

From: Robert Schin *RS*
To: Qualls, Phil; Subbaratnam, Ram
Date: 12/5/02 11:20AM
Subject: Fire Protection Issues at Harris

Hi! - I tried to call both of you but no answer. I would like to discuss with both of you the NRC position on certain fire protection requirements for Shearon Harris. This is to help in completing a fire protection inspection at Harris (last week of onsite inspection is scheduled for the week of 12/16-20/2002). When can we talk?

The issues relate to use of operator actions instead of physical protection of circuits and equipment relied upon for safe shutdown. Harris is a post-1979 plant (Appendix R does not apply; instead, 10 CFR 48, the license condition and incorporated SERs, UFSAR, and BTP CMEB 9.5-1 apply). The current UFSAR states that circuits & equipment that are required for safe shutdown are physically protected from fire (per the three methods described in the BTP).

The Harris Safe Shutdown Analysis (SSA) method for dealing with problem cables, that were required for control room operation of safe shutdown equipment during a fire in a certain area but were not physically protected from that fire, was to rely on operator manual actions (e.g., locally open the breaker to an MOV and locally operate the MOV using the handwheel.) Only if no operator action could be found would Harris physically protect the cables. Consequently, Harris has about 100 local manual operator actions that they rely on for hot shutdown. Harris did not request deviations from the NRC for any of these operator actions and probably none of them were in licensee submittals upon which our SERs were based. Also, Harris probably does not have 50.59 'adversely effect' safety evaluations for most of these operator actions. Also, Harris probably did not walk down the operator actions as part of their operating procedure process. Apparently Harris thought that they were allowed to rely on the operator actions without needing safety evaluations or NRC approval. Apparently they thought they just needed to physically protect the MOV, not the electrical power for the MOV.

So far we have found seven MOVs whose control circuits are not physically protected from fires and whose spurious actuation could stop flow to and promptly damage the operating charging pump. Three have operator actions in the SSA and in the AOP (to prevent spurious actuations) that would not work in all cases; and four were not in the SSA or AOP. Clearly, these represent violations. But are they violations of the license condition requirements for physical protection and changes (e.g., adversely affect SSD), or violations of the TS requirements for procedures, or both? It would seem to me that perhaps we should cite both for these seven MOVs.

My understanding is that, per the license condition, Harris may add operator actions in place of physical protection of circuits as long as they do not adversely affect safe shutdown. (Is this different from your November 29, 2001, letter to NEI forwarding NRC fire protection training materials? In that letter, you stated that if the manual action has no NRC reviewed and approved exemption, deviation, or SER, then the licensee should be cited for violating the approved fire protection program.) The key here may be - what does 'adversely affect' mean? Does any operator action 'adversely affect' safe shutdown because it has a higher probability of failure than physical protection of circuits? Or does an operator action have to increase risk by more than a 'minimal amount' to 'adversely affect' SSD? Or does an operator action only 'adversely affect' SSD if it cannot reasonably be performed by available operators?

Do the requirements differ if the operator action is performed from the control room or locally in the plant? Do the requirements differ if the operator action is relied on for Hot Shutdown or only for Cold Shutdown?

We currently plan to focus on (walk down using the NRC draft checklist) those operator actions that are relied upon for hot shutdown and involve local actions outside of the control room, for only the fire areas

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selected for the inspection. This will involve about 20 operator actions. Also, we plan to walk down the operator actions that the licensee plans to add (has in their approved modification package) for the new ACP room fire area. (The new ACP room fire area is corrective action for the inadequate Thermolag wall WHITE finding.) This will involve about another 20 operator actions.

What checklist should we use?? (e.g., the one in the November 29, 2001, letter to NEI or the one in the new DRAFT IP 71111.05?)

How should we disposition those operator actions that can reasonably be performed by available operators, but have no NRC approval? Do they need to be URIs until the new manual actions rule is effective? Does it matter if the licensee has 50.59/'adversely effect' safety evaluations for some of the operator actions (e.g., for the operator actions being added for the new ACP room)?

CC: Payne, Charlie