From: David G Coseo
To: Reeser, David;
cc: James W Davis; Jerome P Flint; David K Hemmele; Scott M Schmus;
Subject: Exam Comment Information
Date: Wednesday, September 29, 2010 1:50:41 PM

Dave
You requested information on de-energizing RPS to Neutron Monitoring panels:

SRO Question 3

Given the above conditions, the actions for shutting down the reactor are contained in _____(1)_____; and verification that the reactor is shutdown may be determined by _____(2)_____.

a. 1) 20.000.18, Control Of The Plant From The Dedicated Shutdown Panel
   2) verifying that the APRMs indicate power decreasing to less than 3%.

As such, the station staff contends that response A is also correct based on the fact that APRM power can be verified using computers located around the facility by monitoring our Integrated Process Computer System (IPCS). The exam key's explanation for response A being incorrect states the following:

Correct procedure but APRM verification requires access to the Relay Room which is within the fire zone.

The second part of this response fails to take into consideration the operator's ability to remotely monitor APRM power (outside of the Control Room and Relay Room) using IPCS. Given the fact that the governing procedure (20.000.18) does **not** provide direction either way, both responses A and C give acceptable methods for determining that the reactor is shutdown. The SOP for IPCS (23.615) provides the following:

The IPCS provides the capability of monitoring, recording, and displaying plant parameters via strategically located display consoles. In addition, the IPCS has the capability of being accessed via various LAN servers.

From 20.000.18 Bases

Action B.1

Depressing the Manual Scram Pushbuttons is the only manual action performed in the control room that is given credit in the NRC guidance document Generic Letter 86-10, Implementation of Fire Protection Requirements. Equivalent actions are given to account for the condition the SCRAM pushbutton wiring may be damaged in the fire.

B.1 Depress Manual Scram pushbuttons.

OR

Open C71B-CB3A, H11-P608 Power Range Neutron Monitoring System A (RPS MG Set A Output Panel C71P001A in DC MCC Area AB3 G12)

AND

C71B-CB3B, H11-P608 Power Range Neutron Monitoring System B (RPS MG Set B Output Panel C71P001B in DC MCC Area AB3 G12)

Opening RPS breakers CB3A and B de-energizes neutron monitoring cabinets. APRM power loss would result. APRMs would indicate 0% power on IPCS due to the loss of power, which also consequently causes a full reactor scram by de-energizing the Voters. This indication would validate that the APRMs lost power and the Operator would conclude that his actions were successful in de-energizing RPS (and causing the associated shutdown). An operator could further validate reactor shutdown by also looking at the control rod positions.

David G. Coseo
Operations Training General Supervisor
Fermi 2
734-586-4055