



ND-2012-0031  
May 21, 2012

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

Subject: **PSEG Early Site Permit Application  
Docket Number 52-043  
Submittal of Revision 1 of the Early Site Permit Application for the  
PSEG Site**

Reference: 1) Letter ND-2010-0073 from David P. Lewis (PSEG) and Paul J. Davison (PSEG) to U.S. NRC, Application for Early Site Permit for the PSEG Site, dated May 25, 2010

By letter dated May 25, 2010, PSEG Power, LLC and PSEG Nuclear, LLC (PSEG) (Reference 1) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) requesting an Early Site Permit for the PSEG Site, located on the southern part of Artificial Island on the east bank of the Delaware River in Lower Alloways Creek Township, Salem County, New Jersey. The application was submitted in accordance with the requirements contained in 10 CFR Part 52, "Licenses, Certifications and Approvals for Nuclear Power Plants".

Applicants have not yet selected a specific reactor design for any future plant that may be built at the ESP Site. Therefore, technical information from various certified and proposed designs has been used to develop a plant parameter envelope for facility characterization necessary to evaluate the suitability of the site for any future construction and operation of a nuclear power plant.

This submittal includes changes identified by PSEG previous correspondence, including responses to NRC Requests for Additional Information (RAIs), through May 16, 2012. This application revision is composed of six parts. Each of these Parts is identified below along with indication of any revision contained in this document update. Changes to the documents are annotated by revision bars in the right-hand margin.

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NRD

- Part 1, Administrative Information – (Revision 1, included)
- Part 2, Site Safety Analysis Report – (Revision 1, included)
- Part 3, Environmental Report – (Revision 1, included)
- Part 4, Limited Work Authorization – Not used - a Limited Work Authorization is not being requested at this time
- Part 5, Emergency Plan – (Revision 1, included)
- Part 6, Withheld Information – At this time, no information is being withheld under 10 CFR 2.390. Emergency Plans for the states of New Jersey, Delaware, Maryland, and Pennsylvania have been submitted in hard copy under a separate cover letter and were requested to be withheld under 10 CFR 2.390.

Part 1 of this application revision has been revised to reflect changes in the identification of personnel serving on the PSEG Power, LLC and PSEG Nuclear, LLC Boards of Directors and those serving as Directors and Principal Officers of PSEG Power, LLC.

Part 2 has been revised to reflect changes due to responses to NRC Requests for Additional Information (RAI), changes due to applicant identified corrective action program items, and to correct minor editorial errors. The PSEG Nuclear Development Quality Assurance Program Description, Revision 1 will be submitted separately.

Part 3 has been revised to reflect changes resulting from the response to Part 2 RAIs and to correct minor editorial errors.

Part 5 has been revised to incorporate RAI-related changes. The Evacuation Time Estimate (ETE), which is included in Part 5, has been revised to incorporate RAI-related changes.

A document identifying each change, as well as its source or basis, will be provided as an aid to the NRC reviewers under separate cover. This document clearly identifies the basis for each change made in Revision 1 for the Parts specifically included in this submittal.

This ESP Application revision contains no Restricted Data or other defense information requiring separation in accordance with 10 CFR 50.33, Contents of applications; general information, paragraph (j).

Consistent with common licensing practice, most of the application text is written in the present tense, including discussions of facilities and programs not yet built or implemented. Exceptions to this approach are the discussions of operating experience and completed studies and evaluations, which are written in the past tense. It should be understood, however, that statements regarding facilities (e.g., structures, systems and components), and pre-construction, pre-operational, and operational activities (e.g., procedures and programs) typically address activities that have not yet been performed, and will not be performed until it is reasonable and appropriate to do so.

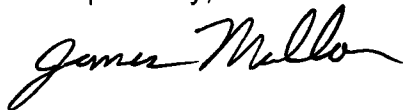
A complete set of the application documents (identified above) is provided in electronic file format on the enclosed disc (Enclosure 1), except for the offsite emergency plans which were previously submitted in hard copy under separate cover letters. Enclosure 1 contains a publicly-available version of the ESP Application, Revision 1. Appropriate pre-submission checks have been performed on the files contained in the Enclosure 1 disc to ensure compliance with the guidelines regarding electronic submissions provided on the NRC web site to ensure that the files are acceptable for electronic submittal. The disc includes a "packing slip" describing its contents, pursuant to NRC instructions for electronic submittals. The packing slip associated with ESPA Revision 0, Submittal 1, incorrectly titled SSAR Figures 1.2-1, 1.2-2 and 1.2-3 as 1.1-1, 1.1-2 and 1.1-3, respectively. The incorrect titles associated with SSAR Figures 1.2-1, 1.2-2 and 1.2-3 have been corrected in this packing slip, and therefore differ from the titles in the packing slip provided with ESPA Revision 0, Submittal 1. A preflight report identifying files with embedded font or figure resolution issues for Enclosure 1 is provided as Enclosure 2.

This submittal contains PDF files, one or more of which contains hyperlinks to other files or to the Internet. These hyperlinks are either inoperable or are not essential to the use of the filing. Any material referenced by hyperlinks to the Internet that was essential for use of this filing has been submitted as part of the filing. Any material referenced by a hyperlink to another PDF that was essential for the use of this filing has either been included by reference or submitted as part of this filing.

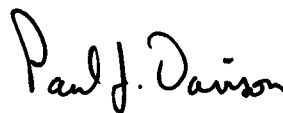
If any additional information is needed, please contact David Robillard, PSEG Nuclear Development Licensing Engineer at (856) 339-7914.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 21st day of May, 2012.

Respectfully,



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



Paul J. Davison  
Vice President, Operations Support  
PSEG Nuclear, LLC

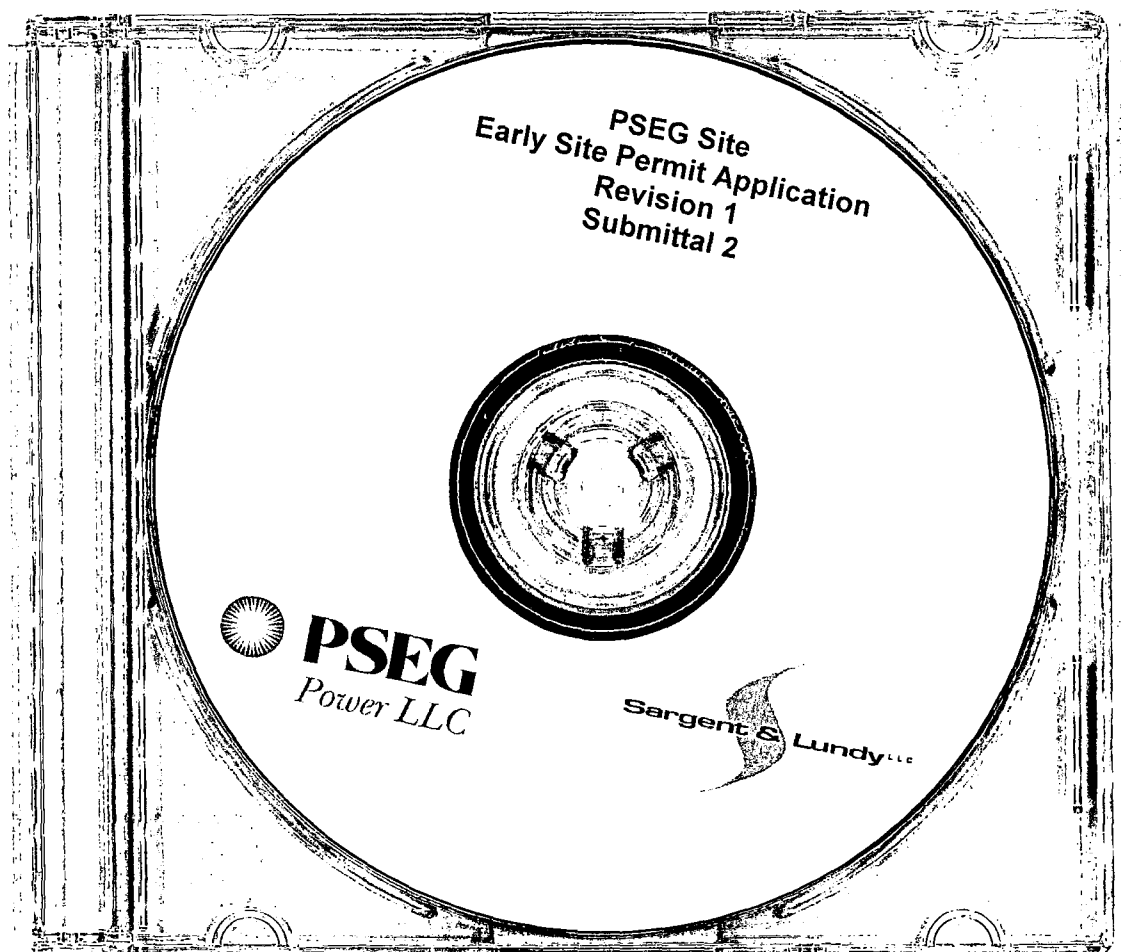
Enclosure 1: PSEG ESP Application DVD  
Enclosure 2: ESP Application Pre-Flight Report

cc: USNRC, Director, Office of New Reactors/DNRL (w/enclosures)  
USNRC, Project Manager, Division of New Reactor Licensing, PSEG Site  
(w/enclosures)  
USNRC Region I, Regional Administrator (w/enclosures)

**PSEG Letter ND-2012-0031, dated May 21, 2012**

**ENCLOSURE 1**

**PSEG ESP Application DVD**



**PSEG Letter ND-2012-0031, dated May 21, 2012**

**ENCLOSURE 2**

**ESP Application Pre-Flight Report**

## PSEG Site ESPA Rev. 1 Submittal 2 Pre-flight Report

This document serves as a pre-flight report for the PSEG Site ESPA Revision 1 Submittal 2. The following files (mostly individual figure files) do not pass pre-flight, but text is word searchable and clarity/legibility is of high quality.

No.	File Name	Preflight Status	Reason
<b>Part 2 – Site Safety Analysis Report</b>			
1	PSEG_SSAR_APP_2AA.pdf	Error/Failed	Fonts not embedded
2	PSEG_SSAR_FIG01_02_003.pdf	Error/Failed	Fonts not embedded
3	PSEG_SSAR_FIG02_01_023.pdf	Error/Failed	Fonts not embedded
4	PSEG_SSAR_FIG02_04_01_004.pdf	Error/Failed	Fonts not embedded
5	PSEG_SSAR_FIG02_04_12_004.pdf	Error/Failed	Fonts not embedded
6	PSEG_SSAR_FIG02_05_01_037.pdf	Error/Failed	Fonts not embedded
7	PSEG_SSAR_FIG02_05_01_038.pdf	Error/Failed	Fonts not embedded
8	PSEG_SSAR_FIG02_05_01_039.pdf	Error/Failed	Fonts not embedded
9	PSEG_SSAR_FIG02_05_04_01_002.pdf	Error/Failed	Fonts not embedded
10	PSEG_SSAR_FIG02_05_04_01_003.pdf	Error/Failed	Fonts not embedded
11	PSEG_SSAR_FIG02_05_04_01_004.pdf	Error/Failed	Fonts not embedded
12	PSEG_SSAR_FIG02_05_04_01_005.pdf	Error/Failed	Fonts not embedded
13	PSEG_SSAR_FIG02_05_04_01_007.pdf	Error/Failed	Fonts not embedded
14	PSEG_SSAR_FIG02_05_04_01_008.pdf	Error/Failed	Fonts not embedded
15	PSEG_SSAR_FIG02_05_04_01_009.pdf	Error/Failed	Fonts not embedded
16	PSEG_SSAR_FIG02_05_04_01_010.pdf	Error/Failed	Fonts not embedded
17	PSEG_SSAR_FIG02_05_04_02_001.pdf	Error/Failed	Fonts not embedded
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19	PSEG_SSAR_FIG02_05_04_02_003.pdf	Error/Failed	Fonts not embedded
20	PSEG_SSAR_FIG02_05_04_02_004.pdf	Error/Failed	Fonts not embedded
21	PSEG_SSAR_FIG02_05_04_02_005.pdf	Error/Failed	Fonts not embedded
22	PSEG_SSAR_FIG02_05_04_02_006.pdf	Error/Failed	Fonts not embedded
23	PSEG_SSAR_FIG02_05_04_02_007.pdf	Error/Failed	Fonts not embedded
24	PSEG_SSAR_FIG02_05_04_03_001.pdf	Error/Failed	Fonts not embedded
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26	PSEG_SSAR_FIG02_05_04_03_003.pdf	Error/Failed	Fonts not embedded
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28	PSEG_SSAR_FIG02_05_04_04_001.pdf	Error/Failed	Fonts not embedded
29	PSEG_SSAR_FIG02_05_04_04_006.pdf	Error/Failed	Fonts not embedded
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31	PSEG_SSAR_FIG02_05_04_04_008.pdf	Error/Failed	Fonts not embedded
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33	PSEG_SSAR_FIG02_05_04_05_002.pdf	Error/Failed	Fonts not embedded
34	PSEG_SSAR_FIG02_05_04_06_001.pdf	Error/Failed	Fonts not embedded
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36	PSEG_SSAR_FIG02_05_04_07_005B.pdf	Error/Failed	Fonts not embedded
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40	PSEG_SSAR_FIG02_05_04_07_006B.pdf	Error/Failed	Fonts not embedded

**PSEG Site ESPA Rev. 1 Submittal 2 Pre-flight Report**

<b>No.</b>	<b>File Name</b>	<b>Preflight Status</b>	<b>Reason</b>
41	PSEG_SSAR_FIG02_05_04_07_006C.pdf	Error/Failed	Fonts not embedded
42	PSEG_SSAR_FIG02_05_04_07_006D.pdf	Error/Failed	Fonts not embedded
43	PSEG_SSAR_FIG02_05_04_07_007.pdf	Error/Failed	Fonts not embedded
44	PSEG_SSAR_FIG02_05_04_07_008a.pdf	Error/Failed	Fonts not embedded
45	PSEG_SSAR_FIG02_05_04_07_008b.pdf	Error/Failed	Fonts not embedded
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60	PSEG_SSAR_FIG02_05_05_002.pdf	Error/Failed	Fonts not embedded
<b>Part 3 – Environmental Report</b>			
1	PSEG_ER_CHAP07.pdf	Error/Failed	< 300 ppi due to images in section
2	PSEG_ER_FIG02_06_005.pdf	Error/Failed	Fonts not embedded
3	PSEG_ER_FIG02_06_006.pdf	Error/Failed	Fonts not embedded
4	PSEG_ER_FIG02_06_007.pdf	Error/Failed	Fonts not embedded
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6	PSEG_ER_FIG02_06_009.pdf	Error/Failed	Fonts not embedded
7	PSEG_ER_FIG03_01_002.pdf	Error/Failed	Fonts not embedded
<b>Part 5 - Emergency Plan</b>			
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2	PSEG_EP_ATT03.pdf	Error/Failed	Fonts not embedded
3	PSEG_EP_ATT11.pdf	Error/Failed	< 300 ppi due to images in attachment and Fonts not embedded
4	PSEG_EP_SEC01.pdf	Error/Failed	< 300 ppi due to 4 figures (maps) in section