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Oswego, NY 13126
February 8, 2003

Mr. John A. Grobe, Director
Division of Reactor Safety
US Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Dear Mr. John A. Grobe:

(I could call this letter How to avoid plant shutdowns by misidentifying primary coolant leakage.)

I am in the middle of reading the transcript of the December 10th evening meeting and I believe that one conclusion is becoming clear. It is that the Davis-Besse plant is unable to identify primary coolant leakage. How do they do this?

Let's start at the top. On the reactor head, it took 10 years to replace CRDM gaskets known to be deficient. Using a local version of the "single failure criteria," they do not look for additional failures because, apparently, only one is allowed. It is therefore unnecessary to look thoroughly on the surface of the upper reactor head or at the nozzles penetrating the upper head. Call this "gasket leakage."

Reactor head leak detection, to me appears to be non-functioning for an unknown period of time. With two valves needing attention and with, (I believe), the connecting pipe at least partially obstructed, did anyone propose also checking the level switch for operability? Also, does the Leads Lifted and Jumpers Placed log happen to mention the control room "Reactor Head Leakage" annunciator/relay(s) s being removed from service?

If your reactor head had so much "gasket leakage" on it that it would have to be removed before you could unbolt it, maybe you would wash it off. And maybe it would flow down the reactor vessel in two places. When you found out that the material in one place is different than the material in the other, would you investigate to find the source of each or would you just call them both "head leakage?"

There are nozzles at the lower reactor head that have residue. Would you spend 3 months trying to prove that it is related to that on the head before you announce it to the public, or would you look at each such affected nozzle for a local source of leakage? And, if you looked at the pictures of the bottom of the reactor, wouldn't you have to explain how the downward flowing "head leakage" got past the circular ring that appears to be attached continuously as sort of a drip ring?

The reactor coolant pumps, (which move primary coolant), have longstanding casing gasket leakage.

Well, have you picked up what I see? If you describe where the leakage comes from, not what it is, you never have primary coolant leakage, and thus, never have to enter any Technical Specification action statement.

Could I suggest that all Region III PWRs, and all FENOC operated plants be checked for fully operable head leak detection systems, including the input to the plant computer?

This is my nineteenth letter. It needs no reply.

Thank you,

Tom Gurdziel

Copy: D. Lochbaum
Selected others