

## PMNorthAnna3COLPEmails Resource

---

**From:** Jean-Claude Dehmel  
**Sent:** Wednesday, August 13, 2008 2:20 PM  
**To:** Andrea Johnson  
**Cc:** Timothy Frye; Thomas KeVERN; NorthAnna3COL Resource  
**Subject:** Evaluation of Dominion Response to Request for Additional Information NRC Letter No. 007

Andrea, please note staff's review status of Dominion response to NRC RAI Letter No. 007 for RAI No. 09.03.02-1, 11.02-2, 11.03-0, 11.03-1, 11.04-2, 11.05-3, and 13.05.02.01-1. See Dominion Letter NA3-08-055R, dated July 23, 2008. For item g. below with further questions, I will load it up as a supplemental RAI in the eRAI workflow.

a. RAI No. 09.03.02-1: This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

b. RAI No. 11.02-2: : This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

c. RAI No. 11.03-1: : This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

d. RAI No. 11.04-2: : This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

e. RAI No. 11.05-3: : This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

f. RAI No. 13.05.02.01-1: : This RAI is closed and becomes a confirmatory item for the next revision of the COLA.

**g. RAI No. 11.03-0:** This RAI addresses the conduct of a plant and site specific cost-benefit analyses for the GWMS, given that NRC/NEI jointly dropped the adoption of a generic CBA template earlier this year. While the staff's evaluation generally concurs with the CB ratios of the analyses of the three system augments considered, the review identified the following items as requiring further information and technical and regulatory clarifications. Specifically:

i) Given that the CB analyses are based on RG 1.110, provide reasons and rationale for not presenting the information (cost parameters) following the format of App. C to RG 1.110. See regulatory position C.5 of RG 1.110.

ii) The presentation of information and then discussions in excluding GWMS system design for PWR plants as being not applicable for BWRs is extraneous and should be removed from the proposed FSAR update, see FSAR p.11-7 and 11-8. The introduction of the CB analyses should state that all system augments considered in the analyses include only those that are compatible with BWR plant design features.

iii) The discussion and rationale for excluding the 600 ft<sup>3</sup> gas decay tank, given a residence time of 19 minutes, is not consistent with the source term as there are noble gases with radioactive half-lives of less than 19 minutes. These include Kr-89, Xe-135m, Xe-137, and Xe-138, which make up a significant fraction of the noble gas source term for the turbine building. Accordingly, it is suggested that this augment be reconsidered on the basis of a CB analysis, rather than excluding it solely on the basis of radionuclide half-lives.

iv) The discussion supporting the exclusion of system augments on the basis capacity or flow rates is incomplete as it is not clear if attempts were made to match or approximate system capacities as closely as is possible with that of DCD system design features. For example, the consideration of a 15,000 CFM HEPA filtration system augment for the CONAVS system with a capacity of about 42,300 CFM is not logical. The closest option in RG 1.110 for such augment is 30,000 CFM, see table A-1. As a result, the discussion should provide qualitative and/or quantitative qualifiers addressing the impact of such differences in capacities and expected impacts (as direction and magnitude) of the resulting cost-benefit-ratio. This observation applies to all other CB cases dismissed in a similar manner in this response.

*Regards, Jean-Claude ...*  
**Office: 301-415-6619**  
**Fax: 301-415-5399**  
**Cell: 703-407-7784**

**Hearing Identifier:** NorthAnna3\_Public\_EX  
**Email Number:** 169

**Mail Envelope Properties** (01BD2A1885C88F45A12CB413DEF03410683ACA8540)

**Subject:** Evaluation of Dominion Response to Request for Additional Information NRC  
Letter No. 007  
**Sent Date:** 8/13/2008 2:19:49 PM  
**Received Date:** 8/13/2008 2:19:51 PM  
**From:** Jean-Claude Dehmel

**Created By:** Jean-Claude.Dehmel@nrc.gov

**Recipients:**

"Timothy Frye" <Timothy.Frye@nrc.gov>  
Tracking Status: None  
"Thomas Kevern" <Thomas.Kevern@nrc.gov>  
Tracking Status: None  
"NorthAnna3COL Resource" <NorthAnna3COL.Resource@nrc.gov>  
Tracking Status: None  
"Andrea Johnson" <Andrea.Johnson@nrc.gov>  
Tracking Status: None

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

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	3609	8/13/2008 2:19:51 PM

**Options**

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