

NP-11-0012  
April 26, 2011

10 CFR 52, Subpart A

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: Exelon Nuclear Texas Holdings, LLC  
Victoria County Station Early Site Permit Application  
Response to Request for Additional Information Letter No. 06  
NRC Docket No. 52-042

Attached are responses to NRC staff questions included in Request for Additional Information (RAI) Letter No. 06, dated March 31, 2011, related to Early Site Permit Application (ESPA), Part 2, Section 15.1. NRC RAI Letter No. 06 contained twenty RAI Questions. This submittal comprises a partial response to RAI Letter No. 06, and includes responses to the following two Questions:

15-1  
15-2

When a change to the ESPA is indicated by a Question response, the change will be incorporated into the next routine revision of the ESPA, planned for no later than March 31, 2012.

The response to RAI Questions 13.03-20 through 13.03-35, and 02.04.04-2 will be provided by May 15, 2011. The response to RAI Question 02.04.04-1 will be provided by September 27, 2011. These response times are consistent with NRC RAI Letter No. 06, dated March 31, 2011.

Regulatory commitments established in this submittal are identified in Attachment 3. If any additional information is needed, please contact David J. Distel at (610) 765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 26<sup>th</sup> day of April, 2011.

Respectfully,



Marilyn C. Kray  
Vice President, Nuclear Project Development

D087  
MRO

**Attachments:**

1. Question 15-1
2. Question 15-2
3. Summary of Regulatory Commitments

cc: USNRC, Director, Office of New Reactors/NRLPO (w/Attachments)  
USNRC, Project Manager, VCS, Division of New Reactor Licensing (w/Attachments)  
USNRC Region IV, Regional Administrator (w/Attachments)

**RAI 15-1:****Question:**

RS-002 provides guidance regarding the information that is needed to satisfy the site acceptance criteria in 10 CFR 52.17 (a)(1) when addressing the potential radiological consequences of Design Basis Accidents (DBA) for the reactor designs considered in the VCS ESP application. In chapter 15 of the VCS ESP application, the applicant uses the DCD X/Q values for dose determination from AP1000 DCD Rev.18. However, AP1000 DCD revision 17 is the revision number referenced in SSAR Section 15.1. The DCD X/Q values from revision 17 of the AP1000 DCD are referenced when X/Q values from the AP1000 DCD revision 18 are used in section 15.1 of the VCS ESP SSAR. Please correct the discrepancy.

**Response:**

AP1000 DCD Revisions 17 and 18 both use two sets of identical X/Q values for accidents: one for Loss-of-Coolant Accident (LOCA) and one for all other DBAs. While Revision 18 of DCD Table 15A-5 explicitly lists both sets of X/Q values, Revision 17 lists the LOCA values only and indicates that non-LOCA values are higher.

The higher non-LOCA values used for AP1000 DCD Revision 17 were provided to Exelon for inclusion in the VCS ESP application by Westinghouse in LTR-CRA-10-35, Revision 1, "AP1000 Accident Doses and Releases as a Function of Time for DCD Rev. 17," dated November 1, 2010, which is provided as an Attachment A to this response. It is seen that the LOCA and non-LOCA X/Q values in this document are the same as those in AP1000 DCD Revision 18. Because the VCS ESP application is based on AP1000 DCD Revision 17, the reference to this DCD revision is retained.

**Associated ESPA Revision:**

No ESPA revision is required as a result of this RAI response.