

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman  
Dr. Gary S. Arnold  
Dr. Craig M. White

In the Matter of

PSEG POWER, LLC AND PSEG  
NUCLEAR, LLC

(Early Site Permit Application)

Docket No. 52-043-ESP

ASLBP No. 15-943-01-ESP-BD01

January 27, 2016

MEMORANDUM AND ORDER  
(Identifying Areas for Prefiled Testimony)

On January 14, 2016, in accordance with the Board's Memorandum and Order of December 15, 2015,<sup>1</sup> the parties responded to the Board's initial written questions regarding the Safety Evaluation Report (SER).<sup>2</sup> Collectively, the parties' responses total 56 pages, exclusive of the authors' supporting affidavits and resumes. As requested by the Board, the parties coordinated their responses so as to avoid repetition.<sup>3</sup>

The parties have provided substantial and, for the most part, directly responsive answers to the Board's first set of written questions concerning the early site permit (ESP) application by PSEG Power, LLC and PSEG Nuclear, LLC (collectively PSEG). As contemplated by the Initial Scheduling Order, the need for written or oral testimony during the evidentiary hearing is

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<sup>1</sup> Licensing Board Memorandum and Order (Initial Board Questions and Associated Administrative Directives) (Dec. 15, 2015) (unpublished).

<sup>2</sup> PSEG Responses to Initial Board Questions (Jan. 14, 2016); NRC Staff Response to the Licensing Board's Initial Questions Issued December 15, 2015 (Jan. 14, 2016).

<sup>3</sup> December 15, 2015 Questions Order at 2.

therefore reduced to the extent that the parties' answers to the Board's written questions resolve many of the Board's concerns and establish an adequate record.<sup>4</sup>

After reviewing the parties' responses to its initial written questions, however, the Board still wishes to receive more detailed and integrated prefiled testimony and exhibits concerning certain matters, as described below. When preparing such testimony, the parties may repeat or incorporate by reference portions of their January 14, 2016 responses as appropriate. The matters to be covered in prefiled written testimony and exhibits are as follows:

1. As allowed by the Board's Order of December 15, 2015, the NRC Staff has elected to defer its response to SER Question No. 1. Accordingly, the Staff shall address SER Question No. 1 in its prefiled written testimony and exhibits.
2. The Staff's response to SER Question No. 9 acknowledges that each of the nine permit conditions the Staff proposes in the SER (at pp. A-2 through A-6) must be "precisely drawn so that the verification of compliance becomes a largely ministerial . . . act." Yet some of the proposed permit conditions arguably include subjective requirements, such as the direction that a future applicant must examine and adequately "evaluate" geologic features (No. 3) and develop emergency action plans that contain "few or no deviations or differences" from NRC-endorsed standards (No. 9). The Staff shall address in detail how verification of compliance with each proposed permit condition can be accomplished by "largely ministerial" action and, if and where appropriate, propose alternative language that might set forth a more objective standard.
3. In response to SER Question No. 20 the Staff stated as follows:

While the Staff recognizes that increasing the resolution of the overall watershed basin model could improve the precision of the Applicant's river flooding model results, the Staff determined on the basis of experience with hydraulic modeling that such improvements could not change the conclusion that storm surge is the bounding flood hazard for the PSEG ESP site and additional analyses were not necessary.

To what extent is the "experience with hydraulic modeling" upon which this decision was based documented? If experience based knowledge is used in the Staff's decision-making process generally, how is this experience documented?

4. The USGCRP report cited in the FSER section 2.3.1.4.10 noted that the power and frequency of tropical storms has "increased substantially in recent decades," and

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<sup>4</sup> Initial Scheduling Order (Nov. 16, 2015) at 3 (unpublished).

many reports, including the USGCRP report, have predicted that this trend will continue in the coming decades. Expanding on their discussion in section 2.3.1.4.10, Staff shall explain how they addressed the issue of climate change induced increases in the power and frequency of hurricanes. In particular, Staff will explain how the models used to establish the PMH at the PSEG ESP site accommodate predicted increases in the power and frequency of storms.

5. In what ways has the PSEG ESP application and review differed from previous ESPs due to events at Fukushima and subsequent evaluations and recommendations?
6. Explain, for the non-expert, how the Applicant calculated the long-term atmospheric dispersion for routine releases. What was the extent of Staff's review? Details of the calculations of the GASPAR code are not required.

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To the extent practicable, the Board again encourages the parties to coordinate their testimony so as to avoid repetition. As provided in the Initial Scheduling Order,<sup>5</sup> all prefiled testimony shall be submitted no later than February 25, 2016, shall identify the responding subject matter expert(s) or individuals(s), and shall be submitted in exhibit form, under oath, so that it is suitable for receipt into evidence without the necessity of the personal appearance of the witness. Unless otherwise advised by the Board, however, each party shall ensure that each person for whom it submits written testimony personally attends the evidentiary hearing and is available to testify and respond to questions. (In contrast, persons who have been identified as responsible for answers to the Board's written questions—but who are not also identified as responsible for prefiled testimony—need not attend the evidentiary hearing unless expressly requested by the Board.)

The Board intends to mark and enter prefiled testimony and exhibits into the record electronically. Pursuant to 10 C.F.R. § 2.304(g), each item of prefiled testimony and each exhibit that is submitted via the agency's E-filing system must be submitted as an individual electronic file. Each party shall number its prefiled testimony and exhibits with an abbreviated

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<sup>5</sup> Initial Scheduling Order (Nov. 16, 2015) at 5 (unpublished).

party designation followed by a three-digit number. For example, the first item of testimony or exhibit submitted by the NRC Staff shall be NRC001, and the first item of testimony or exhibit submitted by the Applicant shall be PSEG001.<sup>6</sup> The exhibit number should be placed in the upper right-hand corner of the first page of the document, and a separate cover sheet should be used only if there is no space on the first page where the exhibit number can be legibly placed. When prefiled testimony and exhibits are submitted, each party should transmit an electronic copy of its prefiled exhibit list in Microsoft Word format to the Board's law clerks, Jennifer Scro (Jennifer.Scro@nrc.gov) and Cooper Strickland (Cooper.Strickland@nrc.gov). Exhibit lists should be ordered by exhibit number and set forth the witness(es) with whom the exhibit is associated and be prepared using the exhibit list template included as Attachment A to this order.

It is so ORDERED.

FOR THE ATOMIC SAFETY  
AND LICENSING BOARD

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Paul S. Ryerson, Chairman  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
January 27, 2016

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<sup>6</sup> If a document must be separated into multiple segments to comply with the NRC's guidance on maximum file sizes, each segment should be identified with a letter following the exhibit number: for example, NRC001A, NRC001B and NRC001C.

**Attachment A**

Submitted/Revised: [mm/dd/yyyy]

In the Matter of PSEG POWER, LLC AND PSEG NUCLEAR, LLC  
(Early Site Permit Application)  
Docket No. 52-043-ESP \ ASLBP No. 15-943-01-ESP-BD01  
2016 Evidentiary Hearing

[Party] Hearing Exhibits

[Party] Exhibit #	Witness(es)	Descriptive Exhibit Title <sup>7</sup>	ADAMS Accession # (If Applicable)

<sup>7</sup> Exhibit titles should not exceed 200 characters and should not include ADAMS Accession Numbers.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
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PSEG POWER, LLC ) Docket No. 52-043-ESP  
AND PSEG NUCLEAR, LLC )  
(Early Site Permit Application) )

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **MEMORANDUM AND ORDER (Identifying Areas for Prefiled Testimony)** have been served upon the following persons by Electronic Information Exchange or by electronic mail.

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PSEG POWER, LLC AND PSEG NUCLEAR, LLC - Docket No. 52-043-ESP  
**MEMORANDUM AND ORDER (Identifying Areas for Prefiled Testimony)**

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[Original signed by Herald M. Speiser ]  
Office of the Secretary of the Commission

Dated at Rockville, Maryland,  
this 27<sup>th</sup> day of January, 2016