

RAS 14357

In the Matter of Amogen Energy Co. LLC  
 Docket No. 50-0219-48 Official Exhibit No. 219-203 Exh. 40  
 OFFERED by: Applicant/  sponsor  
 NRC St. \_\_\_\_\_  
 IDENTIFIED on 9/26/07 Witness/Panel N/A  
 Action Taken: ADMITTED REJECTED WITHDRAWN  
 Reported/Date: \_\_\_\_\_

**From:** Hufnagel Jr, John G  
**Sent:** Thursday, November 30, 2006 10:41 AM  
**To:** Ouaou, Ahmed; Warfel Sr, Donald B  
**Cc:** Polaski, Frederick W  
**Subject:** FW: Challenge Board #1 additional comment

See Russell's clarified points. I will include in the action item list.

- John.

DOCKETED  
USNRC

October 1, 2007 (10:45am)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

-----Original Message-----

**From:** Robinson, Jill M.  
**Sent:** Thursday, November 30, 2006 9:53 AM  
**To:** Hufnagel Jr, John G  
**Subject:** FW: Challenge Board #1 additional comment

*fji*

-----Original Message-----

**From:** William T Russell [mailto:wtrussell@msn.com]  
**Sent:** Thursday, November 30, 2006 9:48 AM  
**To:** Polaski, Frederick W; Robinson, Jill M.  
**Cc:** john.hufnagle@exeloncorp.com  
**Subject:** Challenge Board #1 additional comment

I reviewed my notes this morning and I have an additional comments from yesterdays challenge board.

The Mini-Mod for Cleaning and Coating the Drywell Exterior in the Sand Bed Area has many caveats related to areas that may not be able to be cleaned or are inaccessible. We discussed this generally yesterday. For example:

- Section 6.10.1 discusses actions for areas at the edges of the sand bay that cannot be cleaned.
- Figure 3 discusses interference with the rebar and encasing pipes. Note that this rebar is not protected with concrete and may need a new AMR if the pipes were not filled with concrete or other protective materials.

Assuming there are areas that could not be accessed and/or protective coating applied, results in unprotected surfaces or gaps that would allow water ingress and creates the potential for new of AMR questions. Logical questions for AMR for unprotected or unsealed areas include:

- Are these areas within the UT sampling from the inside? If not why is this ok?
- Some discussion of why these areas were not sealed or protected should be developed to support a conclusion that it was not practicable.
- A possible preventive measure may be to use an injection sealant or penetrating sealant that displaces water to seal these areas.

Overall the issues with upper drywell OD, drywell ID at the floor joint and imbedded steel plate are reasonable and have significant margin.

The local effects of corrosion for 2.5 inch diameter areas appear to be controlled by leak tightness and LOCA pressure loading. This seems reasonable and is consistent with the code.

The buckling local effect used to date is a single area 12x12 (the grids for inspection are 6x6). The impact of

Template = SECY-028

SECY-02

additional areas of corrosion that may be near these areas has not been addressed in any calculation. Given that the sand bed degradation has nearly the same height and it is worse in some bays that are adjacent, this cumulative effect needs to be addressed. If for example there was uniform thinning in an area 6" high and several feet long what would be the affect on margin? I recommend that GE update its analysis to address these potential affects. This is a logical question from review of the GE analysis and cause of degradation. If water caused the degradation, it is likely thin in height and wide due to water level within the sand layer. This may require additional UT from the inside to determine the radial extent of thinning due to corrosion.

I recommend John send out the action items from the challenge board to make sure the issues captured are clear and complete.

Bill