

## **PSEGESPeRAIPEm Resource**

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**From:** Chowdhury, Prosanta  
**Sent:** Wednesday, January 11, 2012 4:17 PM  
**To:** 'PSEGRAIResponses@pseg.com'  
**Cc:** PSEGESPeRAIPEm Resource; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Segala, John; Silvia, Andrea; Clark, Phyllis; McLellan, Judith; Musico, Bruce; Jones, Andrea; Barss, Dan  
**Subject:** PSEG Site ESPA DRAFT RAI 47 (eRAI 6241) SRP-13.03 (NSIR-LIB-EP)  
**Attachments:** PSEG Site ESPA Draft RAI 47 (eRAI 6241).doc

Please find attached DRAFT RAI No. 47 for the PSEG Site ESP application. You have ten working days to review this request and to decide whether you need a conference call to discuss it. Please notify me of your decision in this regard.

After the call, or after ten days, the RAI will be finalized and issued to you. You will then have 30 calendar days to respond. These durations are factored into your review schedule. If additional time is required to respond, please inform me of your proposed schedule to respond at your earliest opportunity.

If you have any questions, please contact me.

Prosanta Chowdhury  
Project Manager  
Licensing Branch 1 (LB1)  
Division of New Reactor Licensing  
Office of New Reactors  
301-415-1647

**Hearing Identifier:** PSEG\_Site\_EarlySitePermit\_RAI  
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**Subject:** PSEG Site ESPA DRAFT RAI 47 (eRAI 6241) SRP-13.03 (NSIR-LIB-EP)  
**Sent Date:** 1/11/2012 4:17:27 PM  
**Received Date:** 1/11/2012 4:17:29 PM  
**From:** Chowdhury, Prosanta

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

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**Options**

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Request for Additional Information No. 47

Application Revision 0

DRAFT

1/11/2012

PSEG Site ESP  
PSEG Power LLC, PSEG Nuclear LLC  
Docket No. 52-043  
SRP Section: 13.03 - Emergency Planning  
Application Section: Part 5

QUESTIONS for Licensing and Inspection Branch (NSIR/DPR/LIB) (EP)

13.03-24

**[Follow up to RAI 22, Question 13.03-12 [RAI E-1]]**

**Supplemental RAI 13.03-12S1:**

In response to RAI 22, Question 13.03-12 [RAI E-1], the applicant stated that the Typical Initial Contact Message Form is for a Site Area Emergency (SAE) and no protective actions are recommended at that time. NUREG-0654/FEMA-REP-1, Rev. 1, Evaluation Criterion E.3 states that information about potentially affected population and areas be included in the initial Emergency Messages to be sent from the plant. Although a protective action recommendation may not be made at the SAE, offsite response organizations benefit from having this information at this time. In the Emergency Plan, include potentially affected population and areas in the initial contact message information, or explain why this is not necessary.

13.03-25

**[Follow up to RAI 22, Question 13.03-13 [RAI F-1]]**

**Supplemental RAI 13.03-13S1:**

In response to RAI 22, Question 13.03-13 [RAI F-1], the applicant stated that the design of the Control Room and TSC are not complete, therefore, a description of the power supplies cannot be provided. The applicant referenced ITAAC 3.0, which requires a demonstration of primary and secondary communications to response facilities, but this ITAAC does not address guaranteed or backup power. In the Emergency Plan, describe whether guaranteed or backup power will be available for the emergency communications equipment in the Control Room and TSC.

13.03-26

**[Follow up to RAI 22, Question 13.03-13 [RAI F-2]]**

**Supplemental RAI 13.03-13S2:**

In response to RAI 22, Question 13.03-13 [RAI F-2], the applicant stated that the design of the Federal Telecommunications System (FTS) is not complete. Therefore, a description of the FTS emergency communications equipment power supplies cannot be provided. RAI 22, Question 13.03-13 [RAI F-2] requested a discussion of availability of specific communication paths (not design details). The applicant referenced ITAAC 3.0, which requires a demonstration of primary and secondary communications to response facilities, but this ITAAC does not identify communication paths. In the Emergency Plan, discuss the availability of the Reactor Safety Counterpart Link (RSCL), Protective Measures Counterpart Link (PMCL), Management Counterpart Link (MCL), and Local Area Network (LAN).

13.03-27

**[Follow up to RAI 22, Question 13.03-14 [RAI H-1]]**

**Supplemental RAI 13.03-14S1:**

In response to RAI 22, Question 13.03-14 [RAI H-1], the applicant stated that Section 5.5 of the PSEG Site Emergency Plan states that the Radiation Monitoring System (RMS) computer and/or Safety Parameter Display System (SPDS) computer systems provide monitoring capability for the radiological parameters identified in Regulatory Guide 1.97. Although the staff reviewed Part 5, Section 9, "Emergency Facilities and Equipment" (Subsections 5.5 and 5.6) and Section 10, "Accident Assessment" (Subsection 5.0), the Section 5.5 language could not be found. However, the staff does note that Subsection 5.0, "Dose Assessment From Plant Effluent Monitors," includes the following in the second paragraph:

"The PSEG Site Radiation Monitoring System computer and/or Safety Parameter Display System provide early indication of abnormal radiological conditions from both process and area monitors. The computer systems provide monitoring capability for the radiological parameters identified in Regulatory Guide 1.97, including high range monitoring capability for effluent release paths. This data is input to the dose assessment computers at the PSEG site."

The computer systems - and its associated plant parameter variables - available in the TSC is not clear. Clarify and describe in the Emergency Plan, the availability in the TSC of the RMS and SPDS plant parameter variables, including those identified in Regulatory Guide 1.97. Please explain how the identification of these specific plant parameter variables is dependent upon selection of a reactor technology. If appropriate, identify this as a combined license (COL) action item.

13.03-28

**[Follow up to RAI 22, Question 13.03-14 [RAI H-4]]**

**Supplemental RAI 13.03-14S2:**

In response to RAI 22, Question 13.03-14 [RAI H-4], the applicant stated that facilities for emergency first aid treatment are identified in PSEG ESP Emergency Plan Section 13, "Medical Support." However, Section 13 does not address onsite facilities and medical supplies for emergency first aid. In the Emergency Plan, describe the facilities and medical supplies at the site for appropriate emergency first aid treatment.

13.03-29

**[Follow up to RAI 22, Question 13.03-15 [RAI J-1]]**

**Supplemental RAI 13.03-15S1:**

In response to RAI 22, Question 13.03-15 [RAI J-1], the applicant stated that the time to warn or advise onsite individuals, and individuals who may be in areas controlled by the operator, will be provided in the new plant Emergency Plan Implementing Procedures. Provide a general description in the Emergency Plan of how onsite individuals, and individuals who may be in areas controlled by the operator, will be notified/warned of an emergency, including the approximate time it will take to notify/warn (see NUREG-0654, evaluation criterion J.1).

13.03-30

**[Follow up to RAI 22, Question 13.03-15 [RAI J-2]]**

**Supplemental RAI 13.03-15S2:**

In response to RAI 22, Question 13.03-15 [RAI J-2], the applicant stated that alternatives to evacuation will be part of the Emergency Plan Implementing Procedures. Provide a general description in the Emergency Plan of alternatives to evacuation that may be implemented in adverse weather conditions, or when specific radiological conditions impact the evacuation route (see NUREG-0654, evaluation criterion J.2).

13.03-31

**[Follow up to RAI 22, Question 13.03-15 [RAI J-3]]**

**Supplemental RAI 13.03-15S3:**

In response to RAI 22, Question 13.03-15 [RAI J-3], the applicant stated that transportation for non-essential onsite personnel is part of the evacuation study for the entire area around the PSEG Site. The applicant stated that Section 3.3 of the evacuation time estimate (ETE) discusses employees that work within the EPZ, and non-essential onsite individuals are included in this category. The PSEG Site ETE accounts for the number of evacuees from the site and the time to evacuate, but does not address provisions for transportation of onsite individuals. In the Emergency Plan, describe provisions for transportation of onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density, and specific radiological conditions (see NUREG-0654, evaluation criterion J.2). In addition, identify the plant organization (e.g., Security) responsible for coordinating these activities.

13.03-32

**[Follow up to RAI 22, Question 13.03-15 [RAI J-4]]**

**Supplemental RAI 13.03-15S4:**

In response to RAI 22, Question 13.03-15 [RAI J-4], the applicant stated that the recommendation to administer potassium iodide (KI) to the offsite population is always

associated with a General Emergency, as part of the General Emergency Initial Contact Message Form. Provide the General Emergency Initial Contact Form in the Emergency Plan.

13.03-33

**[Follow up to RAI 22, Question 13.03-15 [RAI J-5]]**

**Supplemental RAI 13.03-15S5:**

In response to RAI 22, Question 13.03-15 [RAI J-5], the applicant stated that identification of preselected radiological sampling and monitoring points will be part of the Emergency Plan Implementing Procedures. Prove a general description in the Emergency Plan of preselected radiological sampling and monitoring points, including a map showing the locations (see NUREG-0654, evaluation criterion J.10.a).

13.03-34

**[Follow up to RAI 22, Question 13.03-16 [RAI L-1]]**

**Supplemental RAI 13.03-16S1:**

In response to RAI 22, Question 13.03-16 [RAI L-1], the applicant stated that arrangements for the services of physicians and other medical personnel qualified to handle radiation emergencies onsite is discussed in Section 13.1.1, "Normal Operations - Onsite Medical Support," and will also be part of the onsite Emergency Medical Team and Fire Brigade procedures. Section 13.1.1 only describes the ambulance service, and states that the Fire Department provides first aid during transport, but does not describe onsite medical support. In the Emergency Plan, describe arrangements for the services of physicians and other medical personnel qualified to handle radiation emergencies onsite (see NUREG-0654, evaluation criterion L.2).

13.03-35

**[Follow up to RAI 22, Question 13.03-17 [RAI M-1]]**

**Supplemental RAI 13.03-17S1:**

In response to RAI 22, Question 13.03-17 [RAI M-1], the applicant stated that a method for determining atmospheric transport and diffusion throughout the plume exposure emergency planning zone during emergency conditions will be developed following selection of a reactor technology, and that this method is used to periodically estimate total population exposure. In the Emergency Plan, describe the method used to periodically estimate total population exposure. In addition, explain why describing the atmospheric transport analysis is dependent upon selection of a reactor technology. If appropriate, identify a combined license (COL) action item to address this issue (see NUREG-0654, evaluation criterion M.4).

13.03-36

**[Follow up to RAI 22, Question 13.03-18 [RAI N-1]]**

**Supplemental RAI 13.03-18S1:**

In RAI 22, Question 13.03-18 [RAI N-1], the applicant was asked to discuss how the States within the 50-mile ingestion pathway EPZ participate in exercises at least once every 6 years. In response, the applicant stated that the frequency of State participation is detailed in each State's emergency plan. While the State emergency plans address the frequency of participation, include a discussion of this participation in the Emergency Plan.

13.03-37

**[Follow up to RAI 22, Question 13.03-20 [RAI P-1]]**

**Supplemental RAI 13.03-20S1:**

In response to RAI 22, Question 13.03-20 [RAI P-1], the applicant stated that planning and coordination activities associated with the offsite organizations are identified in Section 17, "Emergency Plan Administration," and that Section 2, "Assignment of Responsibility," addresses the state and local emergency plans. The applicant stated that these organizations are responsible for the maintenance of their plans. Include a detailed listing of supporting plans and their sources in the Emergency Plan (see NUREG-0654, evaluation criterion P.6).