Exelon.
Generation

NP-11-0004
January 24, 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. 03
NRC Docket No. 52-042

Attached are responses to NRC staff questions included in Request for Additional Information (RAI) Letter No. 03, dated January 20, 2011, related to Early Site Permit Application (ESPA), Part 2, Sections 2.1.2, and 13.6.3. This submittal comprises a complete response to RAI Letter No. 3, and includes responses to the following Questions:

02.01.02-1 13.06.03-1

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.

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 24th day of January, 2011.

Respectfully,

Marilyn C. Kray

Marilyn C. Kray
Vice President, Nuclear Project Development

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NRO

Attachments:
1. Question 02.01.02-1
2. Question 13.06.03-1
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, Environmental Project Manager, VCS, Division of New Reactor Licensing (w/Attachments)
USNRC, Region IV, Regional Administrator (w/Attachments)

RAI 02.01.02-1:

Question:

The applicant, in VCS SSAR Section 2.1.2.1 states that it has a sale agreement with the current owner of the VCS site. The applicant, in VCS SSAR Section 2.1.2.2 states that, "Exelon plans to acquire all mineral rights, including all related oil and gas leases, under the power block area. Exelon plans to acquire a surface waiver from the mineral interest owners and oil and gas lessees for the area comprising the EAB." The NRC's guidance for the review of an ESP applicant's implementation of these requirements can be found in NRR Review Standard (RS)-002, "Processing Applications for Early Site Permits," Attachment 2, Section 2.1.2, "Exclusion Area Authority and Control," and in NUREG 0800 , "Standard Review Plan," Section 2.1.2 "Exclusion Area Authority and Control." In both RS-002 and NUREG 0800, Section 2.1.2, the review guidance states that, in order to meet the requirements of 10 CFR Part 100, the applicant must demonstrate, prior to issuance of an ESP, that it has the authority within the exclusion area as required by Section 100.3, or must provide reasonable assurance that it will have such authority prior to the start of construction. Absolute ownership of all lands within the exclusion area, including mineral rights, is considered to carry with it the required authority to determine all activities on the land and is acceptable.

RS-002 and NUREG 0800 further state that, where the required authority is contingent upon future procurement of ownership (e.g., by eminent domain proceedings), or by lease, easement, contract, or other means, the exclusion area may be acceptable if the NRC can determine that the information provided by the applicant provides reasonable assurance that the required authority will be obtained prior to start of construction. In cases where ownership and control is to be acquired or completed during a construction period, the NRC will need to perform a special review. Also, in cases of proposed public road abandonment or relocation, the NRC needs to determine that there is sufficient authority or that sufficient arrangements have been made to accomplish the proposed relocation or abandonment. At the combined license (COL) stage of review, the applicant must have completed arrangements to determine all activities within the exclusion area. The applicant will not be permitted to load fuel until exclusion area authority and control, including all transfers of title, easements, lease arrangements, public road abandonments or relocation, as applicable, are completed.

Please provide sufficient documentation to provide reasonable assurance that the required authority will be obtained before the start of construction.

Response:

The Victoria County Station (VCS) ESP site is an approximately 11,500 acre tract of land that is currently owned by a group of private land owners. As part of Exelon's previous Combined License (COL) application project, Exelon entered into a Purchase and Sale Agreement in June of 2007 that provided an option to purchase the entire 11,500 acre site property, as well as mineral rights under the Power Block area. It is noted that the proposed Exclusion Area Boundary (EAB) for the VCS facility is fully contained within the 11,500 acre site property boundary.

The Purchase and Sale agreement remains in effect and the option to purchase the site has been extended. The agreement and the extension are available for NRC review. At the present time, Exelon is negotiating a further extension of this agreement to preserve the option to proceed with a COL project in the future.

As stated in the Question above, the NRC regulations recognize that the required EAB authority may be contingent upon future procurement of ownership via contract. Exelon recognizes that if a COL is pursued for the VCS site, the required EAB authority and control will need to be obtained prior to start of construction. Exelon enjoys a cooperative relationship with the current owners. This cooperation has afforded Exelon the necessary access to conduct the site characterization studies required for the ESP application and to accommodate NRC site visits for the recent hydrology audit. Exelon is confident it will be able to complete all arrangements to control activities in the exclusion area at the COL application stage of review.

Exelon is the holder of the Clinton ESP issued in 2007. At the time of the Clinton ESP application review, Exelon did not have authority over the EAB area, rather it was owned by AmerGen, an Exelon subsidiary. Exelon anticipates that an ESP condition, similar to the ESP condition stated below as issued for the Clinton Power Station ESP, would be applicable to the VCS ESP;

"(1) The permit holder shall enter into an agreement granting it an exclusive and irrevocable option to purchase, enter a long-term lease, and/or other legal right in the land required to satisfy the requirements of 10 C.F.R. Part 100 for the ESP facility. The agreement shall be obtained and executed before submission of an application for a CP or COL seeking authority to construct and operate a nuclear power plant referencing the ESP."

Such a permit condition would assure that Exelon will have the right to obtain ownership (and the requisite EAB authority and control) at the time of submission of the COL application.

Associated ESPA Revisions:

The first sentence of SSAR Section 2.1.2.1 will be revised as follows:

2.1.2.1 **Authority**

Exelon **will obtain** the right to purchase the VCS site, including all the land within the EAB, under a purchase and sale agreement with the current landowner **at the time of submission of the COL application**. The site boundary of the VCS site entirely encompasses the EAB.

The first sentence of ER section 2.2.1.1 will be revised as follows:

2.2.1 **The Site and Vicinity**

2.2.1.1 **The Site**

Exelon **will enter** into an agreement to purchase the proposed 11,532-acre site for construction of a nuclear power plant **at the time of submission of the COL application**.

The second paragraph of ER section 5.1.1.1 will be revised as follows:

5.1.1.1 **The Site**

Exelon will enter into an agreement to purchase the proposed 11,532-acre site for construction of a nuclear power plant at the time of submission of the COL application. Under the purchase agreement for the site, Exelon **will have** the right to purchase the sellers' approximately 30 percent interest in the mineral rights underneath the powerblock and the right to purchase from the sellers a surface waiver within the exclusion area boundary and the area comprising the cooling basin.

RAI 13.06.03-1:

Question:

The provisions of 10 CFR 52.17(a)(1)(xii) in part, state: "An evaluation of the site against applicable sections of the Standard Review Plan (SRP) revision in effect 6 months before the docket date of the application."

The provisions of 10 CFR 52.17(a)(1)(x) state: Information demonstrating that site characteristics are such that adequate security plans and measures can be developed.

The provisions of 10 CFR 100.21(f), state: Site characteristics must be such that adequate security plans and measures can be developed.

Part 2, 13.6, Paragraph 3, of Exelon's ESP application states in part, "The final design of the new units power block and supporting buildings would utilize design features as appropriate to assure that the existing security distances outlined in the regulations above, as well as the Design Basis Threat requirements, and any Interim Compensatory measures that may apply, are adequate." Based on the regulations cited above, the staff has determined that there is no information pertaining to planned unattended openings that may extend from the outside to the inside of the Protected Area.

Please describe all existing and planned culverts and unattended openings that extend from the outside to the inside of the proposed PA, the area for power block structures, and safety-related water sources (e.g., cooling towers). In addition, please update diagram 13.3-22 as needed to reflect the description of the information requested.

Response:

The security-related Protected Area, as shown on Site Safety Analysis Report (SSAR) Figure 1.2-2, encompasses the designated Power Block Area. All site facility safety-related structures, systems, and components, including all safety-related water sources, will be located within the designated Power Block Area. The VCS site is a "greenfield" site, which will require significant grading changes. The entire Protected Area/Power Block Area will be extensively regraded and contoured during site construction such that any existing on-site drainage culverts or similar openings will be eliminated. The general topography of the site surrounding the Protected Area consists of fairly flat rangeland in all directions. Therefore, there are no existing site culverts or unattended openings that will have any impact on the VCS ESP site facility Power Block Area or Protected Area.

Since the detailed site layout design has not been finalized at the ESP stage, Exelon has not identified all possible planned culverts or unattended openings that could extend from the outside to the inside of the designated Protected Area. As shown on SSAR Figure 1.2-2, the only planned openings currently identified that would extend from the outside to the inside of the designated Protected Area are sally port vehicle access points and the main personnel security access building, both of which will be attended access points designed to satisfy security-related regulatory requirements for physical protection of licensed activities. Any additional planned culverts and unattended openings (e.g., plant cooling water system intakes and potential site storm water

drainage system design features) that are identified as part of the final site design will be addressed at the Combined License (COL) application stage, once a reactor design is selected and detailed plant layout information is finalized.

At the COL application stage, a site-specific security assessment will be performed and detailed site Security Plans will be developed to identify and describe the specific security design features implemented to address any planned culverts or unattended openings. The Security Plan will describe the measures taken to ensure assessment, observation, detection, and surveillance requirements are met, and appropriate barriers are installed to prevent potential exploitation of any planned culverts or unattended openings identified at the COL application stage.

Exelon has identified no impediments to the eventual development of an adequate Security Plan for the VCS ESP site facility.

Associated ESPA Revisions:

No revision to VCS ESP SSAR Figure 13.3-2, "Victoria County Station Site Layout" (SSAR page 13.3-22), is required as a result of this RAI response. The information requested is shown on existing SSAR Figure 1.2-2, "Victoria County Station Power Block Area," on a more appropriate scale illustrating the physical details described in the response above. SSAR Figure 1.2-2 is also being added as a reference into SSAR Section 13.6 as described below.

The following new paragraphs will be added to SSAR Section 13.6 in a future revision as indicated below to address existing and planned culverts and unattended openings.

The security-related Protected Area, as shown on SSAR Figure 1.2-2, encompasses the designated Power Block Area. All site facility safety-related structures, systems, and components, including all safety-related water sources, will be located within the designated Power Block Area. The general topography of the site surrounding the Protected Area consists of fairly flat rangeland in all directions. No existing on-site culverts or similar openings will impact the VCS ESP site facility Power Block Area or Protected Area since the Protected Area/Power Block Area will be extensively regraded and contoured during site construction, and any existing on-site drainage culverts or similar openings will be eliminated.

Since the detailed site layout design has not been finalized at the ESP stage, Exelon has not identified all possible planned culverts or unattended openings that could extend from the outside to the inside of the designated Protected Area. As shown on SSAR Figure 1.2-2, the only planned openings currently identified that would extend from the outside to the inside of the designated Protected Area are sally port vehicle access points and the main personnel security access building, both of which will be attended access points designed to satisfy security-related regulatory requirements for physical protection of licensed activities. Any additional planned culverts and unattended openings identified as part of the final site design will be addressed at the COL application stage, once a reactor design is selected and detailed plant layout information is finalized.

At the COL application stage, a site-specific security assessment will be performed and detailed site Security Plans will be developed to identify and describe the specific security design features implemented to address any planned culverts or unattended openings. The Security Plan will describe the measures taken to ensure assessment, observation, detection, and surveillance requirements are met, and appropriate barriers are installed to prevent potential exploitation of any planned culverts or unattended openings identified at the COL application stage.

Exelon has identified no impediments to the eventual development of an adequate Security Plan for the VCS ESP site facility.

ATTACHMENT 3

SUMMARY OF REGULATORY COMMITMENTS

(Exelon Letter to USNRC, NP-11-0004, dated January 24, 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 2.1.2.1, and ER Sections 2.2.1.1 and 5.1.1.1, to incorporate the changes shown in the enclosed response to the following NRC RAI: 02.01.02-1 (Attachment 1)	Revision 1 of the ESPA SSAR and ER planned for no later than March 31, 2012	Yes	No
Exelon will revise the VCS ESPA SSAR Section 13.6 to incorporate the change shown in the enclosed response to the following NRC RAI: 13.06.03-1 (Attachment 2)	Revision 1 of the ESPA SSAR planned for no later than March 31, 2012	Yes	No