Manual Action Rulemaking Comments by RES/PRAB; J.S. Hyslop, Erasmia Lois, Ed Chow

- (1) The package refers to a modification of III.G.2 to allow manual actions. However, most of the discussion refers to use of manual actions in place of barriers. Since III.G.2 provides more means than barriers (i.e. fixed suppression, detection, spatial separation in proper combinations) to protect the safe shutdown train, are these other means subject to replacement by manual actions also?
- (2) It appears that the thrust of the basis is that materials such as Thermo-lag, a material found to have a fire rating different from what was thought originally, is being replaced by manual actions. Yet, the discussion talks generally about replacing barriers with manual actions. Is the intent of the rule to allow fire barriers which are simply not maintained properly to be substituted by manual actions?
- (3) The rulemaking language refers to licensee's doing analyses to show that no "adverse effect" to safety results as a result of the substitution of manual actions. Is it the intent of the rule to compare manual actions to compliance to determine adverse effect? Or are we saying that there is some overall level of safety which we need to maintain which can be defined by other means? We often think of CDF in this regard, but that is the long path and configuration specific. I guess a key general question is how do we think about "what is good enough." I believe Gareth's comment is focused on this question. This may not need be answered in this package.
- (3) The following set of more detailed comments relate to criteria a-j under the section entitled Safety Significance.
- It should be ensured that procedures in statement i address the conditions under which manual actions are needed. I presume that some conditions more subtle than a fire in the fire area would mandate these manual actions.
- Statement c and j should indicate that manual actions are evaluated in combination as needed for safe shutdown to clearly identify the demand on the operators.
- Add a quality control aspect to ensure that factors a-j are met. To accomplish this, add
 a statement to the paragraph after these criteria a-j indicating that licensees should
 simulate their manual actions in the appropriate fire scenario(s) to ensure that factors a-j
 are met.
- Elements of a fire protection program, such as hazard loading and other features that might be included in evaluating an exemption, are not factors in accepting manual actions. Is this done in order to simplify the acceptance procedure?
- (4) We also recommend that a statement be added to the final paragraph in Safety Significance to reflect that the agency's review of the IPEEs are a potential source of insights on the significance of manual action for this rulemaking."
- (5) Also, in first paragraph of the section Risk Informed and Performance Based, it is stated that the staff has qualitatively assessed the risk from manual actions. Yet that assessment is not referenced, and not described. Suggest providing a reference, if possible.