

Workshop on the criteria for allowing operator manual actions in fire situations

On January 22-23, 2004, the Human Reliability Program (HRA) of the Office of Research supported an internal stakeholder workshop focusing on the currently proposed acceptance criteria for allowing operator manual actions in fire situation (SECY 03-100). The objective of the workshop was to brainstorm on how to address the desire expressed by the ACRS to use HRA as part of the underpinning bases (especially when considering the variability in the complexity and number of actions) for any rulemaking regarding the use of operator manual actions during fires. Of concern was whether a reliability goal should be produced as part of the rule (or an accompanying regulatory guide) or to produce qualitative criterion based on human reliability and risk insights which would infer an acceptable reliability for the actions to be credited. During the discussion it was clarified that the feasibility of the human actions that licensees could propose to take credit for fire situations could be ensured through the first six criteria proposed in SECY 03-100 and that, therefore, the reliability of an action (currently addressed in the seventh criterion called "number and complexity") could be addressed through a "time margin." The rationale is that most of the performance shaping factors contributing to uncertainties when performing an HRA as part of a PRA (e.g., having to diagnose the need for performing an action, procedures, training, staff availability, equipment availability/accessability) will be predetermined, well defined, and tested through the first six qualitative criteria. Therefore, a time margin can account for the remaining uncertainties, mainly related to the potential variability among the different crews with regard to performing an action. The group found the concept of "feasibility + time margin" appealing because it can be used as a surrogate reliability criterion, could (potentially) be generic, avoid performing HRA for every plant, provide an objective measure, and be easily implemented by both licensees and regulators. The group agreed that RES should come back with a plan for developing the margins should be along with their bases, the resources needed, and a schedule. This initial investigation is to be completed by mid-February.

DD-3