

From: Edmund Sullivan ^{NRL}
To: David Lew ^{R-F}
Date: Thu, May 4, 2000 11:38 AM
Subject: Re: IP2 SG Meeting

David,

I have edited your comments a bit. See the following. I did not offset the changes but I think you can pick them out.

Ted

>>> David Lew 05/04 9:03 AM >>>

The meeting yesterday included Brian Sheron and Jack Strosnider. Con Edison was accompanied by Westinghouse, Altran and NEI. Members of the public included Dave Lochbaum and John Roberts. The NRC staff took questions from the public after the meeting, which appeared to go well. The meeting was transcribed and will be on the web. Here's my take on the meeting:

* Con Edison's portrayal of their role in the 1997 SG inspection was overly positive. They seem to indicate that they followed the industry guidance. While they indicated that the tube leak was preventable based on what they NOW know, they did not say that it was preventable in 1997.

*Westinghouse stated that the condition of the IP2 SG is similar to conditions in some operating SGs of the same vintage. (The Con Ed speaker Jimmy Mark initially indicated otherwise, but was corrected by Westinghouse.) This was a very provocative statement and we are considering whether some near term response is appropriate or whether it would be more appropriate to continue with the IP-2 action plan to determine what actions should come out of the IP-2 experience. Notwithstanding, we are not aware of that this statement is a proper characterization of the situation and we will see if we can get more specifics to verify if this is the case.

*We did not feel that Con Ed answered all seventeen questions that we provided them. Underlying some of the questions was the depth of their causal analyses. Some were technical in nature, such as Con Edison attributing the leak in C2R5 to PWSCC, but not going further to determine the causes of the PWSCC, e.g., hourglassing or ovalization of the tubes during fabrication. Others were performance related, such as determining whether this was preventable by better Con Ed performance in 1997.

*Altran and Westinghouse presented a low row u-bend stress analysis and the approach to the operational assessment, respectively. We had some concerns with what was presented, including the assumptions in the finite element analysis on stresses induced by flow slot hourglassing, the use of a power of 4 correlation to the crack initiation time between degradation of row 2 tubes and row 3 tubes, the lack of pinpointing the cause of the PWSCC before performing an operational assessment, and the validity of the probability of detection curve being proposed. While most of this information was presented to the staff for the first time, it appeared that the stress analysis and their approach to the operation assessment fell far short of satisfying the technical staff.

*We ended the meeting with noting that ...(1) not all questions were answered and we expect continued interaction with them. we expect the answers to the questions in writing....(2) the root cause lacked rigor...(3) we believe that a more forthcoming assessment of the quality of the 1997 inspection is in order....(4) a reminder that we, as in all events, will look at generic implications, if any.

*While I do not want to speculate on Con Edison's motives, there are a couple of economic issues associated with the SGs. First, Con Edison can provide a more convincing argument for the operational assessment by plugging row 3 tubes preventively. However, this will cause about a 3% derating (my best guess) of the unit. Second, New York is looking at whether the cost of the outage should be put on Con Edison or the rate payers.

112
125
M/S