October 13, 2011

Ms. Marilyn C. Kray Vice President New Plant Development Exelon Generation 200 Exelon Way Kennett Square, PA 19348

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 13

(SRP SECTION: 02.04.13-ACCIDENTAL RELEASES OF RADIOACTIVE LIQUID EFFLUENTS IN GROUND AND SURFACE WATERS) RELATED TO THE VICTORIA COUNTY STATION EARLY SITE PERMIT APPLICATION

Dear Ms. Kray:

By letter dated March 25, 2010, Exelon Nuclear Texas Holdings, LLC (Exelon) submitted an early site permit application for Victoria County Station pursuant to 10 CFR Part 52. The Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application.

The staff has identified that additional information is needed to continue portions of the review and the request for additional information (RAI) is contained in the enclosure to this letter. Exelon is requested to respond within 30 days of the date of this letter.

If the RAI response involves changes to application documentation, Exelon is requested to include the associated revised documentation with the response.

Should you have questions, please contact Tekia Govan at (301) 415-6197 or Tekia.Govan@nrc.gov.

Sincerely,

/RA Tom Tai for:/

Tekia V. Govan, Project Manager BWR Projects Branch Division of New Reactor Licensing Office of New Reactors Ms. Marilyn C. Kray Vice President New Plant Development Exelon Generation 200 Exelon Way Kennett Square, PA 19348

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Tekia V. Govan, Project Manager BWR Projects Branch Division of New Reactor Licensing Office of New Reactors

Docket No. 52-042

Enclosure: Request for Additional Information

Distribution:

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E-RAI Tracking No: 5700

ADAMS Accession No.: ML112850842

OFFICE	BC: NRO/RSAC	BC:NRO/RSAC	PM:DNRL:BWR
NAME	SWilliams*	ERoach*	TGovan*
DATE	9/27/2011	9/27/2011	10/12/2011

^{*}Approval captured electronically in the electronic RAI system.

Request for Additional Information No. 5700 Revision 0

Victoria County Station ESP Exelon Texas Docket No. 52-042

SRP Section: 02.04.13 - Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters
Application Section: 2.4.13

QUESTIONS for Health Physics Branch (CHPB)

02.04.13-3

10 CFR 20 Appendix B Table 2 establishes the allowable radionuclide concentration in releases to the environment. Branch Technical Requirements (BTP) 11-6 describes the process for determination of the potential radioactive source term that may be released to the environment. One potential release pathway of radioactive material to the environment is via liquid release from the failure of an outside tank that contains radioactive materials. Section 2.4.13.5 of the application states that there are no Liquid Waste Management System (LWMS) outdoor tanks, and therefore no accident scenario that could result in the release of radioactive LWMS effluent directly to surface water. However, the certified design for the Advanced Boiling Water Reactor (ABWR) used in this Plant Parameter Envelope (PPE) analysis does include outside tanks that contain radioactive material. The Condensate Storage Tanks (CST) present in the ABWR design are outside tanks and contain up to 500,000 gallons that contain radioactive material. The CST could release radioactive content directly to surface water. Therefore, these tanks need to be considered per BTP 11-6 for the potential radioactive material release and its impact on the environment for compliance with 10 CFR 20. Please indicate the evaluation of these outside tanks in the application and revise section 2.4.13.5 as necessary.