

April 4, 2005

APPLICANT: Dominion Nuclear North Anna, LLC (Dominion)

SUBJECT: SUMMARY OF FEBRUARY 23, 2005, CATEGORY 1 MEETING WITH DOMINION, REGARDING THE NORTH ANNA EARLY SITE PERMIT (ESP) DRAFT SAFETY EVALUATION REPORT OPEN ITEMS, PERMIT CONDITIONS, COMBINED LICENSE ACTION ITEMS, AND OTHER TECHNICAL ISSUES

On February 23, 2005, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Dominion at NRC Headquarters in Rockville, MD. The purpose of the meeting was to discuss Dominion's proposed responses to the open items in the North Anna ESP draft safety evaluation report (DSER). A list of meeting attendees is included as Attachment 1. The meeting agenda is provided as Attachment 2.

The staff indicated the main purpose of the meeting was to discuss the status of the open items and to provide clarification to Dominion, as appropriate, on the proposed responses. The staff stated that feedback would be provided to Dominion on combined license (COL) action items at a later time.

Dominion provided a brief summary of activities that occurred since the DSER was issued on December 20, 2004; noting that its response to Open Item 2.5-1 was submitted on January 25, 2005 (ADAMS Accession No. ML050320090). On February 7, 2005, Dominion submitted a document providing feedback to the staff on DSER issues (ML050410133) including open items, permit conditions, and COL action items. Dominion stated that it expected to provide responses to the 28 remaining open items in the DSER by the March 3, 2005, due date. However, Dominion stated that the response to Open Item 2.5-2 regarding seismic issues will be provided in parts with the final results planned to be submitted by March 31, 2005. In response, the staff noted that the schedule will be evaluated for impacts of the March 31, 2005, submittal on the final safety evaluation report (FSER) due date.

Dominion stated that in response to Open Item 13.3-3, the March 3, 2005, submittal will withdraw the request for approval of major feature H related to the Technical Support Center, Operational Support Center and Emergency Operations Facility.

The meeting continued with a discussion on the status of the open items and the proposed approach by Dominion for addressing each item. A briefing package was provided by the applicant to the staff during this meeting to facilitate discussion on the open items (ML050740293). The NRC maintains an Agencywide Documents Access and Management System (ADAMS), which provides text and image files of the NRC's public documents. The briefing package mentioned above may be accessed through the ADAMS system. If you do not have access to ADAMS or if there are problems in accessing the handouts located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov.

The following paragraphs address only the open items that required additional discussion or clarification by the staff during the meeting. The staff considered Dominion's proposed

responses for all other open items adequate; refer to Dominion's briefing package (ML050740293) for details on the proposed approach with respect to those items.

Open Item 2.3-2. Justify exclusive use of snowpack weight for calculating snow load or use alternate method (e.g., combination of the 100-year return snowpack and maximum-recorded monthly snowfall in the North Anna ESP site region). Dominion's proposed response will specify three site characteristics for snow:

- 100-year snowpack (30.5 lb/sq ft)
- 100-year snowpack plus 48-hour maximum snowfall (~46 lb/sq ft)
- 48-hour winter probable maximum precipitation (PMP) (20.75" rain)

The proposed response is consistent with the March 24, 1975, Branch Technical Position (BTP) on winter precipitation loads. The staff believes that the applicant needs to identify normal and extreme environmental snow load site characteristics for designing the roofs of safety-related structures. Normal snow loads to be considered in the design of a nuclear power plant that might be constructed on a proposed ESP site should be based on the weight of the 100-year snowpack at ground level. Extreme environmental snow loads to be considered in the design of a nuclear power plant that might be constructed on a proposed ESP site should be based on addition of the weight of the 100-year snowpack at ground level plus the weight of the 48-hour probable maximum winter precipitation (PMWP) at ground level for the month corresponding to the snowpack. A COL applicant may choose and justify an alternate method. For example, an applicant might be able to demonstrate that the PMWP could neither fall nor remain entirely on top of the snowpack and/or building roofs. In any event, the ESP application should provide and justify an appropriately conservative extreme environmental load value that includes sufficient margin for the limited accuracy, quantity, and period of time in which historical data has been accumulated.

Open Item 2.4-1. Provide coordinate reference system for identification of plant parameter envelope (site footprint) location. In response to this open item, Dominion stated it planned to provide a cross-reference to the Virginia State coordinate system. The staff responded that in addition to the coordinate system, the staff will need the units of measurement to fully define the boundaries of the ESP site footprint. The applicant agreed to provide this information.

Open Item 2.4-2. Specify the minimum distance between existing unit system, structure, and components (SSCs) and proposed unit intake and discharge tunnels. In response to this action item, the staff noted that it is reviewing whether this issue needs to be considered at the ESP stage. The staff agreed to review the issues involved and to provide feedback to Dominion at a later time.

Open Item 2.4-5. Provide minimum Lake Anna water temperature at the intake for the proposed additional units as a site characteristic. Dominion's response will describe the methods that would be considered to address frazil and anchor ice formation. The staff noted that conditions for frazil ice exist at the site.

Open Item 2.4-6. Provide UHS construction and location details sufficient to assess reliability and stability of the ultimate heat sink under the pressure head of ground water (i.e., determine differential head), since water table is at grade level at certain locations in the ESP site. Dominion's response will describe design approaches that could be used to account for groundwater conditions. The staff agreed to review whether this information is necessary at the ESP stage and to provide feedback to Dominion at a later time.

Open Item 2.4-7. Correlate ground water level measurements taken in support of the ESP application with data from long-term piezometers. Dominion's response will describe that the long-term service water reservoir (SWR) piezometers do not correlate well with the ESP ground water level measurements. The staff noted that Dominion's response should discuss reasons for the lack of correlation of the data.

Open Item 2.5-1. Dominion provided an updated Electric Power Research Institute (EPRI) report in response to this open item on January 25, 2005. The staff noted that the EPRI process seems adequate but that the applicant did not fully address all the issues identified in Open Item 2.5-1. The staff needs the requested information to validate the EPRI results. Dominion agreed to provide the necessary information by March 31, 2005.

In summary, Dominion stated that it is working to provide timely responses to all remaining DSER open items. Dominion noted that substantial discussion remains on permit conditions and COL action items and suggested that the process by which permit conditions and action items are established be clearly defined and well understood by all ESP applicants.

During the public comment portion on the agenda, Mr. Brendan Hoffman of Public Citizen, stated that the DSER covers accidents but not intentional acts of sabotage. He encouraged the staff to look at aircraft analysis even if it cannot be quantified, adding that terrorist threats should be assessed. Mr. Hoffman formally requested that a public meeting be held in the vicinity of the plant to discuss emergency planning (EP). He also noted that the DSER comments should be posted on the NRC's website.

The staff thanked all participants for their comments and adjourned the meeting.

/RA/

Belkys Sosa, North Anna ESP Project Manager
New Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 52-008

Attachments: 1. List of attendees
2. Agenda

cc w/atts: See next page

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Docket No. 52-008

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*See previous concurrence

cc w/atts: See next page

ADAMS ACCESSION NO. ML050750311-Package

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**Meeting Between NRC and Dominion Nuclear North Anna, LLC
on Open Items in the Draft Safety Evaluation Report (DSER) for the North Anna
Early Site Permit**

February 23, 2005

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Agenda

February 23, 2005, Early Site Permit (ESP) Draft Safety Evaluation Report Open Items, Permit Conditions, Combined License Action Items, and Other Technical Issues
Meeting with Dominion Nuclear North Anna, LLC (Dominion)

- | | | |
|-----------|------------------------------------|--------------|
| 1:00 p.m. | Introductory Remarks | NRC/Dominion |
| 1:15 p.m. | Discussion on Noth Anna | NRC/Dominion |
| | ESP Draft Safety Evaluation Report | |
| | - Open Items | |
| | - Combined License Action Items | |
| | - Permit Conditions | |
| | - Other Technical Issues | |
| 4:45 p.m. | Opportunity for Public Comment | |
| 5:00 p.m. | Adjourn | |

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