

## **PSEGSPeRAIPEm Resource**

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**From:** Chowdhury, Prosanta  
**Sent:** Tuesday, December 06, 2011 1:38 PM  
**To:** 'PSEGRAIResponses@pseg.com'  
**Cc:** PSEGSPeRAIPEm Resource; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Segala, John; Silvia, Andrea; Clark, Phyllis; McLellan, Judith; Vega, Frankie; Candelario, LUISSETTE; Karas, Rebecca  
**Subject:** PSEG Site ESPA FINAL RAI 45 (eRAI 6175) SRP-02.05.04 (RGS1)  
**Attachments:** PSEG Site ESPA Final RAI 45 (eRAI 6175).pdf

Please find attached RAI 45 for the PSEG Site ESP Application. A draft of the RAI was provided to you on November 18, 2011. You informed via email on December 6, 2011, that you would not need a clarification call involving 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

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**Sent Date:** 12/6/2011 1:38:23 PM  
**Received Date:** 12/6/2011 1:38:24 PM  
**From:** Chowdhury, Prosanta

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

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MESSAGE	965	12/6/2011 1:38:24 PM
PSEG Site ESPA Final RAI 45 (eRAI 6175).pdf		9444

**Options**

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**Expiration Date:**

**Recipients Received:**

Request for Additional Information No. 45

Application Revision 0

FINAL

12/06/2011

PSEG Site ESP

PSEG Power LLC, PSEG Nuclear LLC

Docket No. 52-043

SRP Section: 02.05.04 - Stability of Subsurface Materials and Foundations

Application Section: 2.5.4

QUESTIONS for Geosciences and Geotechnical Engineering Branch 1 (RGS1)

02.05.04-20

Follow up to RAI 30, Question 02.05.04-3: In calculation package 2251-ESP-GT-008, Rev. 5, "Potential Liquefaction Evaluation," it appears that the relative density was calculated using the field SPT corrected value for overburden stress, energy, borehole diameter, rod length and sample linear (N1)60. In the response to RAI No 30, Question 02.05.04-3, the applicant indicated that the value used for the calculation of the relative density was the field corrected value (N1)60cs which also includes correction for fines content. In compliance with 10 CFR 100.23 (d) (4) and in conformance to NUREG-0800, Standard Review Plan, Chapter 2.5.4, "Stability of Subsurface Materials and Foundations," please clarify which value was ultimately used and explain the basis for its selection.

02.05.04-21

Follow up to RAI 30, Question 02.05.04-3: In the response to RAI No 30, Question 02.05.04-3, the applicant indicated that the equation for relative density was developed based on Figure 3 from Tokimatsu and Seed (Reference RAI-30-5). Since the equation from Figure 3 does not use SPT (N1) 60 values and the equation referenced in the RAI response does, in compliance with 10 CFR 100.23 (d) (4) and in conformance to NUREG-0800, Standard Review Plan, Chapter 2.5.4, "Stability of Subsurface Materials and Foundations," please elaborate on how the relative density equation mentioned in the RAI response, as cited above, was derived.