disease (Committee for Nuclear Responsibility: 1999). (NASC-GG 5)

Comment: Build this nuclear reactor? I don't think so. Killing tens of thousands of people and not to mention years of genetic mutation in all walks of life. (NASC-AA 5)

Comment: Strontium 90 remains radioactive for 600 years and concentrates in the food chain. Like other isotopes it's odorless, tasteless and invisible. It acts like calcium in the body's organisms where it enters the bones and animals and lactating breasts of mammals. It's a carcinogen causing leukemia, bone and breast cancer. Cesium 137, another byproduct, also remains radioactive for 600 years. It also concentrates in the food chain, but it stores in the muscles where it induces malignant muscle cancers called sarcomas. Plutonium is so carcinogenic that one pound of the stuff evenly distributed can cause cancer in every person on earth. Plutonium has a radioactive life of half a million years. It enters the body through the lung, migrates to the bone and liver, crosses the placenta into the embryo, mothers with child. Causes bone cancer, leukemia, liver cancer, testicular cancer, birth deformities and genetic mutations in humans and other animals that are passed from generation to generation. (NASC-B 14)

Comment: I heard something about permitted releases. The plants are actually allowed, as long as its diluted to the proper amount, to put radioactive releases into air, water and the surrounding environment. And this occurs at the same time that the Nuclear Regulatory Commission formally agrees with the linear-no-threshold -- response model which says that any increase in radioactive dose, no matter how small, results in an incremental increase in risk. And at the same time, the Nuclear Regulatory Commission tells us that its primary mission is to protect the public health and safety in matters regarding radiation exposure. (NASC-E 11)

Comment: This is from the Nuclear Regulatory Commission, NUREG/CR-2907, radioactive materials released from nuclear power plants. This was an annual report from 1988. I've selected 1988, about 15 years ago, because of the cancer latency period. After 20 years you have -- and I believe you are beginning -- maybe beginning to reap the whirlwind. In this report, this NUREG report, there was a risk in here for the North Anna plant 40 miles northwest of Richmond, unit 1 and unit 2. There are airborne effluents and radionuclides released which number 26 including some of the cesium and other elements that were mentioned by previous speakers. Liquid effluents, nuclear -- or radionuclides released number 32 in this report. And just scanning the highlights here. The volume of total liquid tritium released in that year was 1,940 liters. (NASC-G 2)

Comment: I'm standing here because of concerns as far as public health. ...In my line of work in my job, I see a lot of our fellow community citizens coming and they have been diagnosed with cancer. The cancer rate for Louisa County has increased in the last 20 years. And my

concern is what's happening? What's happening? I'm not saying that this is because of Dominion Power, but there are issues that we need to consider before we go any further. (NASC-L 1)

Comment: For 30 years I lived downstream from the Connecticut Nuclear Power plant that Old Dominion runs. And 27 years after I was in college I was diagnosed with breast cancer. I had both my breasts cut off to save my life so that I could raise my two young daughters. (NASC-Y 3)

Comment: We do know, as has been said very eloquently by the scientists who have spoken already, that radiation is exceedingly dangerous and toxic. (NASC-Y 4)

Comment: The Nuclear Regulatory Commission essentially is not even going to take a serious look at...placing the onus on the waste generator, the polluter or the creator of the energy to prove that energy is safe for us. ...The onus should not be on the affected individual to prove the health detriment. (NASC-E 12)

Comment: According to our estimation, nuclear power is a public health catastrophe hidden in plain sight. (NASC-G 8)

Comment: It's not about -- so much about the water and the temperature of the water and what's happening, but what happens to the people who play in that water? What happens to the grandfathers who take their children fishing? And they eat fish from that lake. These are things that we need to address. (NASC-L 2)

Comment: I think that we need to look at the issue of public health more so than the issue of is it just a safety factor for the environment. (NASC-L 3)

Comment: And I ask that those of you on the nuclear regulation committee whose salaries my tax dollars pay, that higher consideration be given to the risk, to the life and health and my daughter, the water, the air and the animals than to the financial risk of 21st century of robber barons who are so disconnected from reality that they cannot see the risk not just to me, but to their own families. (NASC-Y 1)

Comment: We know that the only safe decision, the only decision that carries no risk is the decision not to use nuclear decision. We know that. We don't need more research. (NASC-Y 2)

Response: *The NRC will evaluate human health impacts of the proposed action in the EIS. The results of this analysis will be presented in Chapter 4 of the EIS.*

Comment: I previously lived in Utah with my parents where they have seen the tragedy of "downwinders." This is the term used for the cities subjected to radioactive waste in testing in the 1940s. And these people were assured by the government that they were safe. And these people are now suffering from deformities and their children are suffering from deformities. (NASC X 2)

Response: *Nuclear testing in the 1940s is outside the scope of this review and will not be addressed in the EIS.*

11. Uranium Fuel Cycle and Waste Management

Comment: The EIS for the North Anna nuclear power station is.... required to address ..all impacts arising from the additional accumulation of high-level nuclear waste generated and indefinitely stored on-site at the North Anna nuclear power station as the result of the operation of additional nuclear power reactors. This discussion is required, given that the Waste Confidence Rule applies only to waste generated by "existing facility licenses." 55 Fed. Reg. 38,474 (September 18, 1990). (NASC-GG 6)

Comment: This agency [the NRC] has confidence, enough confidence [in the Waste Confidence Act] that they're not going to allow the issue of more nuclear waste being stored on the shores of Lake Anna to be raised in the early site permit process and the environmental review. (NASC-A 9)

Comment: And all of these [uranium fuel] processes from mining, processing the uranium to taking it to Yucca Mountain, if indeed that is going to be the alleged solution, all of these things are going to take massive quantities of fossil fuels and will in their own way contribute to greenhouse gases, global warming, whatever, carbon dioxide emissions we want to talk about there. ...do we want global warming or do we want nuclear waste and the water to be drained from our local lake? ...I think that's a false choice to present to the public, and it's also questionable just on the scientific basis if you really look at the entire fuel cycle. (NASC-E 8)

Comment: And I also think there's a larger problem with the waste issue. If someone has made some decision at some point that waste is not being considered as part of the environmental impact, it seems like a major problem. There's been waste in the plant for the whole existence, and there's no reason to think -- I mean, there's always going to be waste there, even if it's transported out of the county. Even if it is transported, it'll still be generated there, so the waste issue has to be addressed. (NASC-Z 3)

Comment: Will the scope, environmental scoping of this project include the continued storage of that waste on site? ...So, I guess my question is will the continued storage of high level radioactive waste be included in the environmental impact statement for this new facility? (NASC-D 2)

Comment: There's a reluctance for other states to allow transport of nuclear materials through their jurisdiction. Given this, will the EIS address the plan for disposal of the additional nuclear waste generated by the new units? (NASC-M 8)

Comment: My parents' home State, Utah, is a popular destination for the nuclear waste that no one knows what to do with. Impoverished Navajos are resorting to selling their land for nuclear waste storage. (NASC-X 3)

Comment: I'd really add in this situation it's like getting a permit without a plan for a septic system. And that's something that's not reasonable to build a home, and it's certainly not reasonable to build a nuclear power station. (NASC-A 10)

Comment: Man has never created a more long lived or dangerous substance than the radioactive substances that are byproducts of the nuclear reaction process. ...Both fuel waste and decommissioned equipment all pose long term health threats of many lifetimes to humans and other species and animals. (NASC-B 8)

Comment: There's no solution to the nuclear waste problem. People have asked this question tonight about how much nuclear waste is extracted out of the reactors. ...Virginia Power has gone 450 days between refuelings. But at every refueling, approximately 1500 metric tons of highly radioactive waste is removed from the reactor. There's no solution to this radioactive waste problem that at present is being stored on the site waiting for a solution that, frankly, will never appear because of the confluence of technical and political problems. (NASC-D 5)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] spent fuel, dry cask storage. (NASC-J 6)

Comment: Does anybody really have confidence that they're going to move the nuclear waste? They [NRC] are starting this discussion saying that's where they are. They have the confidence that this waste is going to be moved, and it hasn't. (NASC-K 1)

Comment: I am concerned about the toxicity of the waste that's generated. ...I would like this waste not to be stored here, and I would like this waste not to be stored anywhere. I think this is a danger for ourselves, for our children and our great, great, great, great, great, great, great grandchildren. (NASC-P 1)

Comment: And I just think that public health and the environmental events cannot be separated, ...And that the site is obviously not environmentally safe if we cannot take care of the plant's waste. It's not -- nuclear energy is obviously not suitable because we have no way of reintegrating this waste back into our environment in any foreseeable future. Clean up your own mess before you make a new one. (NASC-Q 1)

Comment: My opposition to nuclear weapons is not only the nightmare at the opposing their use, but their very existence because of the pollution and the poisoning of the planet. And whether it's wastes from nuclear weapons or waste from a commercial reactor, it's poison. It seems to me it doesn't make any sense when we don't have, as was said so well by so many others here, we don't have any solution to this problem why create more of the problem? (NASC-W 2)

Comment: You know, if we don't know what we're doing with all the waste that's piling up already, you know, why create more. It's like the toilet that doesn't work, you know. (NASC-W 4)

Comment: The NRC claims that it can produce this electricity with minimal effects on the environment, but all it can do is postpone the effects by further regulations and burying its waste underground for future generations to deal with. These things that we're burying underground are leaking into our underground aquifers and poisoning the environment. All it's going to do is leave it for, like I said, other people to deal...with later instead of us. It's already been pointed out [that] most of the effects of isotopes are produced in nuclear waste. One of them is plutonium, which one pound of it is enough to give everybody in the world cancer. And in the year 2000 it was estimated that nuclear power generated 1,139 tons of plutonium. (NASC-AA 3)

Comment: We do know that the half life of spent nuclear material is far longer than our ability to contain it. (NASC-Y 6)

Comment: You commented on a waste confidence decision that was made by the NRC. And guaranteed that in the first quarter of this century a repository will be made available. ...And it seems like Yucca Mountain is a proposed site, ...My question is how much waste is Lake Anna putting out, how much more waste would Lake Anna with two additional reactors? (NASC-H 1)

Comment: How much additional waste will be generated? We still don't really have an idea. And I'd really like to get a hold of that figure. (NASC-M 9)

Response: *The NRC staff will evaluate the environmental impacts of the uranium fuel cycle including the impacts of fuel manufacturing, transportation, and the onsite storage and eventual disposal of spent fuel. The staff's evaluation will account for the Commission's "Waste Confidence" decision embodied in 10 CFR 51.23 to the extent that decision applies to such impacts. The results of this analysis will be presented in Chapter 4 of the EIS.*

12. Postulated Accidents

Comment: The EIS for the North Anna nuclear power station isrequired to address all of the .. impacts on public health and safety and the environment arising from a severe accident, including the impacts of the accident itself, and the impacts of any emergency response measures such as relocation of the population. (NASC-GG 7)

Comment: In building the nuclear power plants we must remember that the costs go way beyond that of economic decisions that govern the decisions that things such as the power company entities make. But it causes high environmental devastation one way or another -- if there is a nuclear meltdown. (NASC-AA 4)

Comment: Hopefully we're all aware of past nuclear accidents. In the winter of 1957 a tank holding radioactive waste exploded and 10,000 people were evacuated in a rural Russian countryside. And the names of 30 towns and villages disappeared from Soviet maps. And I shouldn't have to remind you of history lessons from Liverpool, England, Browns Ferry, Alabama, Three Mile Island, Pennsylvania or Chernobyl. (NASC-B 16)

Comment: We do know that Murphy's Law says that what can go wrong, will go wrong. Think Chernobyl, Three Mile Island and so forth. (NASC-Y 5)

Response: *The environmental impacts of postulated accidents will be evaluated, and the results of this analysis will be presented in Chapter 5 of the EIS.*

Comment: The EIS for the North Anna nuclear power station is.... required to address all of theimpacts arising from the simultaneous operation of the existing and aging North Anna Unit 1 and Unit 2 power reactors in close proximity to any new proposed advanced reactor design, including the possibility of multiple, simultaneous accidents, whether related (e.g. by fire or natural disaster) or unrelated. (NASC-GG 8)

Comment: What liability did they have in the event of some significant environmental catastrophe connected with this? (NASC-B 4)

Response: *The issue of severe accidents will be addressed in Chapter 5 of the EIS. In addition cumulative impacts will be addressed in Chapter 4 of the EIS.*

13. Site Redress

Comment: And I'd like to, first of all, just point out that we are at the beginning of a process on a very crucial process. ... this process does provide for the expansion of a site which in fact is probably both the agency and the industry emphasize that this does not authorize construction, but in fact it is a partial construction permit. (NASC-A 5)

Response: *As the staff stated during the scoping meeting, the North Anna ESP application includes a site redress plan. The environmental impacts of the site redress plan will be evaluated in the EIS. If the redress plan is approved and incorporated into an approved ESP, then Dominion would have NRC authorization to perform the activities listed in the site redress plan. These include activities such as clearing the land, excavating for buildings, etc. The redress plan explains how Dominion would repair any environmental damage associated with these pre-construction activities if it later decided not to apply for construction permit or COL. The applicant's site redress plan includes a commitment to provide the NRC with a guarantee of \$10 million as financial assurance for Dominion's obligation to comply with the redress plan.*

14. Alternatives

Comment: As an engineer, I know that the state of art with regards to Nuclear Power has changed, as well as many other forms of electricity generation being possible. I would like the options developed [in the EIS] and a clear choice offered to the citizens of Louisa County. (NASC-DD 2)

Comment: The environmental impacts of such alternatives that need to be explored and objectively evaluated include: 1. Whether effects on the environment would be reduced if Dominion alternatively implemented more applications of energy efficiency technologies and energy conservation rather than the development of additional nuclear power capacity at the North Anna site. For instance, for the entire southeastern United States, the Renewable Energy Policy Project has demonstrated that innovative and well-managed efficiency programs would reduce annual increases in electric growth by 61%, reducing new demand by 236 MWh over a twenty-year period. See Powering the South: a Clean and Affordable Energy Plan for the Southern United States (Renewable Energy Project: January 2002). www.repp.org. 2. Whether effects on the environment would be reduced if Dominion alternatively implemented use of passive solar, photovoltaic, wind turbines and hybrid renewable energy systems rather than the development of additional nuclear power capacity at the North Anna site. 3. Whether effects on the environment would be reduced if Dominion alternatively implemented greater use of natural gas energy rather than the development of additional nuclear power capacity at the North Anna site. 4. Whether effects on the environment would be reduced if Dominion alternatively implemented broader applications of the above-mentioned resources as distributed power systems rather than increased reliance on an increasingly vulnerable electrical grid system connecting any additional new power capacity at the North Anna site.(NASC-GG 9)

Comment: So there is a very cheap answer to the energy problem, which is to use much, much less of it. There were about -- I don't know -- 20 percent of us in the world who live like we Americans do, yet we use 80 percent of its resources. So I'm sure we could use much, much less. (NASC-AA 1)

Comment: Conservation is undoubtedly the most effective method of ensuring energy security. Conservation efforts defuse energy producers of energy by reducing the need for generating capacity while stimulating the technologies, the research, the manufacturing and the job creation of more efficient technology's progress. Less for you means more for us. It's a fact that with existing technologies we could continue our current standard of living with less than half the energy generating capacity now in this country. (NASC-B 12)

Comment: The environmental benefits of nuclear are not well known, and are certainly not emphasized. ...nuclear energy in Virginia caused there to be roughly 7 million -- it's a big number -- metric tons less of carbon ...not to be emitted into the environment in 2002 because of the operation of their nuclear facilities. (NASC-BB 3)

Comment: All over the world people are generating power either by creating megawatts, meaning you use less or wind, which is the fastest growing of the alternative energies. If you take the train from the Washington, D.C. to Chicago and you'll see the big wind mills popping up in Pennsylvania. That's real. That's something that people are doing. It works. That's a large scale power that could meet future demand. (NASC-C 4)

Comment: Conservation is the best and cheapest way to go with preserving that power. (NASC-CC 3)

Comment: We don't need nuclear power, we need conservation. We need to respect current generations and future ones. Using the earth's resources for our material needs cannot do any of this. (NASC-AA 6)

Comment: To be frank, nuclear power actually is just a ridiculously stupid and expensive method for doing what is nothing more than boiling water. There are alternatives to boiling water, ones that don't involve nuclear waste that lasts for hundreds of thousands of years. ...Dominion Power owes Virginians a better place. And I might note that in the words and comments of a Dominion Power official here tonight, he never mentioned the one technology, the one opportunity to provide our future needs, and that is conservation. (NASC-D 8)

Comment: This was generated by Institute for Energy and Environmental Research in April of 1996."...reliance on nuclear power has grown and the already large quantities of weapons-useable plutonium in the world are rising rapidly." He quotes Johanson here. ...The path of sustainable society requires more efficient use and a shift to a variety of renewable energy resources." (NASC-G 3)

Comment: And people call this NIMBY, not in my backyard syndrome, and yet I think it a very natural instinct that people do not want someone else's waste in their state or in their locality. ...should we not be focused more on using a type of energy that doesn't have such a poisonous effect on people, on life? (NASC-H 2)

Comment: Just about anything that burns fuel, whether it's burning oil or coal, natural gas; anything that's burning anything is putting various contaminants into the atmosphere, including various types of oxides and carbon dioxide. And carbon dioxide is, of course, what's related to various theories to explain global warming. So again, one of the reasons that we think that nuclear energy is an option to consider whether we'll do it in the future is that of all the various alternative energy forms that we're aware of, it is the only one that can produce energy on a scale large enough to make a difference in terms of what we actually put in the air by energy

production. So it is the only large scale non-emitting generation technology that's available. (NASC-I 6)

Comment: Now if you look over the last 10 or 15 years, the only generation that has been added in the United States has been natural gas. So if you think about what we're doing here, is we are banking our entire future on the supply of natural gas. And what that does, it certainly makes us very vulnerable to any disruption in fuel supply. We're already talking about now importing natural gas from overseas, which would put us into the same situation that we've had with oil for the last 20 or 30 years. And natural gas up to now has been a domestic supply, but we're outstripping that supply and we're now saying in order to meet the natural gas demand, we're going to have to start importing natural gas from many of the same areas of the world that currently are problems in terms of imported oil. (NASC-I 9)

Comment: I for one as a taxpayer would like to see my money go to the support of energy that's renewable and safe. (NASC-N 3)

Comment: But I would like the subsidies to go to safer forms of energy that would not be a threat to me and my children and my children's children. (NASC-P 3)

Comment: So I would really like to be a part of a meeting in the future that talks seriously about dismantling the power stations at Lake Anna and that seriously considers alternative ways of energy and conservation. (NASC-W 3)

Comment: And we do know that monied interests are more interested in technology which can enrich them further than in finding safe sources of energy which are less lucrative and would protect someone like me or my daughter or your sister. (NASC-Y 3)

Comment: As a consumer of Dominion Power, I would like my consumer dollars to go to wind and hydro power, not nuclear power. I believe these are safer for employees and all citizens. And as a taxpayer, I would like to ask of the NRC to use your government influence to reallocate government subsidies away from nuclear power and towards hydro and wind power. (NASC-X 4)

Response: *The NRC staff will prepare an EIS in accordance with the requirements of 10 CFR 52.18 and 10 CFR Part 51. The EIS need not address the benefits of reactor construction and operation, including the need for power, as discussed in 10 CFR 52.18 and the NRC's "Environmental Standard Review Plan," NUREG-1555, Appendix A. As discussed in a June 2, 2003, letter from NRC to Dominion, and in proposed changes to Part 52 published in the Federal Register on July 3, 2003 (68 Fed. Reg. 40025), consideration of alternative energy sources need not be included in the applicant's environmental report. In the case of the North Anna application, Dominion chose not to include consideration of alternative energy sources, and therefore, these will not be included in the EIS. If Dominion applies for a construction permit or combined license in the future, the issue of alternative energy sources will then be evaluated, as required to satisfy NEPA.*

In addition with respect to the comments on conservation, 10 CFR Part 51, Appendix A, states that "consideration will be given to the potential impacts of conservation in determining demand for power and the consequent need for additional generating capacity," section 52.18, however, provides that the EIS need not include an assessment of the benefits (for example, the need power) of the propose action. Because need for power and alternative energy

sources need not be considered in the EIS, conservation need not be considered in that context. Accordingly, conservation need not be considered in the EIS.

Comment: My question is why the North Anna site was chosen in the first place? ...[and why did they choose] North Anna specifically as opposed to all the other potential sites around the country that could have been chosen, why North Anna was picked. (NASC-CC 1)

Response: *The applicant is required by the regulations (10 CFR 52.17) to evaluate alternative sites to determine whether there is any obviously superior alternative to the site proposed. In preparing its application for the ESP, Dominion considered multiple sites. The details of their evaluation are presented in Chapter 9 of the Environmental Report and in "Study of Potential Sites for the Deployment of New Nuclear Plants in the United States," prepared by Dominion and Bechtel Power Corporation through an agreement with Department of Energy. This report is available through the NRC's document management system (ADAMS Accession Number ML040630512). Based on the results of this study, Dominion concluded that North Anna was the best option for construction of new nuclear plants. The alternate sites will be evaluated, and the results of this analysis will be presented in the EIS.*

Comment: Well, according to my understanding of the law that under the National Environmental Policy Act the no action alternative must also be considered. The no action alternative if power needs are rising, forces us to consider other forms of power generation. Not only fossil fuel but the other forms which are renewable. (NASC-G 5)

Response: *The NRC staff will consider the no-action alternative in its EIS. For this review, the no-action alternative means denying the ESP application. As discussed above, alternative energy sources will not be evaluated at this time.*

15. Comments concerning the Safety Review for the ESP, including Safeguards and Security and Emergency Preparedness

Safety Review

Comment: [The EIS for the North Anna nuclear power station is therefore required to address all of the following environmental impacts, including but not limited to: 11.] All impacts arising from seismic hazards posed to the North Anna site expansion highlighted as a consequence of the December 09, 2003 regional earthquake, given that the U.S. Geological Survey considers that Virginia is vulnerable to earthquakes. (NASC-GG 10)

Response: *The seismic hazards posed to such a reactor or reactors is not within the scope of the environmental review. As part of the NRC's site safety review, the staff will consider whether, taking into consideration the site criteria in 10 CFR Part 100, such a reactor or reactors can be constructed and operated without undue risk to the health and safety of the public.*

Safeguards and Security

Comment: The EIS for the North Anna nuclear power station is required to address all impacts arising from increased security risks and tasks associated with the proposed site expansion of the North Anna nuclear power station given the federal government's acknowledgment that threats to nuclear power stations by acts of terrorism can be delivered in part or in combination from the air, the water and by land. (NASC-GG 11)

Comment: Tonight as we're talking about expanding the site of North Anna, we're talking about expanding the possible pre-deployed weapons of mass destruction if used against us. (NASC-A 7)

Comment: 9/11 changed everything, and at the same time it changed nothing. The officials at Dominion Power have not yet realized that on their power station exists one of the most attractive -- [targets] for a terrorist organization. ...I can imagine that a direct hit on the spent fuel nuclear storage would have a catastrophic environmental impact. (NASC-D 6)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] security issues, issues that deal with terrorists that would lead to radiation release. (NASC-J 3)

Comment: Security is another big issue that we need to deal with. (NASC-K 2)

Comment: I hate to say this, but with the amount of terrorism in the world, we do not need more invitations to terrorists, and that's what nuclear power plants are. They cannot be safe enough, despite the claims by the nuclear industry. (NASC-N 4)

Response: *Comments related to aspects of the security plan, including a safeguards contingency plan, a physical security plan, and a guard training and qualifications plan are safety issues that are not within the scope of the staff's environmental review. In addition, the Commission, has determined that terrorism is not predictable and is not an inevitable consequence of a proposed licensing action, and that an EIS is not an appropriate format to address the challenges of terrorism. Additional information about the NRC staff's actions regarding physical security since September 11, 2001, can be found on the NRC's public web site (www.nrc.gov).*

Emergency Preparedness

Comment: My concern is for notification and evacuation of the public in the North Anna area, as this area is rapidly developing. My chief concern is for the safety, protection and welfare of the public. (NASC-HH 1)

Comment: My concern is in regard to the rapid development in the immediate area, the installation of new early warning sirens, emergency backup notification and route alerting. Dominion closely works with the Virginia Department of Emergency Management who provides plans regarding these areas. An audit of this area, by your organization, would better identify these areas concerning early warning notification. (NASC-HH 3)

Comment: Backup Route Alerting is essential for the protection of the general public in the North Anna area since it is rapidly developing in areas where no early warning sirens are currently located and residents must rely on route alerting. ...please verify that these newly developed areas requiring backup route alerting or the installation of an early warning siren are identified by Dominion. Additionally, if no measures are currently in place, they should be implemented to ensure future identification of any new additional areas of development and how they will be addressed for the protection and safety of the general public before any additional site permit is obtained. (NASC-HH 4)

Comment: I don't live in a house, I live in an apartment. But my apartment doesn't release radiation on a regular basis. It doesn't require an evacuation plan, only if there is a fire, of course. But for other people, there's no iodine pills if you live nearby my apartment. (NASC-E 6)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] an evaluation [evacuation] plan relative to roads. (NASC-J 4)

Response: *The comments relate to the adequacy of emergency plans, which is a safety issue that is outside the scope of the staff's environmental review. As part of its site safety review, the NRC staff will determine, after consultation with DHS and FEMA, whether there are any significant impediments to the development of emergency plans and whether the major features of emergency plans submitted by Dominion are acceptable. The currently operating units have emergency plans in place that have been reviewed by both the NRC and DHS/FEMA.*

16. Comments outside the scope of Early Site Permitting including Cost of Power (Subsidies), Need for Power, Operational Safety, and Other issues

Cost of Power

Comment: Who pays you to do your job? Well, we pay for the power. The power that none of us could afford if we add the full costs of the fuel cycle, monetary environmental costs from mining to decommissioning were it not for the hundreds of millions of dollars in government subsidies, tax breaks and insurance liability waivers. Take these away, and the nuclear energy costs many times the cost of coal generation and costs more than twice the price of any solar or wind renewable energy. (NASC-B 10)

Comment: And in strictly economic terms, demand side management in this region would probably cost a few cents per kilowatt-hour. Nuclear power is going to cost three, four, five, ten times that. You couldn't build nuclear power if you didn't have a government subsidy. You couldn't do it. (NASC-C 3)

Comment: I think it's worth pointing out anyway that the [Greenpeace] study found that dollar for dollar the investment dollars put towards a nuclear power plant, an equal number of dollars could create five times as many jobs and 2.3 times as much electricity as a nuclear power plant would. So I think that's worth thinking about just in terms of whether or not nuclear power is really the best option. (NASC-CC 2)

Comment: Nuclear power cannot stand on its own. It is a heavily subsidized energy source and there is no other energy source that is so heavily subsidized. (NASC-D 12)

Comment: [At] Public Citizen, we did a report on that within the last couple of years that discusses how states that rely more on nuclear power ratepayers tend to pay more for their electricity. And you can find that on our website at www.citizen.org. (NASC-E 5)

Comment: [Regarding] remarks that nuclear can't stand on its own. Very true. And I'd like to just [ask] if the nuclear industry really had to provide, really had to pay market rates and really had to go out and get its own insurance, it didn't have any taxpayer or government subsidy, then that would be the end of the nuclear industry. (NASC-E 10)

Comment: Nuclear power has been a controversial and an expensive source of power since the 1960s. It has received 95 percent of the total federal subsidies for [nuclear, wind and solar] since 1947. When adjusted for total power production, nuclear power has been 18 times more expensive than power in terms of subsidy received over the first 25 years of either technology's development. (NASC-G 7)

Comment: There has been no new nuclear reactor built since the one that was started in 1973 and that was completed in 1996? Now, I wonder why that is? Could it be that it's not economically feasible? Yes, that is why. It's a very... expensive way to get energy. And, as a matter of fact, it is being heavily subsidized by our government. And as a taxpayer, I don't want to have my tax money put to that use. (NASC-N 2)

Comment: I am concerned about the subsidies for the plant, this plant and the plants all over the country. (NASC-P 2)

Response: *Whether nuclear power should be subsidized by the Federal government is outside the scope of the staff's environmental review of the application. In addition, as discussed in a June 2, 2003, letter from NRC to Dominion (ADAMS Accession Number ML031480470), and in proposed changes to Part 52 published in the Federal Register on July 3, 2003 (68 Fed. Reg. 40025), consideration of alternative energy sources need not be included in the applicant's environmental report. If Dominion should apply for a construction permit or combined license at some time in the future, alternative power sources will be evaluated at that time. The review of that application will include the development of another EIS and the opportunity to participate in another hearing.*

Need for Power

Comment: As required by 40 C.F.R. § 1503.13 and 10 C.F.R. Part 51, Appendix A 4, the EIS should consider the need for a new nuclear power plant, including the potential impact of conservation measures in determining the demand for power and consequent need for additional generating capacity. (NASC-GG 12)

Comment: Rebecca Smith, a staff reporter for the Wall Street Journal told us on November 11th, 2003 that "The U.S. electric power industry lured by the promise of deregulated markets has added far more generating plants than will be needed for years, a building boom that has thrust industry into its biggest financial bust since the early 1980s and," and I still quote, "in the continental United States nearly 200,000 megawatts of new generating capacity, the equivalent of 400 big nuclear power plants, has been added since 1999 boosting the total by 24 percent at a time when demand has flattened out." She goes on to say that -- one more quote "No region has a greater surplus of electrical capacity than the southeast." And one more quote. "Since 1999 more than 51,000 megawatts of capacity have been built in a nine state region that

extends from Louisiana to Virginia excluding Florida, boosting energy capacity by a third." (NASC-B 15)

Comment: And according to -- affordable energy plan for the southern United States published by REPP, which is the Renewable Energy Policy Project in Washington, D.C., "progressive energy programs will reduce the annual growth due to demand to electricity from 1.8 percent to seven tenths of a percent. As a result, 236 million megawatts of new demand which is the equivalent of the output of 112 new power plants 300 megawatts each in size can be avoided." Under the -- part of the saving from efficiency programs will be used to increase the use of renewable generation. Under the plan renewable sources will grow to provide ten percent of the electricity generated in the region by the year 2020. (NASC-G 6)

Comment: According to the Energy Information Administration the demand for electricity is projected to grow from about 754 gigawatts this year to over 1100 gigawatts over the next 20 years. Now, that's about a 50 percent increase or so. And if you look at the additions to your existing electric generation, we're talking about something on the order of between 300 and 400 gigawatts of additional electric generation that needs to be added to the existing supply of electricity in the United States over this next 20 year period. ...So we're talking about something on the order of 300 times the existing North Anna site in terms of the nationwide need for electricity in the near future. (NASC-I 4)

Comment: I realize we don't have all the answers, but here we are in a room that's heated, lighted and we do need power sources. So we have to find the answers and the way. None of us like power outages. ...So, I -- I ask you to keep asking the questions and let us all work together to find the right answers. Because we have a need [for power] and if it's [not?] nuclear power, maybe there's something better that our bright students will think of. (NASC-R 1)

Comment: I'm glad for Dominion Power's application. I'm glad they're thinking about the future, even though they may say to them we can't build here. I'm glad that they are thinking further of others to provide electricity so that all of us go home and watch TV tonight. (NASC-S 1)

Response: *The NRC staff will prepare an EIS in accordance with the requirements of 10 CFR 52.18 and 10 CFR Part 51. As indicated in 10 CFR 52.18, the EIS need not include an assessment of the benefits of construction and operation of the proposed reactor, or reactors, which have the characteristics which fall within the postulated site parameters, including the need for power. The applicant did not discuss the need for power in the ER, and the need for power will not be addressed in this EIS.*

Operational Safety Issues

Comment: Nuclear power continues to face a lot of unforeseen problems that will keep coming up as [the plants] age and the technical issues come into light, such as the corrosion of the nuclear vessel heads. There was a very serious case at Davis-Besse. And as I understand it, the reactor vessel heads at North Anna are scheduled to be replaced. What other problems might we face just around the horizon? (NASC-D 7)

Comment: The Union of Concerned Scientists in here saying with regards to the new reactor designs which are on the drawing board, perhaps for North Anna if Dominion goes forward with this project, the Union of Concerns Scientists says regarding advanced reactors, as a general

proposition “there is nothing inherently safe about nuclear reactors regardless of the attention to design, construction, operation and management of nuclear reactors. There's always something that could be done or not done to render the reactor dangerous.” (NASG-G 4)

Comment: [The Lake Anna Civic Association has identified seven issues of concern, one of which is] reactor design and performance. (NASG-J 7)

Comment: [There was] a survey that an independent firm did at the nuclear power plants in the United States. And there was a significant percent of employees at the plants, I believe in was somewhere in the neighborhood of 47 percent, who said that at various points they did not feel that they could bring up -- they did not feel comfortable bringing up safety concerns. And some of the things they said on the survey definitely would lead one to question what kind of a safety culture there is within many of the plants or in various aspects of nuclear power generation. (NASG-E 13)

Response: *The issues raised in the comments are safety issues, and, as such, are outside the scope of the environmental review. Accordingly these issues will not be addressed in the EIS. That said, the following are examples of how NRC addresses operational safety issues. NRC maintains resident inspectors at each reactor site. These inspectors monitor the day-to-day operations of the plant and perform inspections to ensure compliance with NRC requirements. In addition, the NRC has an operational experience program that ensures that safety issues that are found at one plant are properly addressed at the others, as appropriate. Finally, the design of any new reactors will have benefitted from lessons learned at existing reactors and will incorporate new safety features that would be impracticable to backfit onto existing plants. The NRC will not issue a license or permit unless it can conclude that there is reasonable assurance: (1) that the activities authorized by the license or permit can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission.*

Other Issues

Comment: We believe and can document that the agency that will provide the approval, the Nuclear Regulatory Commission, has already expressed a bias. And the bias is, we believe, dangerously close to those issues of promotional activity which resulted in the disbandment of its previous agency, the Atomic Energy Commission, because it could not abide by the provision of regulating on behalf of the environment and the public health and safety, but had to enter into the promotional arena. And we believe that the Nuclear Regulatory Commission is involved close in that same process now. (NASG-A 8)

Comment: Over time and especially within, you know, like the last 10 or 15 years the NRC appears to be really moving in the direction from regulating the nuclear industry to promoting it. And we're seeing that over and over in rapid succession with early site permits, combined licenses, the ITAAC program, inspections tests, analysis and acceptance criteria. (NASG-E 9)

Response: *The mission of the NRC is to ensure the use of nuclear materials in commercial applications is accomplished in a manner that does not represent an undue risk to the health and safety of the public. This includes the regulation of the nation's commercial nuclear power plants. The NRC does not promote nuclear power. The U.S. Department of Energy (DOE) is tasked with activities to ensure that our Country has the power it needs. This includes*

promoting power sources that may be needed in the future, including nuclear power. With respect to the NRC staff's review of this ESP application, no decision has yet been made to grant or deny an application. The decision to grant or deny the application will not be made until the EIS and SER have been issued and the hearing process has been completed.

Comment: If you're worried about terrorist attacks against the nuclear plants, then maybe you should tell your government to stop funding to terrorist organizations. (NASC-AA 2)

Response: *This statement makes no reference to any terrorist organizations or how the U.S. government might be funding such organizations. Accordingly, the basis for this statement is unclear. It does not relate to the ESP process and will not be evaluated further.*

Comment: I would ask that somebody someday do the analysis of the amount of ambient heat that energy production in the United States adds to the environment. Virtually all of the energy released in the nuclear reactions is released in the form of heat, which ends up in the environment....Perhaps the analysis of this plant or all of the electrical generating plants in the country might significantly be adding to the melting of the Arctic ice caps and other problems. (NASC-B 9)

Response: *All nuclear or fossil fuel power plants release significant amounts of heat to the environment. Impacts related to the thermal discharge to Lake Anna will be addressed in Chapter 4 of the EIS. The more general comment concerning heat from all generating stations is outside the scope of this review and will not be addressed in the EIS.*

Comment: It's no coincidence that this new round of NRC hearings corresponds to the comprehensive energy legislation now stalled in the Senate that contains billions of dollars of loan guarantees, direct subsidies and tax breaks for the nuclear industry. What does this teach my students? If you're quick and slick, you'll get your piece of the pie while it's still hot....Nuclear power's primary asset is the rich and powerful constituency with its roots deep in the current U.S. Government Administration. While the Administration that you look to for a free handout pushes less conservation, you're trying to sell us more energy that we don't need. (NASC-B 11)

Response: *This comment does not relate to the environmental effects of the proposed action and is not within the scope of the staff's environmental review. The timing of the NRC's scoping meeting was based on the date of the ESP's application it received from Dominion. The NRC does not know the basis for the timing of Dominion's application. The staff will not address this comment in the EIS.*

Comment: But I think it's very important for the public to decide if we want to allow our state and our national energy policies to be driven by the interests of the large power companies and their allies, and whether or not we will pursue a more enlightened policy. (NASC-D 11)

Response: *This comment does not relate to the environmental effects of the proposed action and is not within the scope of the staff's environmental review. The mission of the NRC is to ensure that the use of nuclear materials in commercial applications is accomplished in a manner that does not represent an undue risk to the health and safety of the public. This includes the regulation of the nation's commercial nuclear power plants. NRC does not promote nuclear power. The nation's energy policy is established by Congress and is administered through DOE. The staff will not address this comment in the EIS.*

Comment: I think we can pretty much dispose of that concept that nuclear plants are really into atoms for peace when currently we have Watts Bar and Sequoyah producing tritium with full approval from all the agencies including the Nuclear Regulatory Commission and the Department of Energy that produces tritium for nuclear weapons. And the plants are simultaneously operating as commercial power providers and also providing tritium for nuclear weapons. So it's a two in one obvious overlap between nuclear power and nuclear weapons. (NASC-E 14)

Response: *This comment does not relate to the environmental effects of the proposed action and is not within the scope of the staff's environmental review. The staff will not address the subject of this comment in the EIS.*

17. Support for Nuclear Power

Comment: You understand that there's no technology that isn't without risk. There are many that have benefits and there's always a question of public policy to evaluate the risk and the benefit to try to come to the most informed decision possible. (NASC-BB 2)

Comment: My other comment is no nuclear power plants? Well, that's in the United States. However, world wide there are about 453 power plants operating. There are 30 under construction. About five come on line every year. So the United States might not be doing anything, but the rest of the world is. (NASC-O 1)

Response: *These comments provide only general information in support of nuclear power. They do not provide any specific information relating to the environmental effects of the proposed action and will not be evaluated in the EIS.*

18. Opposition to Nuclear Power

Comment: Because now we know that nuclear power is neither safe nor cheap. It's so dangerous that I'm not allowed to bring my high school physics class on a tour of the current Lake Anna facility for security reasons. There's just us and the facility, and if we aren't a threat, then that only leaves the facility itself. (NASC-B 7)

Comment: To Dominion Virginia Power I would say, even though I'm one of your customers, we'd all be better off without you. (NASC-B 13)

Comment: I think Virginia deserves better than returning to a technology that lacks the public trust, that lacks the economic vigor to stand alone and that burdens future generations with an unwanted legacy. (NASC-D 9)

Comment: Nuclear is a waste of resources. It's a waste of financial, natural and intellectual resources. (NASC-E 3)

Comment: I'm opposed to nuclear energy anywhere on earth. It's a bad idea. It's like having a terrorist for a neighbor and you don't know when it's going to strike, and everybody knows all the reasons. And I want to say, not rudely, but I don't want to be punished by your lack of imagination. I need the power company to do better and protect me. (NASC-T 1)

Comment: So, just for the record [I would] like to put my name down as an unequivocal no. (NASC-W 4)

Comment: I ask you to deny this application simply on the basis of the unknown dangers of nuclear energy. (NASC-X 5)

Response: *These comments provide only general information in opposition to nuclear power. They do not provide any specific information relating to the environmental effects of the proposed action and will not be evaluated in the EIS.*

Summary

The preparation of the EIS for the North Anna ESP will take into account all the relevant environmental issues identified above that were raised during the scoping process. The draft EIS will be made available for public comment. Interested Federal, Tribal, State, and local government agencies, local organizations, and members of the public will be given the opportunity to provide comments to be considered during the development of the final EIS.

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