

NP-11-0033  
July 19, 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. 09  
NRC Docket No. 52-042

Attached are responses to NRC staff questions included in Request for Additional Information (RAI) Letter No. 09, dated May 6, 2011, related to Early Site Permit Application (ESPA), Part 2, Sections 02.05.01 and 02.05.03. NRC RAI Letter No. 09 contained twenty-three (23) Questions. This submittal comprises a partial response to RAI Letter No. 09, and includes response to the following Question:

02.05.01-20

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.

Of the remaining twenty-two (22) RAIs associated with RAI Letter No. 09, responses to six (6) Questions were submitted to the NRC in Exelon Letter NP-11-0022, dated June 2, 2011, responses to six (6) additional Questions were submitted to the NRC in Exelon Letter NP-11-0024, dated June 16, 2011, and responses to eight (8) additional Questions were submitted to the NRC in Exelon Letter NP-11-0027, dated June 28, 2011. The response to RAI Questions 02.05.01-5 and 02.05.01-12 will be provided by August 4, 2011. These response times are consistent with the response times described in NRC RAI Letter No. 09, dated May 6, 2011.

Regulatory commitments established in this submittal are identified in Attachment 2.

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 19<sup>th</sup> day of July, 2011.

Respectfully,



Marilyn C. Kray  
Vice President, Nuclear Project Development

Attachments:

1. Question 02.05.01-20
2. 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 02.05.01-20:****Question:**

In Section 2.5.1.2.5 you stated that no geologic hazards have been identified in the VCS site area and that no deformation zones were encountered in the site investigation. However, you also described in Section 2.5.1.2.4 the presence of growth faults and zones of deformation associated with growth faults at the surface, within the plant boundary and near the power block footprint. In accordance with 10 CFR 100.23 (d), please revise this section to include a discussion of the potential hazards from growth faults within the site vicinity and area. Include a discussion of the uncertainties with respect to the mapped locations and the up-dip limits to the faults.

**Response:**

SSAR Subsection 2.5.1.2.5 was written to address hazards important to nuclear safety. As indicated in RAI 02.05.01-20, SSAR Subsection 2.5.1.2.4 contains descriptions of “the presence of growth faults and zones of deformation associated with growth faults in the site area.” However, Subsection 2.5.1.2.4 also indicates that growth fault D is the only growth fault in the site area that exhibits potential Pliocene-Pleistocene deformation. Since the zone of deformation associated with growth fault D is located approximately 509 ft south of the power block area, which contains all safety-related structures, systems and components, any potential future movement of growth fault D would have no impact on nuclear safety. The zone of deformation associated with growth fault D was derived from an examination of LiDAR data, field observations and the up-dip projection of growth fault D from the seismic reflection data. As discussed in SSAR Subsection 2.5.1.2.4.2.3.2, the up-dip projection intersects the ground surface at the topographic lineament identified within the LiDAR data and the zone of deformation northwest of the lineament correlates with anomalous tilting of the ground surface. Based on the spatial correlation between deformation in the subsurface and the lineament, Exelon concludes that the lineament and the associated southeast-facing slope break represent surface deformation associated with movement on growth fault D since deposition of the middle to late Pleistocene Beaumont Formation. Additional information regarding the presence of growth faults, potential hazards and uncertainties is also provided in responses to RAIs 02.05.01-3, 02.05.01-6, 02.05.01-9, 02.05.01-10, 02.05.01-14 and 02.05.01-15.

As described below, SSAR Subsection 2.5.1.2.5 is being revised to include a discussion of the potential hazards from growth faults within the site vicinity and area.

**Associated ESPA Revision:**

SSAR Subsection 2.5.1.2.5 will be modified in a future revision to the ESPA as follows:

**2.5.1.2.5 Site Area Geologic Hazard Evaluation**

Tertiary and Quaternary growth faults have been identified in the VCS site region (SSAR Subsections 2.5.1.1.4.3.4 and 2.5.1.1.4.3.5). SSAR Subsection 2.5.1.2.4



contains descriptions of the presence of growth faults and zones of deformation associated with growth faults in the site area. The discussions presented in Subsection 2.5.1.2.4 provide information indicating that the closest approach of the zone of interpreted surface deformation associated with fault D to the power block area is approximately 509 feet (155 meters) (Figure 2.5.1-43). Because all of the safety-related structures, systems, and components are contained within the power block area, no ~~No~~ geologic hazards with the potential to affect nuclear safety have been identified within the VCS site area. No geologic units at the site are subject to dissolution. ~~No deformation zones were encountered in the site investigation for VCS.~~

## ATTACHMENT 2

### SUMMARY OF REGULATORY COMMITMENTS

(Exelon Letter to USNRC, NP-11-0033, dated July 19, 2011)

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 will revise the VCS ESPA SSAR Section 2.5.1 to incorporate the change shown in the enclosed response to the following NRC RAI:  02.05.01-20 (Attachment 1)	Revision 1 of the ESPA SSAR and ER planned for no later than March 31, 2012	Yes	No