From: PAUL M. BLANCH <PMBLANCH@ix.netcom.com>
To: JZ <JAZWOL@aol.com>
Date: 5/4/97 11:57am
Subject: SEQUOYAH PRESSURIZER DRAINDOWN

April 24, 1997
John:

I have reviewed your note (enclosed) and attachment from the above event.

From my review, TVA did not identify the root cause of this draindown event. The problem is that during normal operation, the condensate pots do not function as designed. They are bound by non-condensable gases which are then absorbed in the reference legs. The problem was aggravated by the reduction in pressure from 325# to 30# just prior to the event. This caused expansion of the gas and partially voided the reference leg.

Your statement:"[I]s not safety-related and has no control or protective functions." is true however the failure of this device is likely to result in a event that has severe safety consequences. Had this event continued, all core cooling could have been lost resulting in unknown consequences. Another logical question is why was the RVLIS indication ignored.

All of this information has been known to the NRC and the licensees since Westinghouse issued a notice in Feb. 1988 (I think.). This was the subject of many meetings with the staff and the full Commission.

I was given assurance by the NRC that all of these problems were resolved long ago and that every licensee had corrected the problem.

If TVA wants to confirm the root cause to be non-functioning condensate pots it is a simple matter of measuring the pot external temperature and assuring it is close to saturation.

Both TVA and the NRC need to go back and review the long history of this problem and report on the true root cause of the false level indication.

As we discussed on the phone, I am more than willing to assist the licensee and the NRC should you need additional technical assessment.

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NOTE TO: Paul Blanch

FROM: John Zwolinski

SUBJECT: SEQUOYAH PRESSURIZER DRAINDOWN EVENT OF MARCH 24, 1997

In response to your interest to the subject event, I am sending you the attached TVA investigation report on the causes of the event. The staff is in the process of reviewing the report and will make a determination whether any NRC follow-up action is appropriate, either on a plant-specific or generic basis

It may not have been obvious from the NRC morning report referenced in your e-mail to me or March 29 that the instrument involved (cold-calibrated pressurizer level) is not safety-related and has no control or protective functions. On the other hand, the three safety-related (hot-calibrated) pressurizer level instruments have a bellows seal configuration that would prevent noncondensable gases from reducing the level in the reference leg as occurred on the cold-calibrated instrument on March 24 at Sequoyah. Refer to the schematic diagram following page 22 of the attached report that shows one the cold-calibrated instrument (1-LT-68-443F) as well as one channel of the hot-calibrated level instrument (1-LT-68-335)

If you have any questions on the attached report or the event, feel free to contact the NRR Project Manager for Sequoyah. He can be reached at (301) 415-2010 or at e-mail address RWH@NRC.gov.