

Changes to the Federal Register Notice in SECY-05-0052

1. On page 102, paragraph (a)(1), revise line 2 to read ‘ ... postulated **design basis accident** loss-of-coolant’
2. On page 103, paragraph (2), add the following at the end of the paragraph: “LOCAs involving breaks at or below the Transition Break Size (TBS) (see definition below) are considered design basis accidents. LOCAs involving breaks above the TBS are considered beyond design basis accidents.”
3. On page 104, paragraph (c), revise line 4 to read ‘ ... analysis methods **for LOCAs involving breaks at or below the TBS** must meet’ Revise line 6 to read ‘ ... for evaluation models ~~and analysis methods~~ **for LOCAs involving breaks at or below the TBS. The analysis methods for LOCAs involving breaks above the TBS must be maintained, available for inspection, and include the analytical approaches, equations, approximations, and assumptions.**
4. On pages 104-105, paragraph (2), revise line 1 to read ‘ ... **ECCS analyses** ~~evaluation for LOCAs~~’ Revise lines 3 and 4 to read ‘ ... satisfied. The ~~evaluation model or~~ analysis method’ Revise lines 8 and 9 to read ‘ ... supporting justification, **including the methodology used,** must be **available** ~~provided~~ to show that’ Delete the last sentence (When the calculated ... be exceeded.)
5. On pages 107-112, Paragraph (f) “Changes to the facility, technical specifications, and procedures,” replace paragraphs (f)(1), (2), and (6) with the following:

(1) *Submission and approval process.* A licensee may request to make changes to its facility, technical specifications or procedures by submitting an application for a license amendment under 10 CFR 50.90. The application must contain the following information:

- (i) The information required under 10 CFR 50.90 and;
- (ii) A discussion of the method and a demonstration that the criteria in paragraph (c) and (f)(2) of this section have been met,

(2) *Risk-informed Integrated Safety Performance (RISP).* A licensee who wishes to make changes to its facility, technical specifications or procedures must perform a risk-informed integrated safety performance assessment which demonstrates that the following criteria associated with the change are met.

(i) For changes reviewed and approved by the NRC under 10 CFR 50.90, the total increases in core damage frequency and large early release frequency are small and the overall risk remains small. For changes that do not require prior NRC approval under 10 CFR 50.59, any increases in the estimated risk are minimal compared to the overall plant risk profile.

- (ii) Defense-in-depth is maintained, in part by, assuring that:
 - reasonable balance is provided among prevention of core damage, prevention of containment failure (early or late), and consequence mitigation;
 - system redundancy, independence, and diversity are provided commensurate with the expected frequency of postulated accidents, the consequences of those accidents, and uncertainties; and
 - independence of barriers is not degraded.

- (iii) Adequate safety margins are retained to account for uncertainties.
- (iv) Adequate performance-measurement programs are implemented to ensure the RISP assessment reflects actual plant design and operation. These programs shall be designed to:
 - detect degradation of the system, structure or component before plant safety is compromised;
 - provide feedback of information and timely corrective actions;
 - monitor systems, structures or components at a level commensurate with their safety significance.

(6) *Facility and procedures changes not requiring NRC review and approval.* A licensee may make changes to its facility or procedures under § 50.59 without prior NRC review and approval and, provided the requirements below are met.

(i) *Submission and approval process.* A licensee who wishes to make changes to its facility or procedures without prior NRC review and approval must submit an application under § 50.90 to request NRC approval of a process for evaluating the acceptability of such changes. The application must contain the following information:

(A) A description of the licensee's PRA model and risk assessment methods for demonstrating compliance with paragraphs (f)(3) and (f)(4) of this section;

(B) A description of the methods and decisionmaking process for evaluating compliance with the risk criteria, defense-in-depth criteria, safety margin criteria and performance measurement criteria in paragraph (f)(2) of this section; and

(C) A description of the analysis to be performed for demonstrating compliance with paragraph (c) of this section.

(ii) *Acceptance criteria.* The NRC may approve a licensee's process for making changes to its facility and procedures without prior NRC review and approval, and a licensee may make such changes following such NRC approval if the process ensures that:

(A) The acceptance criteria in paragraphs (d) and (f)(2) of this section will be met; and

(B) The change is permitted under 10 CFR 50.59.

The Statements of Consideration should reflect the Commission's continuing support of the RG 1.174 guidelines as an acceptable approach for evaluating proposed changes. The Statements of Consideration should reflect consideration of other elements of defense-in-depth if and when they are relevant, as indicated by the words "in part by" in section (f)(2)(ii). The Statements of Consideration also should provide a discussion of what is meant by the "overall risk remains small."

6. On page 108, the requirements for maintaining containment integrity for realistically calculated pressures and temperatures for beyond design basis LOCAs for plants that adopt 10 CFR 50.46a should be moved from 50.46a(f)(2)(i)(B) and incorporated into GDC 50.
7. On page 110, paragraph (4), revise line 4 to read ' ... used produce ~~realistically conservative~~ realistic results.'
8. On page 111, paragraph (5), revise line 10 to read ' ... that ~~all changes accomplished under this section continue~~ facility design and operation continue to be consistent with the PRA assumptions used to meet'
9. On page 113, paragraph (h)(1), revise line 3 to read ' ... significant. For LOCAs involving pipe breaks at or below the TBS, f-For each change' Insert the following after the period in line 7: 'For LOCAs involving pipe breaks above the TBS, for each change to or

error discovered in an ECCS evaluation model or analysis method or in the application of such a model or method that affects the result, the licensee shall report the nature of the change or error and its estimated effect on the limiting ECCS analysis to the Commission at least annually as specified in § 50.4.'

10. On page 114, revise paragraph (ii) to read: For LOCAs involving pipe breaks larger than the TBS, one which results in a **significant reduction in the capability to meet the requirements of (d)(2) of this section**—calculated peak fuel cladding temperature different by more than ~~300°F~~ from the temperature calculated for the limiting transient using the last acceptable analysis method, or is a cumulation of changes and errors such that the sum of the absolute magnitudes of the respective temperature changes is greater than ~~300°F~~.
11. On page 114, paragraph (2), revise lines 1 through 9 to read ' ... licensee shall compare the revised values of baseline CDF and LERF to those calculated under the last PRA model required by paragraph (f)(5) of this section; determine the cumulative changes in CDF and LERF for changes in the facility, technical specifications and procedures implemented under this section using the updated PRA model; and compare the revised values to the CDF and LERF values calculated under the previous PRA model required by paragraph (f)(5) of this section. If the baseline CDF or LERF increases by 20 percent or more, the cumulative change in CDF increases by 1×10^{-6} per year or more, or the cumulative change in LERF increases by 1×10^{-7} per year or more, the licensee shall report the change to the NRC **if the change results in a significant reduction in the capability to meet the requirements in (f)(2) of this section.**
12. On page 120, delete the last sentence (For analysis methods ... be exceeded.)