Risk-Informed Improvements to the Standard Technical Specifications

Lead Office/Division: NRR/DIRS
Supporting Offices/Divisions: NRR/DRA

Description

Consistent with the Commission's policy statements on technical specifications and the use of PRA, the NRC and industry continue to develop risk-informed improvements to the current standard technical specifications (STS). These improvements are intended to maintain or improve safety while reducing unnecessary burden and to make technical specification requirements consistent with the Commission's other risk-informed regulatory activities.

Proposals for risk-informed improvements to the STS are judged based on their ability to maintain or improve safety, the amount of unnecessary burden reduction they will likely produce, their ability to make NRC's regulation of plant operations more efficient and effective, the amount of industry interest in the proposal, and the complexity of the proposed change.

To date the industry and the staff have identified eight initiatives for risk-informed improvements to the STS: (1) define the preferred end state for technical specification actions (usually hot shutdown); (2) increase the time allowed to delay entering required actions when a surveillance is missed; (3) modify the existing mode restraint logic to allow greater flexibility (i.e., use risk assessments for entry into higher mode limiting conditions for operation (LCOs) based on low risk); (4) modify the current system of fixed completion times to allow reliance on a configuration risk management program (CRMP) to determine risk-informed completion times; (5) optimize surveillance frequencies; (6) modify selected exigent shutdown actions to allow a risk-informed operating time prior to shut down; (7) define actions to be taken when equipment is not operable due to non-functional snubbers or hazard barriers; and (8) risk-inform the scope of the TS rule.

Each initiative can involve some combination of: a topical report approving the generic change; an STS change proposal with a TSTF designator; a pilot plant to test the change; and a Consolidated Line Item Improvement Process (CLIIP) package (described in NRC Regulatory Issue Summary 2000-06, "Consolidated Line Item Improvement Process for Adopting Standard Technical Specifications Changes for Power Reactors," for reviewing and implementing improvements to the STS). The four owners groups may or may not consolidate efforts into a single submittal.

Completed Milestones (date complete)

- Initiative 1:
  - TSTF-422 for CE plants approved and made available via CLIIP (07/2005)
  - TSTF-423 for BWR plants approved and made available via CLIIP (03/2006)
  - BAW-2441 Rev. 2 topical report for B&W plants approved (09/2006)
- Initiative 2:
  - TSTF-358 approved and made available via CLIIP (09/2001)
- Initiative 3:
  - TSTF-359 approved and made available via CLIIP (04/2003)
- Initiative 4B:
  - NEI 06-09 Rev.0 methodology document approved (04/2007)
  - Pilot plant (South Texas Project) LAR for RITS 4B issued (07/2007)

- Initiative 5B:
    - NEI 04-10 Rev. 0 methodology document approved (09/2006)
    - Pilot plant (Limerick) LAR for RITS 5B issued (09/2006)
    - NEI 04-10 Rev. 1 methodology document approved (09/2007)
    - TSTF-425 approved and made available (07/2009)
- Initiative 7:
    - TSTF-372 (snubbers) approved and made available via CLIIP (04/2005)
    - TSTF -427 (hazard barriers) approved and made available via CLIIP (10/2006)

Future Milestones

Selected Major Milestones and Schedules				
Major Milestones	**Original Target Date**	**Revised Date**	**Completion Date**	**NRC Responsibility**
Initiative 1: TSTF-431 for B&W plants approved and made available via CLIIP	June 2005	November 2009		NRR/DIRS
Initiative 1: WCAP-16294 for Westinghouse plants approved	October 2006	September 2009		NRR/DPR
Initiative 1: TSTF for Westinghouse plants approved and made available via CLIIP	TBD			NRR/DIRS
Initiative 5B: TSTF-425 approved and made available via CLIIP	June 2008	December 2008	July 2009	NRR/DIRS
Initiative 6: WCAP-16125 Rev. 1 for CE plants approved	June 2009	October 2009		NRR/DPR
Initiative 6: TSTF- 426 for CE plants approved and made available via CLIIP	TBD			NRR/DIRS
Initiative 6: Topical reports and TSTFs for Westinghouse, B&W, and BWR plants to be submitted	TBD			NRR/DPR and NRR/DIRS
Initiative 8: Topical reports and TSTFs for all plants to be submitted	TBD			NRR/DPR