PSEGESPeRAIPEm Resource

From: Chowdhury, Prosanta
Sent: Friday, April 29, 2011 11:38 AM
To: 'PSEGRAIResponses@pseg.com'
Cc: PSEGESPeRAIPEm 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 DRAFT RAI 26 (eRAI 5711) SRP-02.04.04 (RHEB)
Attachments: PSEG Site ESPA Draft RAI 26 (eRAI 5711).doc

Please find attached DRAFT RAI No. 26 for the PSEG Site ESP application. You have ten working days to review this request and to decide whether you need a conference call to discuss it. Please notify me of your decision in this regard.

After the call, or after ten days, the RAI will be finalized and issued to you. You will then have 30 calendar days to respond. These durations are factored into your review schedule. If additional time is required to respond, please inform me of your proposed schedule to respond at your earliest opportunity.

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: 49

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Subject: PSEG Site ESPA DRAFT RAI 26 (eRAI 5711) SRP-02.04.04 (RHEB)
Sent Date: 4/29/2011 11:37:52 AM
Received Date: 4/29/2011 11:37:53 AM
From: Chowdhury, Prosanta

Created By: Prosanta.Chowdhury@nrc.gov

Recipients:
"PSEGESPeRAIPEm Resource" <PSEGESPeRAIPEm.Resource@nrc.gov>
Tracking Status: None
"'David.Lewis2@pseg.com'" <David.Lewis2@pseg.com>
Tracking Status: None
"'James.Mallon@pseg.com'" <James.Mallon@pseg.com>
Tracking Status: None
"'David.Robillard@pseg.com'" <David.Robillard@pseg.com>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"Silvia, Andrea" <Andrea.Silvia@nrc.gov>
Tracking Status: None
"Clark, Phyllis" <Phyllis.Clark@nrc.gov>
Tracking Status: None
"McLellan, Judith" <Judith.McLellan@nrc.gov>
Tracking Status: None
"Caverly, Jill" <Jill.Caverly@nrc.gov>
Tracking Status: None
"Giacinto, Joseph" <Joseph.Giacinto@nrc.gov>
Tracking Status: None
"Raione, Richard" <Richard.Raione@nrc.gov>
Tracking Status: None
"'PSEGRAIResponses@pseg.com'" <PSEGRAIResponses@pseg.com>
Tracking Status: None

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Options
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Return Notification: No
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Request for Additional Information No. 26
Application Revision 0

DRAFT

4/29/2011

PSEG Site ESP
PSEG Power LLC, PSEG Nuclear LLC
Docket No. 52-043
SRP Section: 02.04.04 - Potential Dam Failures
Application Section: 2.4.4

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.04-1

NUREG-0800, Standard Review Plan (SRP), Section 2.4.4, ‘Potential Dam Failures,' establishes guidance that the NRC staff use to evaluate whether an applicant meets the NRC's regulations.

For the analysis presented in Section 2.4.4 of the PSEG SSAR, the applicant used Stokes Law to analyze the effects of sediment transport in the event of dam failure instead of a fully calibrated sediment transport model. The conclusion of the analysis was that the sediment particles will drop out prior to reaching the site.

Staff requests that the applicant provide a detailed description of the thought process that led to the decision that a Stokes Law analysis of sediment transport was sufficient. This discussion should include alternative analyses considered and the conceptual model that was used to justify this analysis.

02.04.04-2

NUREG-0800, Standard Review Plan (SRP), Section 2.4.4, ‘Potential Dam Failures,' establishes guidance that the NRC staff use to evaluate whether an application meets the NRC's regulations.

In the PSEG ESP application SSAR, the applicant looked at various scenarios for breach of dams and verified the time required for the flood wave to get to the site. In this analysis, flood waters from the nearest dam failure would have already receded by the time the next flood waters would arrive. The staff thinks that the time interval used to eliminate the initial flood threat may not be sufficiently conservative and that the combined events should be considered.

The staff requests additional discussion of the conceptual model used to justify the method used to eliminate the risk of flooding due to the failure of multiple dams. Please include any historical data or information drawn upon to verify the results of this analysis.