

## NorthAnnaRAIsPEm Resource

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**From:** Shea, James  
**Sent:** Wednesday, July 08, 2015 3:08 PM  
**To:** na3raidommailbox@dom.com  
**Cc:** NorthAnnaRAIsPEm Resource; Weisman, Robert; Carpentier, Marcia; Xu, Jim; Nie, Jinsuo; Karas, Rebecca; Chakravorty, Manas; Wang, George; Jenkins, Ronaldo; Eudy, Michael; Brittner, Donald; Graizer, Vladimir; Chokshi, Nilesh  
**Subject:** North Anna 3 RAI 02.05.02-08  
**Attachments:** RAI\_7820 (3).docx

**By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted a Combined License Application for North Anna, Unit 3, pursuant to Title 10 of the *Code of Regulations*, Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this COLA.**

**The NRC staff has identified that additional information is needed to continue portions of the review and a Request for Additional Information (RAI), is enclosed. To support the review schedule, Dominion is requested to respond within 45 days of the date of this request. If the RAI response involves changes to the application documentation, Dominion is requested to include the associated revised documentation with the response.**

Thanks,

### **James Shea**

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**From:** Shea, James

**Created By:** James.Shea@nrc.gov

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## Request for Additional Information

Issue Date: 07/08/15

Application Title: North Anna, Unit 3 - Docket Number 52-017

Operating Company: Dominion

Docket No. 52-017

Review Section: 02.05.02 - Vibratory Ground Motion

Application Section:

### QUESTIONS

02.05.02-08

By letter dated February 23, 2015 (NA3-15-002), you provided revised Ground Motion Response Spectra (GMRS) for the North Anna Unit 3 COL application using the EPRI 2013 Ground Motion Model (GMM), and developed Foundation Input Response Spectra (FIRS). For North Anna Power Station Units 1 and 2, on September 17, 2011, you provided a Summary Report of the August 23, 2011, Earthquake Response and Restart Readiness Determination Plan with the 5% damped response spectra of the base mat recordings of the August 23, 2011, Mineral, Virginia earthquake, shown in Attachment 3 of the report. The response spectra of these base mat earthquake recordings exceed the GMRS and FIRS in the low frequency range. The planned North Anna 3 safety-related structures are designed to the Certified Seismic Design Response Spectra (CSDRS) in the ESBWR DCD, which envelopes the GMRS, FIRS and Unit 1 base mat recordings at low frequencies. However, the descriptions in the FSAR note the site-specific seismic portion of the licensing basis is the GMRS and FIRS, with no recognition of the earthquake recordings as a separate part of that basis. Further, the explanation given in Section 2.5.2.1.3 does not provide an adequate justification for excluding the recordings from the licensing basis.

1. To provide assurance that the site-specific portion of the licensing basis properly considers the maximum component of the actual recorded Mineral, Virginia earthquake, consistent with 10 CFR Part 50, Appendix A, GDC 2, please provide FSAR changes for the affected sections to reflect inclusion of the earthquake recording as a separate part of the site-specific basis, similar to Dominion's treatment of the earthquake recordings for Units 1 and 2 (item No.10 of long term action commitment list, ML13135A637).
2. To provide assurance that operability evaluations or other demonstration of plant safety, as described in ISG-1, Section 3.3, paragraph 3, would consider the Mineral, Virginia earthquake recordings, please provide in the FSAR the basis used in operability assessments relative to seismic safety that would be used to demonstrate plant safety for the as-found condition of safety-related SSCs, until the SSC is restored to meet the original design basis and design criteria.