Digital I&C Highly Integrated Control Room
Human Factors Task Working Group #5

Draft Standard Review Plan/Branch Technical Position on

Guidance for the Evaluation of Minimum Inventory of Alarms, Controls, and Displays for New Light Water Reactor Plant Designs

March 4, 2009
Overview

- Highlights of Draft SRP/BTP
- Comments/Questions
- Proposed Path Forward
Two important changes since last TWG Meeting

– Branch Technical Position Format

– Changes to Industry HSI Criteria Matrix
Draft Minimum Inventory SRP/BTP

**Background - Highlights**

- **Basic Reference** –
  SECY 92-053, “Use of Design Acceptance Criteria During 10 CFR Part 52 Design Certification Reviews”

- **MI Rationale** –
  Assuring that the staff has sufficient information available to make a safety determination at the time of design certification.

- **MI Purpose** –
  Common-cause failures of computer-based human system interfaces (HSIs). Loss or degradation of the computer-based, normally-used HSIs in the main control room (MCR) or if evacuation of the MCR becomes necessary, alternative HSIs are needed to ensure the reactor can be shutdown safely and maintained in a safe condition.
The MCR minimum inventory is that set of MCR alarms, controls, and displays (i.e., the HSIs) needed by operators to bring the reactor to a safe shutdown condition and maintain it in a safe shutdown condition when there is a loss or degradation of normally used HSIs.

The RSF minimum inventory is that set of remote shutdown (RSF) HSIs needed by operators upon MCR evacuation for prompt hot shutdown of the reactor, to maintain the unit in a safe condition during hot shutdown, and for the potential capability of subsequent cold shutdown of the reactor.
Draft Minimum Inventory SRP/BTP

Acceptance Criteria - Highlights

- Four general criteria for developing the Main Control Room (MCR) minimum inventory
- One general criterion for developing the Remote Shutdown Facility (RSF) minimum inventory
- Several specific criteria for developing the MCR and RSF minimum inventory applicable to Design Certification Applicants
- Several specific criteria for Combined License Applicants to verify applicability of the DCD MCR and RSF minimum inventory to their plant
- Detailed criteria (Minimum Inventory HSI Development Criteria Matrix)
Comments/Questions
Path Forward

- Revise draft SRP/BTP to consider stakeholder comments
- Publish revised draft SRP/BTP in Federal Register for public comment
- Review public comments and address as appropriate
- Publish final SRP revision and BTP