

PSEGSPeRAIPEm Resource

From: Chowdhury, Prosanta
Sent: Monday, August 13, 2012 10:50 AM
To: 'PSEGRAIResponses@pseg.com'
Cc: PSEGSPeRAIPEm Resource; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Segala, John; Silvia, Andrea; Roach, Kevin; Clark, Phyllis; McLellan, Judith; Plaza-Toledo, Meralis; Stirewalt, Gerry; Karas, Rebecca
Subject: PSEG Site ESPA FINAL RAI 63 (eRAI 6584) SRP-02.05.01 (RGS1)
Attachments: PSEG Site ESPA Final RAI 63 (eRAI 6584).pdf

Please find attached RAI 63 (eRAI 6584) for the PSEG Site ESP Application. A draft of the RAI was provided to you on July 30, 2012. You informed via email on August 13, 2012, 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; however, you requested via email on August 13, 2012, that the response duration be 45 days rather than the usual 30 days. After reviewing your request, we concluded that a 45-day response period is acceptable for this RAI. As our standard practice, we will assess any impact the additional response time may have on the review schedule. If this RAI cannot be responded to within 45 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
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Division of New Reactor Licensing
Office of New Reactors
301-415-1647

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From: Chowdhury, Prosanta

Created By: Prosanta.Chowdhury@nrc.gov

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Options

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Request for Additional Information 63

Application Revision 1

FINAL

8/13/2012

PSEG Site ESP
PSEG Power LLC, PSEG Nuclear LLC
Docket No. 52-043

SRP Section: 02.05.01 - Basic Geologic and Seismic Information
Application Section: 2.5.1

QUESTION

02.05.01-19

Supplement to RAI 42, Question 02.05.01-1

In the response to RAI 42, Question 02.05.01-1 (ML120120518), regarding origin of the regional Fall Zone separating the Piedmont and Coastal Plain physiographic provinces, information prepared for the North Anna ESP application (ML042800292) was cited as the basis for concluding that the Fall Zone is non-tectonic in origin and developed due to differences in erodability of rock units in the Piedmont and Coastal Plain. The cited reference addresses the seven Fall lines of Weems (1998), not the regional Fall Zone, although a single fall line (i.e., the easternmost Tidewater fall line) may coincide with a segment of the Fall Zone in the site region. PSEG ESP application (Revision 1), SSAR Section 2.5.1.1.4.2.5.3 (pg 2.5-31) acknowledges that the Fall Lines of Weems (1998) are not the same as the regional Fall Zone. Therefore, using the North Anna ESP information as the basis for concluding that the Fall Zone is non-tectonic in origin may conflict with the PSEG ESP application SSAR.

The response also cited Karner and Watts (1982) and Wyer and Watts (2006) and implied that regional geophysical data (e.g., regional gravity) indicates arches and embayments occurring adjacent to the Fall Zone formed due to differential sediment loading. The pertinent information used to suggest an origin for these features based on regional geophysical data was not summarized.

Finally, the response stated that, although an apparent spatial correlation suggests secondary faulting associated with the Fall Zone near the Belair fault in Georgia (Prowell, 1988), this correlation is an artifact of the geologic setting and likely represents a sampling bias. The response also cited Cumbest and others (2000), who discussed a region miles from the Fall Zone that was likewise interpreted to support the sampling bias concept. No information was provided to explain how these two examples support the sampling bias concept.

In order for the staff to assess information interpreted to indicate a non-tectonic origin for both the Fall Zone and arches and embayments occurring adjacent to the Zone, in compliance with 10 CFR 100.23 and in conformance with NUREG-0800, Section 2.5.1 ("Basic Geologic and Seismic Information"), please clarify the initial response to RAI 42, Question 02.05.01-1, by providing the following materials:

1. Additional information, including consideration of references that propose faulting to be associated with some segments of the Fall Zone (e.g., Pazzaglia and Gardner, 1994; Pazzaglia, 1993; and references cited therein), to justify interpretations that (a) the Fall Zone and adjacent arches and embayments are non-tectonic in origin and, that (b) no evidence exists for primary or secondary Quaternary faulting associated with the Fall Zone in the site region.

2. A summary of the pertinent data derived from references cited in the response to RAI 42, Question 02.05.01-1, and used to determine that regional geophysical data document a non-tectonic origin for the arches and embayments occurring adjacent to the Fall Zone.

3. Additional information to explain how two specific references cited in the response to RAI 42, Question 02.05.01-1 (i.e., Prowell, 1988; Cumbest and others, 2000), indicate that interpretations of faulting along the Fall Zone result from a sampling bias.