

## HarrisRAIsPEm Resource

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**From:** Hughes, Brian  
**Sent:** Tuesday, March 13, 2012 2:49 PM  
**To:** HarrisRAIsPEm Resource  
**Subject:** RAI-LTR-081 RELATED TO SRP SECTION 02.05.02 VIBRATORY GROUND MOTION FOR HARRIS 2 & 3 COLA  
**Attachments:** HAR-RAI-LTR-081.doc

**Hearing Identifier:** HarrisCOL\_eRAIs  
**Email Number:** 86

**Mail Envelope Properties** (3D388D66E29B124A910BAC867C3A359DBE8D8272A6)

**Subject:** RAI-LTR-081 RELATED TO SRP SECTION 02.05.02 VIBRATORY GROUND  
MOTION FOR HARRIS 2 & 3 COLA  
**Sent Date:** 3/13/2012 2:48:30 PM  
**Received Date:** 3/13/2012 2:49:21 PM  
**From:** Hughes, Brian

**Created By:** Brian.Hughes@nrc.gov

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

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

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	3	3/13/2012 2:49:21 PM
HAR-RAI-LTR-081.doc	41582	

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

03/14/2012

Mr. John Elnitsky  
Vice President, Nuclear Plant Development  
Progress Energy Carolinas, Inc.  
P.O. Box 14042  
Saint Petersburg, FL 33733

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 081 RELATED TO  
SRP SECTION 02.05.02 VIBRATORY GROUND MOTION FOR THE SHEARON  
HARRIS UNITS 2 AND 3 COMBINED LICENSE APPLICATION

Dear Mr. Elnitsky:

By letter dated February 18, 2008, Progress Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced 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 90 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 at 301-415-6582.

Sincerely,

/RA/

Brian Hughes, Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

Enclosure: Request for Additional Information

JElnitsky

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

**/RA/**

Brian Hughes, Lead Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

ERAI Tracking No. 6104

Enclosure: Request for Additional Information

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NRO-002

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NAME	DSeber*	RKaras	BHughes*	BHughes*
DATE	10/09/11	10/10/11	03/14/12	03/14/12

\*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD COPY**

Request for Additional Information No. 6104

3/14/2012

Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023  
SRP Section: 02.05.02 - Vibratory Ground Motion  
Application Section: 2.5.2 Vibratory Ground Motion

QUESTIONS for Geosciences and Geotechnical Engineering Branch 1 (RGS1)

02.05.02-19

In accordance with NUREG-0800, Standard Review Plan, Chapter 2.5.2, "Vibratory Ground Motion," and Regulatory Guide (RG) 1.208, "A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion" please assess the adequacy of the existing EPRI-SOG seismic source model in light of the August 23, 2011 **M**5.8 Mineral, Virginia earthquake. The earthquake was located in the Central Virginia Seismic Zone, which is modeled by all of the EPR-SOG ESTs except for the Law Engineering Team. Please review the adequacy of the each of the ESTs source models that incorporate this earthquake (including the Law Engineering Team) in terms of the maximum magnitude probability distribution, source geometry, probability of activity, and seismicity rates. In addition, please address the impact on the GMRS.