

## PSEGESPEnveRAIPEm Resource

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**From:** Fetter, Allen  
**Sent:** Thursday, September 20, 2012 2:58 PM  
**To:** PSEGRAIResponses@pseg.com  
**Cc:** PSEGESPEnveRAIPEm Resource; 'Robillard, David L'; 'Mallon, James'; Hsia, Anthony; Silvia, Andrea; Saulsbury, James; Zimmerman, Gregory P.  
**Subject:** PSEG Site ESPA Final RAI Env-11 (eRAI\_6739)  
**Attachments:** PSEG Site ESPA Final RAI Env-11 (eRAI\_6739).pdf

Please find attached RAI Env-11 for the PSEG Site ESP Application. The Env-11 RAI is an aggregate of the rACC draft RAIs that were provided to you on July 20, 2012 as part of a complete table of draft RAIs. At your request, an initial clarification discussion of rACC-01b and rACC-01c was held on August 13, 2012, and was followed by other calls that included a clarification discussion of rACC-01a. A 45 day response time was requested for rACC-01a, which was accepted. No other changes are necessary; hence we are issuing this RAI as final.

The schedule we have established to the 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 (except for rACC-01a), it is expected that a date for receipt of this information will be provided to the staff within the 30-day period so that the staff can assess how this information might impact the published schedule.

Please contact me if you have any questions.

Allen H. Fetter, Project Manager  
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Office of New Reactors  
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**Subject:** PSEG Site ESPA Final RAI Env-11 (eRAI\_6739)  
**Sent Date:** 9/20/2012 2:58:18 PM  
**Received Date:** 9/20/2012 2:58:20 PM  
**From:** Fetter, Allen

**Created By:** Allen.Fetter@nrc.gov

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**Options**

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**Request for Additional Information Env-11**

Issue Date: 9/20/2012

Application Title: PSEG Site ESP Environmental Review - Docket 52-043

Operating Company: PSEG Power LLC, PSEG Nuclear LLC

Docket No. 52-043

Review Section: ESP EIS 5.11 - Environmental Impacts of Postulated Accidents

Application Section: ER

**QUESTIONS**

**ESP EIS 5.11-1**

rACC-01: Provide the proper meteorological data for the 50th percentile ( $\chi/Q$  values) and revise the associated tables in the ER

As per ESRP 7.1, the NRC staff must ensure that the applicant used a 50th percentile  $\chi/Q$  value that was based on onsite meteorological data, or 10% of the levels given in Regulatory Guide 1.3 or Regulatory Guide 1.4, to represent more realistic dispersion conditions than assumed in the safety evaluation.

During the Environmental Site Audit, it was found that some of the meteorological data used to determine the 50th percentile  $\chi/Q$  values were incorrect. ER Tables 7.1-38, 7.1-40, 7.1-46, and 7.1-55 need to be revised.

**ESP EIS 5.11-2**

rACC-01a: In ER Table 7.1-5, source term releases for the 2-hour period are not provided. Provide a revised version of ER Table 7.1-5 with an additional column with releases for the 2-hour period.

As per ESRP 7.1, the NRC staff must confirm the dose calculations for the worst 2-hour release; thus, the NRC staff needs to be provided the 2-hour source term releases.

The current siting regulations require an exclusion area of such a size that an individual located for any 2-hour period at the exclusion area boundary would receive a dose that would not be in excess of 0.25 sievert (25 rem) total effective dose equivalent (TEDE).

**ESP EIS 5.11-3**

rACC-01b: For ER Table 7.1-39, confirm that the DCD Dose calculated for the worst 2-hour release is correct. If it is not correct, provide dose calculations for the worst 2-hour release and provide justification for the calculations.

As per ESRP 7.1 the NRC staff needs to complete dose calculations for the worst 2-hour release; thus, staff needs the 2-hour source term releases. Particularly, the current siting regulations require an exclusion area of such a size that an individual located for any 2-hour period at the exclusion area boundary would receive a dose that would not be in excess of 0.25 sievert (25 rem) total effective dose equivalent (TEDE).

**ESP EIS 5.11-4**

rACC-01c: Provide a cross-reference table that links the tables in the PSEG ER with the appropriate tables in the DCD.

Under 10 CFR 51.41, information that may be useful in aiding the NRC in complying with section 102(2) of NEPA may be requested of the applicant.

As discussed during the Environmental Site Audit, the requested table would assist the NRC staff to confirm the proper DCD tables were used to prepare the ER tables.

#### ESP EIS 5.11-5

rACC-02: Revise the list of reservoirs to include two reservoirs in Salem County (Laurel and Elkinton Pond) that do not appear to be considered in the list.

As per ESRP 7.2 the NRC staff must confirm the potential consequences of a liquid-pathway release as presented in NUREG-0440 (NRC 1978) and NUREG-1437 (1996).

A significant portion (about 1/3) of Salem County's drinking water is obtained from water reservoirs.

#### ESP EIS 5.11-6

rACC-03: Provide the input and output MACCS2 files used for the severe accident calculations and the calculation package 2009-11222 that describes the input to the calculations.

As per ESRP 7.2 the NRC staff must check the MACCS calculations input and output results and the calculation package. The environmental consequences of severe accidents are estimated using acceptable methodology (such as the MACCS code package; Chanin et al. [1990]).