

NRC Comments – 06/27/18

Fire PRA FAQ 18-0014 – Detection Time for Manual Non-suppression

The staff does not agree that the detection time subtraction term can be removed from the equation for time available to determine manual suppression credit. Instead, the staff agrees that the detection time should be adjusted due to scenario specific conditions.

For instance, for areas where detection is not present or personnel occupancy level is low or nonexistent, the removal of detection time from the time available would not be appropriate or consistent with the bulk of the data that makes up the suppression curves and represents earlier success of suppression. After all, earlier success of suppression relies upon earlier detection.

NRC Research and EPRI are currently in the process of developing a methodology for classifying growth modeling and revising the application of manual non suppression. This methodology will take into account some of the necessary complications for adjusting the detection time in question such as the level of occupancy, detection capability, main control room component alarm conditions, etc. The adjustment of the detection time subtraction term is better suited for a larger working group than a FAQ in order to address the complications and potential misapplications from introducing these conditions bearing upon detection time, and thus, to make the necessary adjustments to the overall methodology that would be required.