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**Murphy, Martin**

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**From:** Fletcher, Cecil *KCF*  
**Sent:** Wednesday, September 14, 2011 10:04 AM  
**To:** Murphy, Emmett; Karwoski, Kenneth  
**Cc:** Murphy, Martin; Rivera-Ortiz, Joel  
**Subject:** RE: Planned Inspections for North Anna Unit 1  
**Attachments:** image001.gif

Emmett,

You bring up some interesting points. I will check into them and get back to you.

By the way, there is no 75% completion call set up at this point, between the licensee and NRR. Do you guys intend on having a call with them to discuss their results?

Cecil

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**From:** Murphy, Emmett *EMM*  
**Sent:** Tuesday, September 13, 2011 5:22 PM  
**To:** Karwoski, Kenneth; Fletcher, Cecil  
**Cc:** Murphy, Martin  
**Subject:** RE: Planned Inspections for North Anna Unit 1

Cecil, I work in the Steam Generator and Chemical Engineering Branch, NRR. In terms of what you might be looking for, you might want to have a good look at their degradation assessment supporting this SG inspection. In particular, you might want to review the justification for inspecting SG A as opposed to one or more of the others. Inspecting one SG for each unit seems reasonable if the U-bend planes are parallel for all three steam generators. It's not clear from information available to me that this is the case. Are they? The steam generators, including the tube bundles are not axi-symmetric. For example, the tubes are supported by AVBs normal to the plane of the u-bend. So, depending on the ground motion, the tube bundles of the different SGs may respond differently depending on how each SG is oriented relative to the ground motion. If the plane of the u-bends are not parallel among the three SGs, has this been evaluated such that SG A is concluded to have the most limiting orientation? If not, one might argue they should look at the other SGs as well. Also, a major focus of their inspection should be on whether there are any deltas in signal response compared to the most recent inspection. Widespread, noticeable deltas might also call into question whether additional SGs should be inspected.

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**From:** Karwoski, Kenneth *KKR*  
**Sent:** Saturday, September 10, 2011 9:59 AM  
**To:** Fletcher, Cecil  
**Cc:** Murphy, Emmett; Murphy, Martin  
**Subject:** Re: Planned Inspections for North Anna Unit 1

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Cecil,

This looks reasonable to me.

If anything comes out of these inspections, let us know.

Thanks,

Ken

*E/45* (10)