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Design Acceptance Criteria

Task Working Group Overview

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DAC History

- **Defined in SECY-92-053**
- **Used in lieu of detailed design info**
- **Objective attributes, verified as ITAAC**
- **Intended for limited use:**
  - Control Room HFE
  - Piping stress analyses
  - Digital I&C

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Why DAC?

DAC enabled a Staff safety finding for a given design, subject only to sound implementation and ITAAC verification.

Quality Process + ITAAC

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DAC Resolution Objective – What is needed?

Confirmation that the Design information meets the established Acceptance Criteria.

DAC Resolution – How?

- Task Working Group formed 10/09 (inspection, technical and licensing components) to develop viable process for DAC inspection
- Process framework and methodology currently in development
- Process to be piloted 3Q-FY10

DAC Resolution - Scope

- For HFE: Implementation Plans (NUREG-0711) and Control Room configuration
- For piping design: stress analysis methodologies
- For Digital I&C: HW/SW design practices; life cycle development methodology

DAC Example

Inspections, Tests, Analyses	Acceptance Criteria
Block level FMEA of the Criterion 5.1 systems listed in Table 2.2.15-1 show that they perform safety-related functions required for design basis events in the presence of: (a) single detectable failures within safety-related systems concurrent with identifiable but non-detectable failures; (b) failures caused by the single failure; and (c) failures and spurious system actions that cause or are caused by the DBE requiring the safety-related functions, as identified in the applicable FMEA. **{{Design Acceptance Criteria}}**	Analysis report(s) conclude(s) that the systems identified in Table 2.2.15-1 for Criterion 5.1 ensure(s) that safety-related functions required for design basis events are performed in the presence of: (a) single detectable failures within safety-related systems concurrent with identifiable but non-detectable failures; (b) failures caused by the single failure; and (c) failures and spurious system actions that cause or are caused by the DBE requiring the safety related functions, as identified in the applicable FMEA. **{{Design Acceptance Criteria}}**

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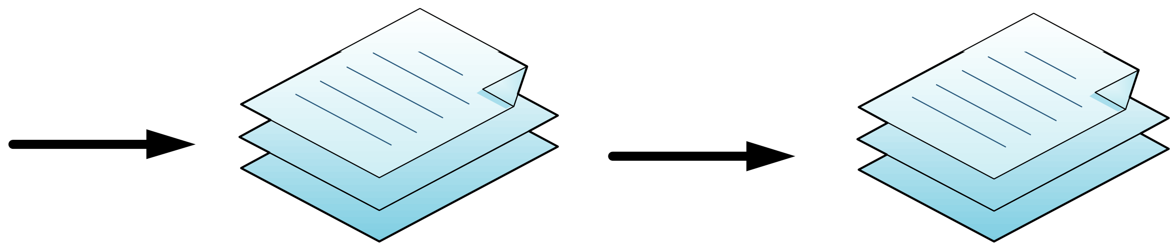
The Challenge

- Extent of inspection?
- What attributes are important?
- Avoidance of another design review!!
- How much scrutiny?
- Implications of pre-COL inspection
- *What is the Strategy?*

Strategy is Key

How much
scrutiny??



DAC Strategy
Document

ITAAC Inspection
Documents

Strategy Documents

- Discipline- or Product-specific
- Detail the technical foundation for Who, What, How and Why?
- Identifies key attributes
- Forms the bases for procedure(s) upgrades

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Path Forward

• Process Framework	11/09
• Strategy Docs complete	12/09
• Procedure(s) drafted	1/10
• Tabletop Process validation	2/10
• ACRS brief	3/10
• Pilot implementation	3Q/FY10

Questions / Discussion