

## **PSEGSPeRAIPEm Resource**

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**From:** Chowdhury, Prosanta  
**Sent:** Thursday, May 12, 2011 10:24 AM  
**To:** 'PSEGRAIResponses@pseg.com'  
**Cc:** PSEGSPeRAIPEm Resource; 'David.Lewis2@pseg.com'; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Colaccino, Joseph; Silvia, Andrea; Clark, Phyllis; McLellan, Judith; Caverly, Jill; Giacinto, Joseph; Raione, Richard  
**Subject:** PSEG Site ESPA FINAL RAI 26 (eRAI 5711) SRP-02.04.04 (RHEB)  
**Attachments:** PSEG Site ESPA Final RAI 26 (eRAI 5711).pdf

Please find attached RAI 26 for the PSEG Site ESP Application. A draft of the RAI was provided to you on April 29, 2011. At your request, a clarification discussion on Question 02.04.04-2 (for DRAFT RAI 26) was held on May 12, 2011. As a result of the discussion, we understand that you have no further questions on this specific RAI, and therefore, we are issuing this RAI as final with no changes made to it.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 calendar days of receipt of RAIs. For any RAIs that cannot be responded to within 30 calendar days, it is expected that a date for receipt of this information will be provided to the staff within the 30-calendar day period so that the staff can assess how this information will impact the published schedule.

If you have any questions, please contact me.

Prosanta Chowdhury  
Project Manager  
EPR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors  
301-415-1647

**Hearing Identifier:** PSEG\_Site\_EarlySitePermit\_RAI  
**Email Number:** 57

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**Subject:** PSEG Site ESPA FINAL RAI 26 (eRAI 5711) SRP-02.04.04 (RHEB)  
**Sent Date:** 5/12/2011 10:24:05 AM  
**Received Date:** 5/12/2011 10:24:07 AM  
**From:** Chowdhury, Prosanta

**Created By:** Prosanta.Chowdhury@nrc.gov

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**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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PSEG Site ESPA Final RAI 26 (eRAI 5711).pdf	37126	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

Request for Additional Information No. 26

Application Revision 0

FINAL

5/12/2011

PSEG Site ESP  
PSEG Power LLC, PSEG Nuclear LLC  
Docket No. 52-043  
SRP Section: 02.04.04 - Potential Dam Failures  
Application Section: 2.4.4

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.04-1

NUREG-0800, Standard Review Plan (SRP), Section 2.4.4, 'Potential Dam Failures,' establishes guidance that the NRC staff use to evaluate whether an applicant meets the NRC's regulations.

For the analysis presented in Section 2.4.4 of the PSEG SSAR, the applicant used Stokes Law to analyze the effects of sediment transport in the event of dam failure instead of a fully calibrated sediment transport model. The conclusion of the analysis was that the sediment particles will drop out prior to reaching the site.

Staff requests that the applicant provide a detailed description of the thought process that led to the decision that a Stokes Law analysis of sediment transport was sufficient. This discussion should include alternative analyses considered and the conceptual model that was used to justify this analysis.

02.04.04-2

NUREG-0800, Standard Review Plan (SRP), Section 2.4.4, 'Potential Dam Failures,' establishes guidance that the NRC staff use to evaluate whether an application meets the NRC's regulations.

In the PSEG ESP application SSAR, the applicant looked at various scenarios for breach of dams and verified the time required for the flood wave to get to the site. In this analysis, flood waters from the nearest dam failure would have already receded by the time the next flood waters would arrive. The staff thinks that the time interval used to eliminate the initial flood threat may not be sufficiently conservative and that the combined events should be considered.

The staff requests additional discussion of the conceptual model used to justify the method used to eliminate the risk of flooding due to the failure of multiple dams. Please include any historical data or information drawn upon to verify the results of this analysis.