

## **PSEGESPEnveRAIPEm Resource**

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**From:** Fetter, Allen  
**Sent:** Tuesday, March 26, 2013 1:13 PM  
**To:** 'PSEGRAIResponses@pseg.com'  
**Cc:** PSEGESPEnveRAIPEm Resource; 'Robillard, David L'; Mallon, James; 'Saulsbury, Bo'; Zimmerman, Gregory P.  
**Subject:** PSEG ESP Draft Supplemental Environmental RAI T-lines\_2013-03-26\_submitted  
**Attachments:** PSEG ESP Draft Supplemental Environmental RAI on T-lines\_2013-03-26\_submitted.pdf

Please find attached a draft supplemental RAI on transmission lines for the environmental review of the PSEG Site ESP application.

Please note that the draft RAI in the attached file has been assigned a letter number with a suffix (S) that will allow it to be tracked back to the original RAI (Env-03). An "a" follows the "S" as one supplemental RAI on Env-03 has already been issued. A unique e-RAI identifying number (eRAI 7071) will be used to distinguish this specific supplemental RAI from the original RAI as well.

You have ten working days to review this draft supplemental RAI and to decide whether you need a conference call to clarify any of portion of the RAI. After the call, or after ten days, NRC will finish processing the RAI through the eRAI system and issue it to you as a final RAI. Subsequent their receipt, you will then have 30 calendar days to respond.

If you have any questions, please contact me.

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**Hearing Identifier:** PSEG\_Site\_EarlySitePermit\_Env\_RAI  
**Email Number:** 27

**Mail Envelope Properties** (4AD1A659C92C8546AA34BFB9D10564E477AA95976C)

**Subject:** PSEG ESP Draft Supplemental Environmental RAI  
T-lines\_2013-03-26\_submitted  
**Sent Date:** 3/26/2013 1:13:17 PM  
**Received Date:** 3/26/2013 1:13:19 PM  
**From:** Fetter, Allen

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

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1212	3/26/2013 1:13:19 PM
PSEG ESP Draft Supplemental Environmental RAI on T-lines_2013-03-26_submitted.pdf		
213778		

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

**Draft Supplemental Request for Additional Information (RAI)  
PSEG Early Site Permit (ESP) Application  
March 26, 2013**

<i>Item Number</i>	<i>ESRP/ER Section</i>	<i>RAI</i>	<i>Full Text (Supporting Information)</i>
<p><b>Env-02Sa</b></p> <p><b>ESP EIS 2.2</b></p> <p><b>eRAI 7071</b></p> <p><b>(rTL-03S)</b></p>	<p>ESRP 2.2.2</p> <p>ER 9.4.3</p>	<p>The application provided two macro-corridors and stated: “As stated in Chapter 1, PSEG is evaluating whether additional off-site transmission may be necessary for transmission stability, but the location and need have not yet been determined. In order to capture the potential effects of developing off-site transmission, PSEG analyzed the potential effects of two new off-site macro-corridors. No decision has been made as to the selection of the macro-corridor or the specific route within the selected macro-corridor, but two macro-corridor alternatives have been preliminarily considered and are discussed in detail in Subsection 9.4.3. The two 5-mi. wide macro-corridors analyzed are the South and West Macro-Corridors.”</p> <p>Based on the above statement, the NRC staff needs additional information to determine whether the transmission lines are reasonably foreseeable at this time. In the context of NEPA, a reasonably foreseeable impact is commonly understood as an impact that is sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision, as opposed to an impact</p>	<p>In Section 3.7.2 of the environmental report (ER), PSEG states:</p> <p style="padding-left: 40px;">To support the new plant, one additional offsite transmission line may be required for transient stability purposes. Formal PJM analyses are required to fully identify the requisite transmission system upgrades that are necessary to accommodate a new nuclear plant at the PSEG Site. These PJM analyses have not been initiated, but formal entry into the PJM generation queue and commencement of these analyses is anticipated when a reactor technology is selected.</p> <p>In the ER, PSEG goes on to estimate the environmental impacts of two conceptual transmission line routes that could be used for a new line if it is needed. Because PSEG has not yet determined that a new line will be</p>

<i>Item Number</i>	<i>ESRP/ER Section</i>	<i>RAI</i>	<i>Full Text (Supporting Information)</i>
		<p>that is merely possible or speculative.</p> <p>Because building of transmission lines is not an activity that is defined as “construction” regulated by the NRC, the NRC’s NEPA review considers those impacts as cumulative impacts. In implementing NEPA, the NRC uses certain definitions from the Council on Environmental Quality’s regulations [see 10 CFR 51.14(b)], including 40 CFR 1508.7, which states:</p> <p style="padding-left: 40px;"><i>Cumulative impact</i> is the impact on the environment which results from the incremental impact of the action when added to other past, present, and <i>reasonably foreseeable [emphasis added]</i> future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.</p> <p>Accordingly, the NRC staff would consider the impacts from transmission lines as part of its cumulative impacts analysis if building them is reasonably foreseeable. PSEG should indicate whether it considers the transmission lines referred to in its application (i.e., both, one, or none) to be reasonably foreseeable and then provide the applicable detailed information about the reasonably foreseeable transmission line routes that is described below. If, however, PSEG determines that the transmission lines are</p>	<p>necessary, the evaluation of environmental impacts was performed using available information and methods to estimate the location of the lines and the associated resources that might be affected. (A similar level of analysis was done for the alternative sites.)</p>

<i>Item Number</i>	<i>ESRP/ER Section</i>	<i>RAI</i>	<i>Full Text (Supporting Information)</i>
		<p>not reasonably foreseeable, then PSEG should provide justification for its conclusion. If the transmission lines are not reasonably foreseeable, the detailed information described below is not needed.</p> <ol style="list-style-type: none"> <li>1. Land Use information <ul style="list-style-type: none"> <li>– Provide information on and maps of existing land uses and land covers (LU/LC) along the proposed transmission line route. The information provided should be from the same sources as were used to provide LU/LC information in the Environmental Report (ER) for the existing PSEG site, the proposed ESP site, the proposed causeway, and the transmission line macro-corridors. Also, discuss the potential impacts to LU/LC of building and operating transmission lines along the proposed route. In particular, provide the total amount and types of land areas that would be disturbed temporarily and permanently by building and operating the transmission lines. (ESRP 4.1.2 and 4.3.1)</li> <li>– Provide information on and maps showing the location of special land-use classifications that would be impacted by building and operating transmission lines along the proposed route (e.g., Native American or military reservations, wild and scenic rivers,</li> </ul> </li> </ol>	

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		<p>state and national parks, national forests, designated coastal-zone areas, prime farmlands, flood-plains, wildlife refuges, and wilderness areas). (ESRP 2.2.2)</p> <ul style="list-style-type: none"> <li>– Provide information on and maps showing the location of major public and trust land areas along the proposed transmission line route. (ESRP 2.2.2)</li> <li>– Provide information on and maps showing the location of the highways, railroads, and utility corridors that would be crossed by the proposed transmission line route and its access corridors. (ESRP 4.1.2)</li> <li>– Describe the general methods that would be used for transmission line construction and maintenance (e.g., tower foundations, stringing, location of access roads, span length, and clearing of corridors). (ESRP 3.7)</li> </ul> <p>2. Terrestrial information (sufficient for EIS sections including wetlands and the BA)</p> <ul style="list-style-type: none"> <li>– Provide specific information on important waterfowl areas that would be crossed by the proposed transmission line route, a list and descriptions of these areas, and data on the local abundance and distribution of waterfowl, their seasonal status, and local flight patterns. This information is</li> </ul>	

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		<p>particularly important because of the coastal nature of the region and the fact that it is in the Atlantic flyway. (ESRP 2.4.1)</p> <ul style="list-style-type: none"> <li>– Provide specific information on any commercially or recreationally valuable species (wildlife and plant) that could be adversely impacted by building and operating transmission lines along the proposed route. (ESRP 2.4.1)</li> <li>– Provide a list of species of concern as disease vectors or pests for the proposed transmission line route. (ESRP 2.4.1)</li> <li>– Provide specific information on the location and areal extent of terrestrial habitats/plant communities along the proposed transmission line route. (ESRP 4.3.1)</li> <li>– Provide specific information on the locations of “important” terrestrial species and the location and areal extent of “important” habitats along the proposed transmission line route. This includes information on any threatened, endangered, or special concern species, and on sensitive habitats, including wetlands. (ESRP 4.3.1)</li> <li>– Provide specific information on clearing methods, temporary and permanent erosion, runoff, and siltation control methods, dust suppression methods, and other construction practices for control or suppression along the proposed</li> </ul>	

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		<p>transmission line route. (ESRP 4.3.1)</p> <ul style="list-style-type: none"> <li>– Provide specific information on proposed mitigation (e.g., avoidance, minimization, restoration, and/or compensation) for habitat losses, including “important” habitats, or for disruption of “important species,” where appropriate along the proposed transmission line route. (ESRP 4.3.1)</li> <li>– For the proposed transmission line route, provide the specific distance from the source beyond which construction noise levels would be expected to attenuate to below the 80- to 85-adjusted decibels threshold at which wildlife behavior is affected, and compare that distance to the distance between the source of construction noise and the locations of any Federally or State-listed threatened or endangered species. (ESRP 4.3.1)</li> <li>– Provide information on any consultation with the appropriate Federal (e.g., U.S. Fish and Wildlife Service) and State resource agencies conducted to gain information on specific sensitive species (i.e., threatened, endangered, and special concern) and habitats that may occur along the proposed transmission line route. (ESRP 4.3.1)</li> <li>– Provide specific information on any wildlife management practices to be implemented along the proposed</li> </ul>	



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		<p>transmission line route. (ESRP 5.6.1)</p> <ul style="list-style-type: none"> <li>– Provide specific information on identified occurrences of invasive species (as defined in Executive Order 13112) along the proposed transmission line route, and how the new transmission line could affect the proliferation of such species. (ESRP 5.6.1)</li> <li>– Provide specific information on the impacts of transmission system operation and rights-of-way maintenance (cutting and herbicide application), i.e., bird collisions with power lines, the special case of rights-of-way maintenance impacts on floodplains and wetlands, and the effects of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, and livestock). The applicant has provided an environmental compliance matrix that describes maintenance activities performed by PSE&amp;G for its lines. Such a matrix would need to be developed specifically for the proposed transmission line route. The applicant has previously indicated that an Avian Protection Plan would be developed for the new transmission line. (ESRP 5.6.1)</li> </ul> <p>3. Aquatic resources data (sufficient for EIS sections and BA) where the</p>	

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		<p>proposed transmission corridors intersect or are adjacent to aquatic resources</p> <ul style="list-style-type: none"> <li>– Provide documentation of any consultations conducted with the appropriate Federal and State agencies to obtain information on “important species and habitats” as defined in ESRP 2.4.2, Table 2.4.2-1, that may occur along the proposed transmission line route. (ESRP 2.4.2)</li> <li>– Provide map and description of the location and extent of “important species or habitats” as defined in ESRP 2.4.2, Table 2.4.2-1, that are known or expected to be present in the vicinity of the transmission corridors together with any specific habitat requirements or community interrelationships (ESRP 2.4.2).</li> <li>– Provide information concerning any physical, chemical, and biological factors known to influence distribution and abundance of threatened and endangered aquatic life in the vicinity of the transmission corridors (from the general literature) (ESRP 2.4.2).</li> <li>– Provide the clearing methods, erosion, runoff, and siltation control methods (both temporary and permanent), dust-suppression methods, and other construction practices for impact control or minimization that are specific to the</li> </ul>	

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		<p>proposed transmission system (ESRP 4.3.2)</p> <ul style="list-style-type: none"> <li>– Provide information concerning the water bodies crossed or spanned that are expected to have tower foundations located within them (ESRP 4.3.2)</li> <li>– Provide the location and areal limits of construction activities having impacts on aquatic environs (ESRP 4.3.2)</li> <li>– Provide a description of the magnitude and schedule of construction activities that are expected to impact “important species or habitats” as defined in ESRP 2.4.2, Table 2.4.2-1 (ESRP 4.3.2)</li> <li>– Provide information concerning maintenance practices that are anticipated to adversely affect aquatic biota and any licensee commitments on maintenance practices (ESRP 5.6.2)</li> </ul> <p>4. Hydrologic alterations data where the proposed transmission corridors intersect or are adjacent to water bodies</p> <ul style="list-style-type: none"> <li>– Provide description of activities expected to result in hydrologic alterations (e.g., construction of cofferdams, dredging, placement of fill material into the water, creation of piers or jetties, dewatering activities) (ESRP 4.2.1)</li> </ul> <p>5. Socioeconomics/EJ impacts</p>	

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		<ul style="list-style-type: none"> <li>– Provide topographic maps (minimum 15-minute scale) or aerial photographs showing the proposed transmission line route. (ESRP 3.7)</li> <li>– Address the aesthetic impacts of the transmission lines by (a) describing the transmission system physical design parameters, including illustrations and descriptions of towers, conductors and other structures with dimensions, materials, color, and finish (ESRP 3.7); (b) assessing the visual effects of transmission lines along the proposed route on cultural, scenic, historic, park, and recreation areas along with estimates of the number of people affected (RG 4.2); and (c) providing an assessment of the aesthetic impacts associated with transmission lines that cross the Delaware River at an alternative location closer to the PSEG site as described in ER Section 9.4.3.1.</li> <li>– For the proposed transmission line route, provide a description of the effects of clearing the ROW and installing towers and conductors on the environs and people living in or traveling through the adjacent areas (RG 4.2, Sect. 4.2).</li> <li>– Number and length of new access and service roads required for new transmission line route (RG 4.2, Sect. 4.2).</li> </ul>	

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		<ul style="list-style-type: none"> <li>– Provide quantified estimates of (a) noise levels associated with operations of the transmission lines, and (b) the number of people who would experience this noise along the proposed transmission line route. (ESRP 3.7)</li> <li>– Identify all block groups within the proposed transmission line route that, based on 2010 Census data, meet the environmental justice criteria described in ER Section 2.5.4. Describe pathways by which environmental justice populations in these block groups could be affected by building and operating the transmission lines, and identify any disproportionate impacts to those populations within the specific corridor. (ESRP 2.5.4)</li> </ul> <p>6. Cultural/historic</p> <ul style="list-style-type: none"> <li>– Provide information on the amount of archaeological survey that has been conducted within the macro corridors. Expressed in acres surveyed and percentage of corridor surveyed.</li> <li>– The number of known archaeological sites listed on the NRHP is already provided in ER. Provide the number of unevaluated sites. Information on site types is not necessary.</li> <li>– Provide the number of Historic Properties within 10 mi of each transmission line corridor centerline</li> </ul>	

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		<p>(ESRP 2.5.3).</p> <p>8. Environmental Consequences of the Proposed Action</p> <ul style="list-style-type: none"> <li>– Update adverse construction and operation impacts and mitigation actions as appropriate (ESRP 10.1).</li> <li>– Update irreversible and irretrievable commitments of resources as appropriate (ESRP 10.2).</li> <li>– Update the benefit-cost balance (ESRP 10.4).</li> </ul>	