

## PMVogtleCOLPEm Resource

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**From:** Christian Araguas  
**Sent:** Friday, August 29, 2008 4:53 PM  
**To:** wasparkm@southernco.com; AGAUGHTM@SOUTHERNCO.COM  
**Cc:** PMVogtleCOLPEm Resource  
**Subject:** RAI Letter No. 002 Related SRP Sections 2.3.1 and 2.3.5 for Vogtle Units 3 and 4  
**Attachments:** VOG-RAI-LTR-002.pdf

Wes/Amy,

Attached is RAI Letter No. 002 related SRP Sections 2.3.1 and 2.3.5 for Vogtle Units 3 and 4. The ADAMS accession number is ML082421137.

Christian Araguas  
Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

**Hearing Identifier:** Vogtle\_COL\_Public  
**Email Number:** 3

**Mail Envelope Properties** (CB87FC66F95637428C5E0D066E756B6F7C8C35022B)

**Subject:** RAI Letter No. 002 Related SRP Sections 2.3.1 and 2.3.5 for Vogtle Units 3 and 4  
**Sent Date:** 8/29/2008 4:52:41 PM  
**Received Date:** 8/29/2008 4:52:45 PM  
**From:** Christian Araguas  
**Created By:** Christian.Araguas@nrc.gov

**Recipients:**  
"PMVogtleCOLPEm Resource" <PMVogtleCOLPEm.Resource@nrc.gov>  
Tracking Status: None  
"wasparkm@southernco.com" <wasparkm@southernco.com>  
Tracking Status: None  
"AGAUGHTM@SOUTHERNCO.COM" <AGAUGHTM@SOUTHERNCO.COM>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	307	8/29/2008 4:52:45 PM
VOG-RAI-LTR-002.pdf	156800	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

## **VoglecolRAIsPEm Resource**

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**From:** Christian Araguas  
**Sent:** Friday, August 29, 2008 4:41 PM  
**To:** VoglecolRAIsPEm Resource  
**Subject:** Request for Additional Information Letter No. 002 Related To SRP Sections 02.03.01 and 02.03.05 for the Vogtle 3 and 4 Combined License Application  
**Attachments:** VOG-RAI-LTR-002.doc

Christian Araguas  
Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

**Hearing Identifier:** Vogtle\_COL\_eRAIs  
**Email Number:** 5

**Mail Envelope Properties** (CB87FC66F95637428C5E0D066E756B6F7C8C350229)

**Subject:** Request for Additional Information Letter No. 002 Related To SRP Sections 02.03.01 and 02.03.05 for the Vogtle 3 and 4 Combined License Application  
**Sent Date:** 8/29/2008 4:40:55 PM  
**Received Date:** 8/29/2008 4:40:56 PM  
**From:** Christian Araguas

**Created By:** Christian.Araguas@nrc.gov

**Recipients:**  
"VogtlecolRAIsPEm Resource" <VogtlecolRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	144	8/29/2008 4:40:56 PM
VOG-RAI-LTR-002.doc	55802	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

August 29, 2008

Mr. Joseph A. (Buzz) Miller  
Senior Vice President  
Southern Nuclear Operating Company  
P.O. Box 1295  
Birmingham, AL 35201

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 002 RELATED TO  
SRP SECTIONS 02.03.01 AND 02.03.05 FOR THE VOGTLE ELECTRIC  
GENERATING PLANT UNITS 3 AND 4 COMBINED LICENSE APPLICATION

Dear Mr. Miller:

By letter dated March 28, 2008, Southern Nuclear Operating Company (SNC), submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me for the Vogtle Electric Generating Plant combined license at 301-415-3637.

Sincerely,

**/RA/**

Christian Araguas  
Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-025  
52-026

Enclosure:  
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me for the Vogtle Electric Generating Plant combined license at 301-415-3637.

Sincerely,

**/RA/**

Christian Araguas  
Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-025  
52-026  
eRAI Tracking No. 539 and 543

Enclosure:  
Request for Additional Information

Distribution:

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NRO-002

OFFICE	RSAC/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	CCox*	CAraguas*	MSpencer*	CAraguas*
DATE	6/24/08	8/05/08	8/26/08	8/29/08

\*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD COPY**

**Request for Additional Information No. 539  
Vogtle  
Southern Nuclear Operating Co.  
Docket No. 52-0025 and 52-0026  
SRP Section: 02.03.01 - Regional Climatology  
Application Section: 2.3.1**

**QUESTIONS FROM SITING AND ACCIDENT CONSEQUENCE BRANCH (RSAC)**

02.03.01-1

FSAR Section 2.3.1.3.4 states that for the VEGP site, the 100-year snow load is 10 psf which is well within the 63 psf design basis snow load of the AP1000. The 10 psf is a ground snow load value, whereas the 63 psf is a roof snow load value. Please clarify why 63 psf was used instead of 75 psf, as given in FSAR Table 2.0-201?

02.03.01-2

To assist the NRC staff's review according to NUREG-0800, Section 2.3.1, please clarify whether both the AP1000 DCD site parameter and Vogtle ESP site characteristic for 3-second wind gust are based on a 100-year return period in FSAR Table 2.0-201.

**Request for Additional Information No. 543 Revision 0  
Vogtle**

**Southern Nuclear Operating Co.  
Docket No. 52-0025 and 52-0026  
SRP Section: 02.03.05 - Long-Term Atmospheric Dispersion Estimates for Routine Releases  
Application Section: 2.3.5**

**QUESTIONS FROM SITING AND ACCIDENT CONSEQUENCE BRANCH (RSAC)**

02.03.05-1

FSAR Section 2.3.5 states that using the same assumptions and methodology as described in the ESPA SSAR (which relied on DCD Revision 15), along with the building dimensions provided in DCD Revision 16, the long-term (routine release) dispersion and deposition estimates were evaluated at the Dose Calculation EAB and at the various receptor locations described in the ESPA SSAR. The FSAR stated that this evaluation confirmed that the  $\chi/Q$  values for the EAB and the various receptor locations are bounded by those provided in the ESPA.

Using an updated building cross sectional area of 2636 m<sup>2</sup> and a containment height of 60.9 m, while still maintaining the other XOQDOQ inputs consistent with the Vogtle ESP, the staff calculated slightly less conservative  $\chi/Q$  values for both the EAB and the



various receptors. Please reevaluate the potential changes in the  $\chi/Q$  and  $D/Q$  values due to the change in AP1000 building dimensions. Given that some of the resulting values appear to be less conservative (i.e., higher values) please provide, as part of Section 2.3.5 of the COL application, an updated version of the information found in ESP Tables 2.3-17 and 2.3-18.