

NP-10-0007  
May 6, 2010

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  
Additional Information - Accident Analysis Clarifications in Support of  
Early Site Permit Application  
NRC Project Number 0781

References: Exelon Nuclear Texas Holdings, LLC letter to USNRC, Application for  
Early Site Permit for Victoria County Station, dated March 25, 2010

Exelon Nuclear Texas Holdings, LLC (Exelon) submitted an application for an early site permit (ESP) in the referenced letter for the Victoria County Station (VCS) site. That submittal consisted of six parts as described in the referenced letter.

In addition to the contents of the application, Exelon is also providing the following supplemental information in support of the review of the VCS ESP application (ESPA). This information confirms previous discussion with the NRC staff regarding acceptance review questions via conference call held May 5, 2010.

#### Design Basis Accidents

Since Babcock & Wilcox (B&W) mPower reactor design source terms originally provided to Exelon represent preliminary design values at this time, Exelon commits to revise the VCS ESPA Site Safety Analysis Report (SSAR) Section 15.1 and Environmental Report (ER) Section 7.1.1 to remove the existing statements that the core source terms for the B&W mPower reactor design will be bounded by those for the other technologies proposed in the Plant Parameter Envelope (PPE). This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.

#### Design Certification Document Revisions

Exelon commits to revise the VCS ESPA SSAR Section 15.1 and ER Section 7.1.1 to clarify that both the GE and Toshiba Advanced Boiling Water Reactor (ABWR) designs are being considered for the site; however, the existing PPE is based on the current ABWR certified design as described in 10 CFR 52 Appendix A. This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.

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Evaluation Methodology

Exelon commits to revise the VCS ESPA SSAR Section 15.2 and ER 7.1.2 to correct the referenced site acceptance criteria from 10 CFR 50.34 and 10 CFR 100 to 10 CFR 52.17(a)(1). It is noted that these references provide identical acceptance criteria. Therefore, there is no impact to the SSAR and ER results or conclusions. This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.

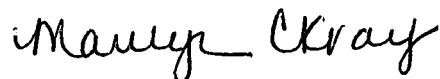
Accident Source Terms and Dose Consequences

Exelon commits to revise the VCS ESPA SSAR Chapter 15 and ER Chapter 7 design-specific source term tables and the design-specific accident dose consequence tables to include a reference to the appropriate reactor Design Control Document (DCD) revision number that these values are based on. This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.

Regulatory commitments established in this submittal are identified in Enclosure 1. 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 6<sup>th</sup> day of May, 2010.

Respectfully,



Marilyn C. Kray  
Vice President, Nuclear Project Development

Enclosure: (1) Summary of Regulatory Commitments

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

## ENCLOSURE 1

### SUMMARY OF REGULATORY COMMITMENTS (Exelon Letter to USNRC No. NP-10-0007, dated May 6, 2010)

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	Programmatic (Yes/No)
Exelon commits to revise the VCS ESPA Site Safety Analysis Report (SSAR) Section 15.1 and Environmental Report (ER) Section 7.1.1 to remove the existing statements that the core source terms for the B&W mPower reactor design will be bounded by those for the other technologies proposed in the Plant Parameter Envelope (PPE).	This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.	Yes	No
Exelon commits to revise the VCS ESPA SSAR Section 15.1 and ER Section 7.1.1 to clarify that both the GE and Toshiba Advanced Boiling Water Reactor (ABWR) designs are being considered for the site; however, the existing PPE is based on the current ABWR certified design as described in 10 CFR 52 Appendix A.	This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.	Yes	No
Exelon commits to revise the VCS ESPA SSAR Section 15.2 and ER 7.1.2 to correct the referenced site acceptance criteria from 10 CFR 50.34 and 10 CFR 100 to 10 CFR 52.17(a)(1).	This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.	Yes	No
Exelon commits to revise the VCS ESPA SSAR Chapter 15 and ER Chapter 7 design-specific source term tables and the design-specific accident dose consequence tables to include a reference to the appropriate reactor Design Control Document (DCD) revision number that these values are based on.	This revision will be included in the next periodic update of the VCS ESPA SSAR and ER.	Yes	No