

PSEGSPeRAIPEm Resource

From: Chowdhury, Prosanta
Sent: Monday, May 16, 2011 2:17 PM
To: 'PSEGRAIResponses@pseg.com'
Cc: PSEGSPeRAIPEm Resource; 'David.Lewis2@pseg.com'; 'James.Mallon@pseg.com'; 'David.Robillard@pseg.com'; Colaccino, Joseph; Silvia, Andrea; Clark, Phyllis; McLellan, Judith; Caverly, Jill; Giacinto, Joseph; Raione, Richard
Subject: PSEG Site ESPA FINAL RAI 29 (eRAI 5714) SRP-02.04.12 (RHEB)
Attachments: PSEG Site ESPA Final RAI 29 (eRAI 5714).pdf

Please find attached RAI 29 for the PSEG Site ESP Application. A draft of the RAI was provided to you on May 6, 2011. You informed via email on May 16, 2011, that you would not need a clarification call involving this specific RAI, and therefore, we are issuing this RAI as final with no changes made to it.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 calendar days of receipt of RAIs. For any RAIs that cannot be responded to within 30 calendar days, it is expected that a date for receipt of this information will be provided to the staff within the 30-calendar day period so that the staff can assess how this information will impact the published schedule.

If you have any questions, please contact me.

Prosanta Chowdhury
Project Manager
EPR Projects Branch
Division of New Reactor Licensing
Office of New Reactors
301-415-1647

Hearing Identifier: PSEG_Site_EarlySitePermit_RAI
Email Number: 59

Mail Envelope Properties (320204600EA7B9408FE833FF15E4FF7D57C1E5A707)

Subject: PSEG Site ESPA FINAL RAI 29 (eRAI 5714) SRP-02.04.12 (RHEB)
Sent Date: 5/16/2011 2:17:11 PM
Received Date: 5/16/2011 2:17:13 PM
From: Chowdhury, Prosanta

Created By: Prosanta.Chowdhury@nrc.gov

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Files	Size	Date & Time
MESSAGE	954	5/16/2011 2:17:13 PM
PSEG Site ESPA Final RAI 29 (eRAI 5714).pdf	44447	

Options

Priority: Standard

Return Notification: No

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Sensitivity: Normal

Expiration Date:

Recipients Received:

Request for Additional Information No. 29

Application Revision 0

FINAL

5/16/2011

PSEG Site ESP
PSEG Power LLC, PSEG Nuclear LLC
Docket No. 52-043
SRP Section: 02.04.12 - Groundwater
Application Section: 2.4.12

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.12-1

In accordance with the requirements of 10 CFR 100.20(c) "Factors to be considered when evaluating sites" relating to hydrology and as recommended in Standard Review Plan 2.4.12 "Groundwater" acceptance criteria, please describe hydrogeologic parameters for the units described in Sections 2.4.12.1.2.2 (Alluvium) through 2.4.12.1.2.13 (Merchantville Formation). The only unit discussed in detail was the Potomac Raritan Magothy (PRM) Formation" (Section 2.4.12.1.2.14)

02.04.12-2

In accordance with the requirements of 10 CFR 100.20(c) "Factors to be considered when evaluating sites" relating to hydrology and as recommended in Standard Review Plan 2.4.12 "Groundwater" acceptance criteria, please describe the detailed development of the groundwater flow model, the integration of the previous site model, existing regional studies and site specific parameters and data, and discuss the model simulations and calibration including the impacts of boundary conditions on model accuracy.

02.04.12-3

In accordance with the requirements of 10 CFR 100.20(c) "Factors to be considered when evaluating sites" relating to hydrology and as recommended in Standard Review Plan 2.4.12 "Groundwater" acceptance criteria, please describe the horizontal and vertical model grid cell sizing and associated numerical accuracy of the model simulations for the 1988 Dames and Moore study Section 2.4.12.3.2 and the more recent Dewatering Study (Section 2.4.12.4.1.1).

02.04.12-4

In accordance with the requirements of 10 CFR 100.20(c) "Factors to be considered when evaluating sites" relating to hydrology and as recommended in Standard Review Plan 2.4.12 "Groundwater" acceptance criteria, please describe the assumptions used

for conservative modeling of flow velocity such as the assumptions extending to the hydraulic conductivity, porosity and hydraulic gradient (Section 2.4.12.1.3.5), and clarify the use of site specific porosity information for horizontal and vertical flow velocity calculations. Also, please update Table 2.4.12-1 to indicate whether porosities listed are effective or total porosities, and update Table 2.4.12-8 so that the footnote agrees with the nomenclature used to delineate an upward or downward hydraulic gradient.

02.04.12-5

In accordance with the requirements of 10 CFR 100.20(c) “Factors to be considered when evaluating sites” relating to hydrology and as recommended in Standard Review Plan 2.4.12 “Groundwater” acceptance criteria, please: (1) clarify how the 1988 Dames and Moore modeling results remain conservative and applicable; and (2) describe whether existing production wells are to be used for water supply and address the impacts of any new proposed wells on groundwater flow, vertical gradients, and transport pathways.