

Problem Statement 3

- Current PRA modeling methods are satisfactory for digital systems in nuclear power plants
- Dynamic modeling has not been shown to:
 - Change the risk contribution of digital systems
 - Be viable or cost-effective
 - Be necessary or warranted in modeling digital systems
 - NUREG/CR-6901 - characteristics of digital I&C systems for which dynamic modeling may provide benefit.
 - Designers can / have addressed these characteristics, obviating the need for dynamic modeling.

Problem Statement 3

- Current research should be directed toward improving current modeling techniques by:
 - Further data analysis
 - Digital failure modes and effects evaluation
 - Hardware
 - Software
 - Completing a valid case comparison of methods in context of entire PRA model
 - Investigate hybrid approaches to PRA modeling