Criscione, Lawrence

From:

Criscione, Lawrence

Sent:

Wednesday, December 15, 2010 5:56 PM

To:

Cianci, Sandra

Cc:

Virgilio, Martin; Collins, Elmo

Subject:

RE: January 10th meeting with Marty and Region IV

Attachments:

Criscione - IN non-concurrence.pdf

Sandy,

I have no additional questions. I look forward to meeting with Marty and Elmo on January 6th.

I will discuss whatever Marty and Elmo wish to discuss. My chief concern is that, for reasons unknown to me, the NRC appears to be refusing to take a position on whether or not the passive reactor shutdown which occurred at Callaway Plant was consciously allowed to occur and whether the operators consciously relied on transient Xenon-135 to prevent the reactor from restarting.

In the winter/spring of 2009, as a former employee of Ameren I was concerned that Region IV was not properly investigating the October 21, 2003 passive reactor shutdown. Now, as an NRC employee, my concern is that our risk informed processes dissuade us from being proactive in addressing glaring Safety Culture issues at the licensees.

Currently there is an Information Notice being drafted on several reactivity management issues in Region IV, one of which is the passive reactor shutdown at Callaway Plant. I submitted a two page "non-concurrence" statement on that draft IN which I have attached to this email. The two attached pages concisely summarize the concerns which I would like to discuss with Mr. Virgilio and Mr. Collins.

I am seeking their insight and opinion on how the Safety Culture problems brought to light by Ameren's handling of the October 21, 2003 shutdown can best be addressed. However, I will discuss any topic Mr. Virgilio or Mr. Collins wishes to discuss.

Thank you,

Larry

From: Cianci, Sandra

Sent: Tuesday, December 14, 2010 3:48 PM

To: Criscione, Lawrence

Cc: Virgilio, Martin; Collins, Elmo

Subject: RE: January 10th meeting with Marty and Region IV

Larry,

I rescheduled the meeting for January 6, 2011, 1:00pm – 2:00pm in Marty's office. I have included Elmo Collins in the meeting to be responsive to your earlier request to him for an Open Door Meeting. Please let me know if you have any additional guestions.

Thank you,

Sandy Cianci

Administrative Assistant to Marty Virgilio, DEDR

2/14

Office of the Executive Director for Operations O-17 H13 301-415-1714 sandra.cianci@nrc.gov

From: Criscione, Lawrence

Sent: Sunday, December 05, 2010 10:19 AM

To: Cianci, Sandra Cc: Virgilio, Martin

Subject: January 10th meeting with Marty and Region IV

Sandy,

On November 3, 2010 I met with Mr. Virgilio to discuss the October 21, 2003 passive reactor shutdown at Callaway Plant. I uncovered this incident in February 2007 while working for Ameren. I first reported it to the NRC in March 2007 when I felt that Ameren was unwilling to investigate the incident internally. Since 2007 I have been attempting to get Region IV to properly address the incident. I became an NRC employee in late 2009 and my duties with the NRC have nothing to do with addressing the October 21, 2003 passive reactor shutdown.

On August 13, 2010 Adam Heflin, the Chief Nuclear Officer of Ameren, came to NRC headquarters for a "Drop-in" visit with Mr. Virgilio and Mr. Borchardt. The primary topic on their agenda was "2003 Reactivity Management Event of Inadvertent Passive Shutdown; Exchange Perspectives; Confirm they are doing everything they can".

My intent at my November 3rd meeting with Mr. Virgilio was to provide him my perspective of the October 21, 2003 incident. My perspective is different from Ameren's. I believe that the passive reactor shutdown went unnoticed for 67 minutes (until the channel 2 SRNI energized at 11:25) and that the utility is embarrassed by this fact and is for some reason covering it up. I base my belief, that the shutdown went unnoticed, on the activities which the crew was performing during the twenty minutes it took reactor power to decay to the source range: placing cooling tower blowdown in service to optimize circ water chemistry, raising letdown flow from 75 to 120 gpm to optimize reactor plant chemistry, lowering intake flow to conserve electricity. Although all of these activities are important, none take precedence over actively controlling the nuclear fission reaction in the reactor core. I find it highly unlikely that US NRC licensed reactor operators would intentionally prioritize these activities over inserting the control banks had they recognized that the reactor had passively shut down.

If you believe Ameren's perspective – that the operators recognized the reactor had passively shut down and intentionally relied on an informal estimation that Xenon-135 levels were sufficient to prevent an inadvertent return to criticality while they finished placing the secondary and tertiary systems in their shutdown alignments – then you must ask yourself what went wrong with Region IV's operator licensing and requalification processes that would permit US NRC licensed operators to have such a fundamental misunderstanding of the importance of conservatively controlling the nuclear fission reaction in the reactor core.

My November 3rd meeting with Mr. Virgilio was only 30 minutes long so there was not sufficient time to adequately discuss my concerns. At the end of the meeting Mr. Virgilio agreed to meet with me at a later date to finish our discussion. Last Friday, you sent me a revised Outlook appointment changing my meeting date with Mr. Virgilio from December 16th to January 10th. The reason for making this change is "To include RGN IV."

I am happy to include Region IV in the discussion. My original intent for meeting with Mr. Virgilio was to give him my perspective and to seek his advice; it was not to ask him to address the issue. I don't know what the intent of including Region IV is, but if we are going to be discussing solutions, I believe it might be valuable to include NRR and OE.

I have discussed my concerns regarding the October 21, 2003 passive reactor shutdown with Eric Leeds on two occasions. NRR is currently drafting an Information Notice on Region IV reactivity management issues which includes a brief discussion on the Callaway incident. I have sought Roy Zimmerman's advice regarding the October 21, 2003 shutdown on three occasions. Although there currently does not appear to be a role for OE, Mr. Zimmerman's perspective on solutions to address the incident may be beneficial. Please note that neither office has been involved in the investigation of the incident; all investigations thus far have been by Region IV with assistance from OI.

It does not matter to me if you choose to include NRR and OE in the January 10th appointment. The purpose of this email was to bring to your attention that offices other than Region IV have been involved in the discussion in the past and may benefit from being included on January 10th. It might help us, as an agency, to all be on the same page if NRR and OE are included during a discussion of solutions. If Mr. Virgilio's intent on January 10, 2011 is to merely gain Region IV's perspective in parallel with my own, then it's probably not worthwhile including NRR and OE since the only office to investigate the incident thus far has been Region IV.

Again, it matters not to me who is included on January 10th; I just wanted to bring to your attention that other offices have been involved in the discussion of this incident.

Thank you,

Larry

Lawrence S. Criscione Reliability & Risk Engineer RES/DRA/OEGIB Church Street Building Mail Stop 2A07 (301) 251-7603