

2/6

From: Phil Qualls  
To: Doris Chyu, George Dick  
Date: 3/19/02 2:20PM  
Subject: Re: Byron/Braidwood Single Spurious Actuation

Doris,

The issue of "spurious actuations" does not apply to these "required for III.G.2" circuits. These are redundant SSD trains in the same FA. One must remain free of fire damage. The licensee is incorrectly applying the spurious actuation issue to required systems. The licensee's Fire Protection Report Section 3.5 (page 5.5-8 on the 1990 version) "Safe Shutdown Capability" states to refer to Appendix A5.7, Section III.G for a discussion of fire protection provided for safe shutdown capability.

Appendix A5.7 says they comply with the exception of deviations identified in Appendix A5.8.

Appendix A5.8 does NOT identify a deviation for these cables.

IMHO the licensee failed to identify these as REQUIRED equipment due to the problems we identified with the ESL at Braidwood. The single spurious actuation argument does not apply to equipment that must be FREE OF FIRE DAMAGE.

*PHI* >>> Doris Chyu 03/19/02 12:32PM >>>  
George, Phil,

I researched the subject question as a result of the phone call we had on 2/26/02. The following is what I found:

Byron fire protection report amendment No. 3 stated "a spurious operation analysis has been performed for Byron Plant. Refer to the response to Question 010.65."

Question 010.65 stated "only one spurious actuation occurs per single fire."

From the licensee's submittals, fire protection report and licensee response to Question 010.65, which addressed how the licensee perform circuit analysis, it appeared that neither the licensee or the NRC made a distinction between circuits required for safe shutdown or associated circuits when it comes to single spurious actuation. When you read through Question 010.65, many valves in fact are safe shutdown required and not associated circuits.

Even when it appeared we granted some different requirements to Byron and Braidwood, there are other statement in the fire protection report that contradicted the above assumption. The fire protection report stated that "where the safe shutdown analysis shows that control cables from both redundant trains of equipment are located in the same fire zone, credit is taken for alternate shutdown via local operation of equipment as specified in various plant procedures."

In our example where the licensee did not want to take manual actions for the four AFW injection valves to S/G, if you applied the single spurious actuation assumption as in Question 010.65, it appeared that the licensee is not required to take manual actions. However, if you applied the latter statement, it also implied that the licensee has to take manual actions for these AFW valves since the redundant control cables are in the same areas.

Please let me know how are we going to pursue this. Attached please find what the licensee has to say about no additional manual actions were needed for the AFW valves.

*N/I*

**CC:** Edward Connell; Eric Weiss; Mark Salley