

NRR-PMDAPEm Resource

From: Hall, Victor
Sent: Tuesday, March 17, 2015 11:03 AM
To: david.distel@exeloncorp.com
Cc: Whaley, Sheena; Purnell, Blake
Subject: Request for Additional Information: LaSalle Flooding Hazard Reevaluation Report (TAC Nos. MF3655 and MF3656)
Attachments: LaSalle RAI Rev1.docx

Mr. Distel,

By letter dated March 12, 2014, Exelon Generation Company LLC (the licensee) submitted its flood hazard reevaluation report (FHRR) for LaSalle County Station, Units 1 and 2 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14079A425). By e-mail dated June 18, 2014, the U.S. Nuclear Regulatory Commission (NRC) staff provided a request for additional information (RAI) regarding the above referenced FHRR (ADAMS Accession No. ML14169A545). The licensee responded to this RAI by letter dated July 14, 2014 (RS-14-194) (ADAMS Accession No. ML14293A599).

The staff determined that the attached RAI is necessary to complete its assessment of the licensee's FHRR. Please contact me if you would like clarification on the attached RAI. If no clarification is necessary, the NRC requests that Exelon provide a response, or a schedule to provide a response, within 30 days of this e-mail. The NRC staff has determined that no security-related or proprietary information is contained herein.

Thank you,
-Vic

Victor Hall
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301-415-2915

Hearing Identifier: NRR_PMDA
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Subject: Request for Additional Information: LaSalle Flooding Hazard Reevaluation Report (TAC Nos. MF3655 and MF3656)
Sent Date: 3/17/2015 11:03:18 AM
Received Date: 3/17/2015 11:03:00 AM
From: Hall, Victor

Created By: Victor.Hall@nrc.gov

Recipients:

"Whaley, Sheena" <Sheena.Whaley@nrc.gov>

Tracking Status: None

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Tracking Status: None

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Tracking Status: None

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Options

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Request for Additional Information
Fukushima Lessons Learned Flood Hazard Reevaluation Report
LaSalleCounty Station, Units 1 and 2 (TAC Nos. MF3655 and MF3656)

By letter dated March 12, 2014, Exelon Generation Company LLC (the licensee) submitted its flood hazard reevaluation report (FHRR) for LaSalle County Station, Units 1 and 2 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14079A425). By e-mail dated June 18, 2014, the U.S. Nuclear Regulatory Commission (NRC) staff provided a request for additional information (RAI) regarding the above referenced FHRR (ADAMS Accession No. ML14169A545). The licensee responded to this RAI by letter dated July 14, 2014 (RS-14-194) (ADAMS Accession No. ML14293A599). The staff determined that additional information, as requested below, is necessary to complete its assessment of the licensee's FHRR.

RAI 1: FLO2D Modeling

Background:The staff compared aerial imagery and the shapefiles created by the FLO-2D software using geographical information system (GIS software) to verify that site features (e.g., buildings, drainage systems, and paved surfaces) have been properly modeled in the Local Intense Precipitation (LIP) analysis. An American Standard Code for Information Interchange (ASCII) projection file included in response to the previous RAI, georeferenced the site data using a horizontal coordinate system WGS84 UTM Zone 16N and vertical datum of NAVD88 with units of meters. However, the graphical plots and maps created by the FLO-2D software (e.g., shape files, maximum water surface elevation, depth, and velocity) do not appear to have the same projection as the ASCII file. This discrepancy prevents the correct alignment of aerial imagery GIS.

Request:Provide the appropriate projection information used in FLO-2D.

RAI 2: Section 3.1 LIP- Event Duration and Distribution

Background:The FHRR presents a LIP flood reevaluation for a one-hour, one-square-mile probable maximum precipitation (PMP) event using a site-specific Hydrometeorological study. This approach may not capture the potentially most conservative and bounding flood condition resulting from precipitation events of different magnitude, duration, and timing.

Request:Provide justification that the LIP analysis presented in the FHRR is bounding in terms of warning time, flood depth, and flood duration. This justification can include sensitivity analysis of LIP event duration to consider localized (one square mile) PMP events up to 72 hours in duration (e.g., 1-, 6-, 12-, 24-, 48-, 72-hour PMPs) and various rainfall distributions (e.g., center-loaded and others in addition to a front-loaded distribution). The evaluations could identify potentially bounding scenarios with respect to flood height, event duration, and associated effects. Provide electronic versions of any associated modeling input and output files for the sensitivity runs.

RAI 3: General Hazard Reevaluation- Flood Duration Parameter

Background:Enclosure 2 of the 50.54(f) letter requests the licensee to perform an integrated assessment of the plant's response to the reevaluated hazard if the reevaluated flood hazard is not bounded by the current design basis. The FHRR should include all of the flood hazard

information needed to understand the flood hazard and associated effects that will be an input to the integrated assessment; including the flood duration parameters for LIP(see definition and Figure 6 of the NRC interim staff guidance document JLD-ISG-2012-05, "Guidance for Performing an Integrated Assessment," dated November 2012 (ADAMS Accession No. ML12311A214).

Request: Provide the applicable flood event duration parameters associated with LIP using the results of the flood hazard reevaluation. This includes the warning time the site will have to prepare for the event (e.g., the time between notification of an impending flood event and arrival of floodwaters on site) and the period of time the site is inundated. Provide the basis for the flood event duration, which may include a description of relevant forecasting methods (e.g., products from local, regional, or national weather forecasting centers) and timing information derived from the hazard analysis.