

20

**From:** Burnell, Scott  
**To:** Kammerer, Annie; Hayden, Elizabeth; Wilson, George; Khanna, Meena; Powell, Amy  
**Subject:** RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors  
**Date:** Saturday, August 27, 2011 8:18:00 AM

*OPA*

*NAME to RES*

All;

That certainly gives OPA something to consider going forward. Thanks Annie.

Scott

---

**From:** Kammerer, Annie  
**Sent:** Saturday, August 27, 2011 8:11 AM  
**To:** Burnell, Scott; Hayden, Elizabeth; Wilson, George; Khanna, Meena; Powell, Amy  
**Subject:** RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors

As of when I left yesterday, we had not yet gotten estimates. I don't think we will get them for a while because the only thing that will give that is the accelerometer readings that were sent to California to be digitized. After that they have to be turned into response spectra and checked against the DBE spectra at the instrument locations. That will all take a couple days. The people at the plants seemed to (mistakenly) think that they would get more than a very crude estimate from the scratch plates. So....

Both the NRC and licensee have determined that the ground motions experienced in the earthquake did exceed the plant's licensing basis. In addition to performing independent analyses, the NRC has worked closely with the USGS since the earthquake. Data is still being collected and analyzed to determine the precise level of shaking that was experienced at key locations within the North Anna facility. The requirements for the existing reactors were based on the best available information at the time. As you are aware, the NRC is currently conducting the Generic Issue 199 program to reassess hazard and risk estimates for all US nuclear plants. These new hazard level estimates developed by NRC Staff will be a factor in NRC actions related to the North Anna plant.

Meena/George: does this look OK to you?

FYI. The I hope that last statement is true since it is the obvious thing to do and I have already stated my belief NRR to several in that we need to perform an assessment based on the G1-99 curves before restart. (this was NOT the "big one" and these large eastern events tend to cluster) However, I have no say in whether that happens or not.

---

**From:** Burnell, Scott  
**Sent:** Saturday, August 27, 2011 7:27 AM  
**To:** Kammerer, Annie; Hayden, Elizabeth; Wilson, George; Khanna, Meena; Powell, Amy  
**Subject:** RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors

I meant a couple of sentences on ground motion estimates, even if it's just for comparison to what Dominion provides. Thanks.

I think we've still got a decade or so before the locusts descend, but who knows?

---

**From:** Kammerer, Annie  
**Sent:** Saturday, August 27, 2011 7:26 AM  
**To:** Burnell, Scott; Hayden, Elizabeth; Wilson, George; Khanna, Meena; Powell, Amy  
**Subject:** RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors

I don't know much more about the inspection itself than you do.

*E/21* (10)

So, other than that, you're set?

I'd like to say I'm going out to enjoy my day, but actually I'm trying to finish up a NUREG on Comparison of US and Japan Seismic Design Standards and Computational Methods.

Of course, I am also bracing for my FIRST hurricane....Magnitude 5.8 earthquakes, I've done lots of those...but a hurricane? That is new....when do we get those legendary 17 year cicada things? Is that like a swarm of locusts?

---

From: Burnell, Scott  
Sent: Saturday, August 27, 2011 7:11 AM  
To: Kammerer, Annie; Hayden, Elizabeth; Wilson, George; Khanna, Meena; Powell, Amy  
Subject: RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors

Annie;

The primary response is for OCA to get something to Markey, although Dominion filing a 50.72 declaring they exceeded the SSE seems to take care of that anyway. It wouldn't hurt to have a couple of sentences for us to consider in our Monday press release on the North Anna inspection. Thanks.

Scott

---

From: Kammerer, Annie  
Sent: Saturday, August 27, 2011 7:05 AM  
To: Hayden, Elizabeth; Wilson, George; Khanna, Meena  
Cc: Burnell, Scott  
Subject: RE: Letter from Rep. Markey re: North Anna, seismic issues for reactors

Elizabeth,

I just finished rereading the letter that I had printed out. I just noticed that this is due Monday!

The response to this letter is easy for me to write. It will probably take me an hour. I don't know if you are getting support on this.

Do you want me to take a first stab at it and send it to everyone, so that OPA and NRR can further noodle it?

Annie

---

From: Hayden, Elizabeth (OPA)  
Sent: Friday, August 26, 2011 11:30 AM  
To: Wilson, George; Khanna, Meena; Kammerer, Annie  
Cc: Burnell, Scott  
Subject: FW: Letter from Rep. Markey re: North Anna, seismic issues for reactors

FYI—please see paragraph 3. I'm sure you will likely be the ones working on an answer to these questions. They are very similar to ones reporters have asked us.

Beth

From: Powell, Amy  
Sent: Friday, August 26, 2011 10:56 AM  
To: Schmidt, Rebecca; Batkin, Joshua  
Cc: Decker, David; Coggins, Angela; Belmore, Nancy; Hayden, Elizabeth  
Subject: Letter from Rep. Markey re: North Anna, seismic issues for reactors

FYI, we just received the attached letter from Rep. Markey re: North Anna (did this week's quake surpass db) and other matters seismic. OCA will work with SECY to process. CC'ed Beth in OPA for awareness.

Amy