



ND-2013-0016
July 17, 2013

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: **PSEG Early Site Permit Application**
Docket No. 52-043
Response to Request for Additional Information, No. Env-06S,
ESP EIS 2.5 - Socioeconomics

- References:
- 1) PSEG Power, LLC Letter No. ND-2013-0006 to USNRC, Submittal of Revision 2 of the Early Site Permit Application for the PSEG Site, dated March 27, 2013
 - 2) Env-06S, Review Section: ESP EIS 2.5 - Socioeconomics, dated June 17, 2013 (eRAI 7132)
 - 3) PSEG Power, LLC Letter No. ND-2012-0062 to USNRC, Response to Request for Additional Information, No. Env-06, ESP EIS 2.5 - Socioeconomics, dated October 4, 2012
 - 4) PSEG Power, LLC Letter No. ND-2012-0068 to USNRC, Response to Request for Additional Information, No. Env-06, ESP EIS 2.5 - Socioeconomics, dated October 18, 2012

The purpose of this letter is to respond to the request for additional information (RAI) identified in Reference 2 above. This RAI addresses Question No. ESP EIS 2.5-12 for the Environmental Report (ER), as submitted in Part 3 of the PSEG Site Early Site Permit Application, Revision 2.

Enclosure 1 provides our response for RAI No. Env-06S, Question No. ESP EIS 2.5-12.

Enclosure 2 includes the revisions to the ER resulting from our response to RAI No. Env-06S.


D 079
NRD

Enclosure 3 provides the KLD Traffic Impact Analysis for the PSEG Site, TR-441, Rev. 5.

If any additional information is needed, please contact David Robillard, PSEG Nuclear Development Licensing Engineer, at (856) 339-7914.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 17th day of July, 2013.

Sincerely,



James Mallon
Early Site Permit Manager
Nuclear Development
PSEG Power, LLC

- Enclosure 1: Response to NRC Request for Additional Information, RAI No. Env-06S, Question No. ESP EIS 2.5-12, Review Section: ESP EIS 2.5 - Socioeconomics
- Enclosure 2: Proposed revisions, Part 3 – Environmental Report (ER)
- Enclosure 3: CD-ROM Containing KLD Traffic Impact Analysis for the PSEG Site, TR-441, Rev. 5

cc: USNRC Project Manager, Division of New Reactor Licensing, PSEG Site (w/enclosures)
USNRC Environmental Project Manager, Division of New Reactor Licensing (w/enclosures)
USNRC Region I, Regional Administrator (w/enclosures)
Oak Ridge National Laboratory

PSEG Letter ND-2013-0016, dated July 17, 2013

ENCLOSURE 1

RESPONSE to RAI No. Env-06S

**QUESTION No.
ESP EIS 2.5-12**

Review Section: ESP EIS 2.5 - Socioeconomics

Response to RAI No. Env-06S, Question ESP EIS 2.5-12:

In Reference 2, the NRC staff asked PSEG for information regarding Socioeconomics, as described in Subsection 2.5 of the Environmental Report. The specific request was:

rSOC-11S: Clarify the inconsistencies between the traffic analysis in the Environmental Report (ER) and in the Traffic Impact Analysis (TIA).

Supporting Information:

ESRP Section 4.4.2 directs the staff to identify and assess potential mitigation measures. ESRP Section 4.4.2 also directs the staff to analyze where the applicant has some control or "...little to no control over alternatives to mitigate impacts that in the reviewer's judgment are adverse..." The staff has noticed some inconsistencies between the information in the ER (Table 4.4-2, page 4.4-30) and the TIA (ML12286A197 & ML12286A199). Also, there are some impacts at intersections discussed in the TIA, but not the ER.

PSEG Response to NRC RAI:

ER Table 4.4-2 summarizes the results of the TIA performed for the PSEG Site ESPA. The table presents level of service information (LOS) for three of the cases presented in the TIA. The "Future No-Build" column depicts the traffic conditions in year 2021 if the new plant is not built at the PSEG Site. The "Future with Causeway" column depicts the traffic conditions with the causeway in service and construction activities taking place at the PSEG Site, but without any mitigation to alleviate the traffic impacts. The "With Mitigation" column depicts the traffic conditions with the causeway in service and construction activities taking place at the PSEG Site, and considers the mitigation measures noted in the far right hand column of the table.

The data for the "Future No-Build" column is sourced from Table 6 of Revision 4 of the TIA (ML12286A197 & ML12286A199). The data for the "Future with Causeway" column is not provided in Revision 4 of the TIA. The data for the "With Mitigation" column is sourced from Table 23 of Revision 4 of the TIA.

PSEG has revised the TIA (Revision 5, included in Enclosure 3) to provide the data for the "Future with Causeway" column. This information is provided in Appendix I, Table I-3.

ER Table 4.4-2 does not present every intersection evaluated in the TIA. The five intersections summarized in ER Table 4.4-2 are those intersections where the LOS is below New Jersey Department of Transportation (NJDOT) standards (i.e., C or worse) with the mitigation measures considered. Those intersections where the LOS remains the same or improves, and are at a LOS of B or better, are not depicted on the table.

Associated PSEG Site ESP Application Revisions:

ER Subsection 4.4.1.5 will be revised as shown in Enclosure 2 to clarify the description of the information presented in ER Table 4.4-2.

During preparation of this RAI response, PSEG reviewed the information presented in ER Table 4.4-2. In two cases the LOS indicated for the “Future with Causeway” column was incorrect. The proposed revision to ER Table 4.4-2 is provided in Enclosure 2.

PSEG Letter ND-2013-0016, dated July 17, 2013

ENCLOSURE 2

**Proposed Revisions
Part 3 – Environmental Report (ER)
Subsection 4.4 – Socioeconomic Impacts**

**PSEG Site
ESP Application
Part 3, Environmental Report**

Replace with "five"
per RAI Env-06S.

4.4.1.5 Transportation Routes

A number of major highways are located north and north-northeast of the PSEG Site. The major interstates are 76, 95, 276, 295, 476, 495 and 676 (Figure 2.2-5). The major NJ highways providing access between the site and these interstates are NJ Route 45 and NJ Route 49, which pass through Salem City.

To avoid disruptions to the HCGS and SGS operational workforces, construction-related traffic will primarily use the proposed causeway. The anticipated transportation routes to and from the PSEG Site via the proposed causeway are shown on Figure 2.5-7. As shown in this figure, there are multiple routes from the terminus of the proposed causeway to NJ Route 45 and NJ Route 49 in Salem City. PSEG conducted a traffic impact assessment (TIA) study to determine the impact of construction traffic. This study indicates that construction traffic on these roads is greatest during shift changes, when construction activities reach their peak. During shift changes, 2200 vehicles are estimated to use these local roads during peak construction. Delivery of construction materials, equipment and supplies adds another 50 vehicles per day to the local highways over the 68-month construction period.

Additional traffic on receiving roadways results in a deterioration in the level of service (LOS) at four key intersections near Salem. LOS is a measure of time delays at signalized and unsignalized intersections, and is ranked from A to F based on the delay times. LOS A reflects the optimum conditions with delay times of less than 10 seconds for both signalized and unsignalized intersections. Delay times of 10 to 20 seconds, 15 to 35 seconds, 25 to 55 seconds, 35 to 80 seconds, and greater than 50 – 80 seconds are classified as LOS B through F, respectively. The lower value of each noted LOS range is for the unsignalized intersections and the higher value for the signalized intersections. Three of these intersections are unsignalized and are located along Grievess Parkway at Chestnut, Oak, and Walnut streets. Grievess Parkway is located on the south side of Salem City and extends between Yorke Street to the east, and Front Street to the west. The fourth intersection, Front Street and NJ Route 49 (also known as South Broadway) is signalized and is located on the west / north side of Salem City. The fifth intersection, NJ Route 49 and Market Street is signalized and located at the center of Salem City. The projected LOS at these locations for the future without the causeway, and with the causeway are presented in Table 4.4-2. These data indicate that the LOS deteriorates more under the future with construction traffic scenario, particularly for the morning shift change. The morning LOS deteriorates from C to F at the Chestnut and Oak Street intersections (southeast approaches), and remains at F during peak hours at the Walnut Street and the Front Street NJ Route 49 intersections.

Based on this deterioration in LOS, the TIA evaluated various mitigation measures at four of the five intersections. The mitigation measures found to be the most effective and their associated affect on the future LOS levels with construction traffic are shown in Table 4.4-2. Potential mitigation measures include:

- Changing the three Grievess Parkway intersections at Chestnut, Oak and Walnut streets from two-way stop sign control to traffic light control
- Constructing turn bays at the Grievess Parkway/Oak Street intersection
- Adding another turn bay at the Front Street/NJ Route 49 intersection

Replace with Insert A
per RAI Env-06S.

Replace with "in the "With Mitigation" column in Table 4.4-2."
per RAI Env-06S.

Rev. 2

RAI Env-06S, Insert A

The projected LOS levels at these locations are presented in Table 4.4-2. The “Future No-Build” column depicts the traffic conditions in year 2021 if the new plant at the PSEG Site is not built. The “Future with Causeway” column depicts the traffic conditions with the causeway in service and construction activities taking place at the PSEG Site, but without any mitigation to alleviate the traffic impacts. These data indicate that the LOS deteriorates more under the future with construction traffic scenario, particularly for the morning shift change. The morning LOS deteriorates from C to F at the Chestnut and Oak Street intersections with Grieves Parkway (southeast approaches), and deteriorates to F during peak hours (AM and PM) at the Walnut Street and Grieves Parkway, and the Front Street and NJ Route 49 intersections. The “With Mitigation” column depicts the traffic conditions with the causeway in service and construction activities taking place at the PSEG Site, and considers the mitigation measures noted in the far right hand column of the table.

PSEG Site
ESP Application
Part 3, Environmental Report

Table 4.4-2
Level of Service Impacts at Key Intersections with and without Causeway Construction

Intersection	Level of Service (LOS) ^(a)						Mitigation Measures
	Future No-Build		Future With Causeway		With Mitigation		
	AM	PM	AM	PM	AM	PM	
Grieves Parkway and Walnut Street ^(b)					D	A	Traffic Signal
Northwest Approach	F	F	F	E			
Southeast Approach	F	F	F	C			
Grieves Parkway and Chestnut Street ^(b)					B	D	Traffic Signal
Northwest Approach	C	E	E	D			
Southeast Approach	C	C	F	C			
Grieves Parkway and Oak Street ^(b)					A	C	Traffic Signal
Northwest Approach	B	C	B	F			Extra eastbound right turn bay
Southeast Approach	C	B	F	F			Extra northbound left turn bay
Broadway (Route 49) and Front Street	B	B	F	F	D	D	Extra southbound left turn bay
Broadway (Route 49) and Market Street	B	C	C	D	C	E	None

a) LOS is a reflection of delays at intersections with A being the optimum with minimum delays, and F being the worst with unacceptable delays

b) Future No-Build has two-way stop sign control; Future With Causeway has traffic signal control

Replace with "D" per RAI Env-06S.

Replace with "E" per RAI Env-06S.

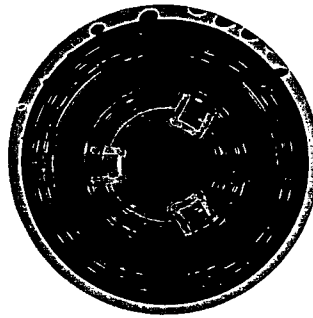
Revise to read "Future No-Build and Future With Causeway have two-way stop sign control; With Mitigation has traffic signal control" per RAI Env-06S.

PSEG Letter ND-2013-0016, dated July 17, 2013

ENCLOSURE 3

**CD-ROM Containing
KLD Traffic Impact Analysis for the PSEG Site, TR-441, Rev. 5**

PSEG Site
Early Site Permit Application
RAI No. Env-06S
Enclosure 3



PSEG
Power LLC

Sargent & Lundy LLC