

Fire PRA FAQ 13-0001 on ASD VEWFDS system credit for fire PRA

NRC position: No FAQ is needed as NUREG/CR-6850 enables 5 minutes of credit towards ASD VEWFDS installed in a cabinet. With respect to the applications defined in the proposed FAQ solution, several comments are needed.

Comments on application 1: ASD VEWFDS installed inside the MCB

- Detector random failure probability of 0.01 seems reasonable, but needs a better basis
- Factor of 0.20 times Appendix L credit is reasonable for the analysis, providing that 0.01 detector random failure probability is properly supported
- Target sets within a section of the MCB that are critical to the analysis and yield greater CCDP than that corresponding solely to the initiating component failure should be postulated and treated per Appendix L.

Comments on application 2: ASD VEWFDS installed inside back panel cabinets of MCR

- Detector random failure probability of 0.01 seems reasonable, but needs a better basis
- Factor of 0.20 for non-suppression probability for the MCR is reasonable, providing that 0.01 detector failure probability is properly supported
- Damage occurs to the entire cabinet containing the initiating component due to the time required to perform fire protection measures necessary to isolate the fire

Comments on application 3: ASD VEWFDS installed inside cabinets in non-continuously occupied area

- Use approved FAQ 46 solution, Figure 13-2. Developing the approach to limit damage to the initiating component according to Figure 13-1 is premature since the testing is underway.