



**RIC 2010
Future Risk-Informed
Technical Specification
Initiatives**

Kenneth Schrader
Pacific Gas and Electric Company
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**Risk-Informed Technical Specification
Task Force (RITSTF) Initiatives**

- Risk-Informed TS Completion Times With Configuration Risk Management Program or Maintenance Rule Backstop (RITSTF - 4b)
- Provide Conditions in the TS Limiting Conditions for Operation (LCO) for Levels of Degradation to Preclude Entry Into LCO 3.0.3 (RITSTF - 6b)

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**Risk-Informed Technical Specification Task
Force (RITSTF) Initiatives - continued**

Relocate TS Limiting Conditions for Operation (LCOs) that do not Satisfy 10 CFR 50.36 Criterion 3 or 4 (RITSTF - 8a)

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Risk-Informed TS Completion Times With Configuration Risk Management Program or Maintenance Rule Backstop

- Allows licensees to replace TS completion times with a risk informed completion time
- Risk informed completion time determined in real time
- Cannot exceed 30 day backstop
- Will add new TS Conditions to address loss of function (i.e., all components inoperable)



Example TS

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)
 3.5.1 Accumulators
 LCO 3.5.1 Four ECCS accumulators shall be OPERABLE.
 APPLICABILITY: MODES 1 and 2, MODE 3 with RCS pressure > 1000 psig.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|---|
| A. One accumulator inoperable due to boron concentration not within limits. | A.1 Restore boron concentration to within limits. | 72 hours OR In accordance with the Risk Informed Completion Time Program |
| D. Two or more accumulators inoperable. | D.1 Refer LCO 3.6.3. Restore inoperable accumulators to OPERABLE status. | Immediately 1 hour OR In accordance with the Risk Informed Completion Time Program |

Change

Change



Risk-Informed TS Completion Times With Configuration Risk Management Program or Maintenance Rule Backstop

Significant Benefits:

- Allows online replacement of components that cannot currently be replaced online (e.g., vital battery)
- Plant shutdown due to inoperable components based on real time risk versus predetermined time periods
- Small period of time allowed to correct loss of function (i.e., all components inoperable)



Provide Conditions in the TS Limiting Conditions for Operation (LCO) for Levels of Degradation to Preclude Entry Into LCO 3.0.3

- Provides new TS Conditions for levels of degradation that are not addressed in current TS
- Provides small period of time when multiple components inoperable

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Example TS

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)
 3.5.1 Accumulators
 LCO 3.5.1 Four ECCS accumulators shall be OPERABLE.
 APPLICABILITY: MODES 1 and 2, MODE 3 with RCS pressure > 1000 psig.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|-----------------|
| A. One accumulator inoperable | A.1 Restore accumulator to OPERABLE status. | 24 hours |
| B. Two or more accumulators inoperable. | B.1 Verify LCO 3.5.2, "ECCS - Operating," is met. | 1 hour |
| | AND B.2 Restore all but one accumulator to operable status. | 24 hour |

Change

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Provide Conditions in the TS LCO for Levels of Degradation to Preclude Entry Into LCO 3.0.3

- Significant Benefits:
- Prevents plant shutdowns for many component configurations not addressed in current TS Conditions
- Provides small period of time when multiple components inoperable to restore all but one component to operable

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Relocate TS LCOs that do not Satisfy 10 CFR 50.36 Criterion 3 or 4

- Relocates current TS that do not satisfy 10 CFR 50.36 Criterion 3 or 4 to licensee control
- 10 CFR 50.36 Criterion 3
 - *A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier*

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Relocate TS LCOs that do not Satisfy 10 CFR 50.36 Criterion 3 or 4

- 10 CFR 50.36 Criterion 4
 - *A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety*

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Relocate TS LCOs that do not Satisfy 10 CFR 50.36 Criterion 3 or 4

Significant Benefits:

- Improves plant reliability – allows maintenance and repair of components online versus during outage
- Simplifies plant requirements for operators

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Relocate TS LCOs that do not Satisfy 10
CFR 50.36 Criterion 3 or 4

Significant Benefits:

- Prevents unnecessary plant shutdowns for structures, systems, and components (SSCs) that are not primary success path for design basis accidents
- Prevents unnecessary plant shutdowns for SSCs that are not risk significant
