



ND-2015-0006  
April 15, 2015

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: **PSEG Early Site Permit Application**  
**Docket No. 52-043**  
**Supplemental Response to Request for Additional Information, RAI**  
**No. 67, Probable Maximum Surge and Seiche Flooding**

- References:
- 1) PSEG Power, LLC Letter No. ND-2014-0010 to USNRC, Submittal of Revision 3 of the Early Site Permit Application for the PSEG Site, dated March 31, 2014
  - 2) RAI No. 67, SRP Section: 02.04.05 – Probable Maximum Surge and Seiche Flooding, dated October 29, 2012 (eRAI 6615)
  - 3) PSEG Power, LLC Letter No. ND-2011-0066 to USNRC, Supplemental Response to Request for Additional Information, RAI No. 39, Probable Maximum Surge and Seiche Flooding, dated December 9, 2011
  - 4) PSEG Power, LLC Letter No. ND-2013-0039 to USNRC, Response to Request for Additional Information, RAI No. 67, Probable Maximum Surge and Seiche Flooding, dated November 27, 2013
  - 5) PSEG Power, LLC Letter No. ND-2014-0020 to USNRC, Response to Request for Additional Information, RAI No. 67, Probable Maximum Surge and Seiche Flooding, dated August 21, 2014

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The purpose of this letter is to provide a supplemental response to the request for additional information (RAI) provided in Reference 2 above. This RAI addresses the Probable Maximum Surge and Seiche Flooding, as described in Subsection 2.4.5 of the Site Safety Analysis Report (SSAR), as submitted in Part 2 of the PSEG Site Early Site Permit Application, Revision 3.

In light of issues arising from the language describing the proposed use of engineered flood protection measures, PSEG reassessed the approach to establishing the Design Basis Flood. In Reference 5, the design basis Water Surface Elevation (WSEL) was established using a one-dimensional model. These results are considered unrealistically conservative. PSEG also performed a deterministic analysis using a two dimensional, high-resolution storm surge model, which provides a conservative, yet more realistic, design basis WSEL. This supplemental response revises the SSAR to credit the results from the high-resolution storm surge model to establish the design basis flood level for the PSEG Site. No changes to the RAI response text for Question No. 02.04.05-12 in Reference 5 are proposed.

Enclosure 1 provides markups to the Early Site Permit Application that supersede the markups provided in Reference 5. Also included is a redline copy of SSAR Subsection 2.4.5, Probable Maximum Surge and Seiche Flooding, that highlights the changes between the version of SSAR Subsection 2.4.5 provided in Reference 5 and the final version submitted herein. Enclosure 2 includes the new regulatory commitments established in this submittal.

If any additional information is needed, please contact David Robillard, PSEG Nuclear Development Licensing Engineer, at (856) 339-7914.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 15th day of April, 2015.

Sincerely,

A handwritten signature in black ink, appearing to read "James Mallon". The signature is fluid and cursive, with the first name "James" and last name "Mallon" clearly distinguishable.

James Mallon  
Early Site Permit Manager  
Nuclear Development  
PSEG Power, LLC

Enclosure 1: Optical Media containing the following:

- Proposed Revisions Part 2 – Site Safety Analysis Report, Subsection 2.4.5 - Probable Maximum Surge and Seiche Flooding
- Proposed Revisions Part 2 – Site Safety Analysis Report, Chapter 2 – Site Characteristics
- Proposed Revisions Part 3 – Environmental Report, Subsection 2.3.1 – Hydrology

Enclosure 2: Summary of Regulatory Commitments

cc: USNRC Project Manager, Division of New Reactor Licensing, PSEG Site  
(w/enclosures)  
USNRC Environmental Project Manager, Division of New Reactor Licensing  
(w/enclosures)  
USNRC Region I, Regional Administrator (w/enclosures)

**PSEG Letter ND-2015-0006, dated April 15, 2015**

**ENCLOSURE 1**

**Optical Media containing the following:**

- **Proposed Revisions Part 2 – Site Safety Analysis Report, Subsection 2.4.5 - Probable Maximum Surge and Seiche Flooding**
  - **Proposed Revisions Part 2 – Site Safety Analysis Report, Chapter 2 – Site Characteristics**
  - **Proposed Revisions Part 3 – Environmental Report, Subsection 2.3.1 – Hydrology**

PSEG Site  
Early Site Permit Application  
RAI No. 67 Supplemental Response  
Enclosure 1



**PSEG**  
*Power LLC*

Sargent & Lundy LLC



**PSEG Letter ND-2015-0006, dated April 15, 2015**

**ENCLOSURE 2**

**Summary of Regulatory Commitments**

## ENCLOSURE 2

### SUMMARY OF REGULATORY COMMITMENTS

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)
PSEG will revise the SSAR and ER to incorporate the changes in Enclosure 2 in response to NRC RAI No. 67, Questions 02.04.05-12 and 02.04.05-15.	This revision will be included in a future update of the PSEG ESP application.	Yes	No