

## PSEGSPeRAIPEm Resource

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**From:** Clark, Phyllis  
**Sent:** Thursday, February 23, 2012 6:32 PM  
**To:** 'PSEGRAIResponses@pseg.com'  
**Cc:** PSEGSPeRAIPEm Resource; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Segala, John; Silvia, Andrea; Roach, Kevin; Chowdhury, Prosanta; Canova, Michael; McLellan, Judith; Tammara, Seshagiri; Schaaf, Robert  
**Subject:** PSEG Site ESPA DRAFT RAI 55 (eRAI 6289) SRP-02.02.03 (RPAC-RSAC)  
**Attachments:** PSEG Site ESPA Final RAI 55 (eRAI 6289).pdf

Please find attached RAI 55 for the PSEG Site ESP Application. A draft of the RAI was provided to you on February 3, 2012. You informed via email on February 22, 2012, that based on the results of a clarification call on RAI 55 (eRAI 6289), conducted on February 21, 2012 no changes were needed to the draft RAI. 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 60 calendar days of receipt of RAIs. For any RAIs that cannot be responded to within 60 calendar days, it is expected that a date for receipt of this information will be provided to the staff within the 60-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.

*P. Clark*

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**Hearing Identifier:** PSEG\_Site\_EarlySitePermit\_RAI  
**Email Number:** 120

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**Subject:** PSEG Site ESPA DRAFT RAI 55 (eRAI 6289) SRP-02.02.03 (RPAC-RSAC)  
**Sent Date:** 2/23/2012 6:31:36 PM  
**Received Date:** 2/23/2012 6:30:51 PM  
**From:** Clark, Phyllis

**Created By:** Phyllis.Clark@nrc.gov

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

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1080	2/23/2012 6:30:51 PM
PSEG Site ESPA Final RAI 55 (eRAI 6289).pdf	56364	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

Request for Additional Information No. 55

Application Revision 0

FINAL

2/23/2012

PSEG Site ESP  
PSEG Power LLC, PSEG Nuclear LLC  
Docket No. 52-043  
SRP Section: 02.02.03 - Evaluation of Potential Accidents  
Application Section: 2.2.3

QUESTIONS for Siting and Accident Conseq Branch (RSAC)

02.02.03-4

RS-002 and RG 1.206 provide guidance regarding the information that is needed to ensure that the potential hazards in the site vicinity are identified and evaluated in order to meet the siting criteria in 10 CFR 100.20 and 10 CFR 100.21.

In SSAR Section 2.2.3.2.3, the applicant addresses potential flammable vapor cloud explosions due to chemicals transported by vessels on the Delaware River. The applicant evaluated this by performing probabilistic analysis which consisted of determining allowable trips for each of the chemicals (SSAR Table 2.2-14) and comparing the allowable trips against the estimated trips of that chemical (SSAR Table 2.2-15). The applicant concluded by stating, "For each chemical, the total number of allowable trips is greater than the estimated number of trips; therefore, none of these chemicals pose a threat greater than  $10^{-6}$  hazards per year."

Based on the acceptance criteria of NUREG-0800, the staff considers that the *aggregate* probability of hazard should be determined, based on realistic data and assumptions, to be  $10^{-6}$  or less per year, as opposed to the applicant's assessment of discrete individual chemical trips each having a probability of  $10^{-6}$  or less per year. The assessment of the hazard probability should include solid explosives transport also. Therefore, the applicant is requested to revise the calculations to determine the total probability of explosive hazard from flammable vapor clouds due to all chemicals and solid explosives transported by vessels on the Delaware River.