

PUBLIC MEETING TO DISCUSS DRAFT RULE LANGUAGE FOR PROPOSED RULE ON RISK-INFORMED CHANGES TO ECCS REQUIREMENTS FOR LOSS-OF- COOLANT ACCIDENTS (10 CFR 50.46a)

August 17, 2006
DoubleTree Hotel
12:30pm - 5:00pm



Agenda

Welcoming Remarks, Purpose and Meeting Conduct T. Collins

Opening Remarks G. Holahan

Discussion of Draft Final Rule Language M. Tschiltz
S. Dinsmore

Break

Stakeholder Questions T. Collins

Additional Opportunity for Meeting Participant Comments
T. Collins

NRC Closing Remarks and Adjournmen M. Tschiltz



50.46a Topics for Discussion

Topics:

- Operational restrictions / maintaining mitigation
- Scope of RISP

- PRA update and reporting
- Criteria for changes subject to prior NRC review and approval
- PRA Quality
- Applicability to new Reactors



Maintaining Mitigation for >TBS LOCAs

Operational Restrictions

- **Proposed rule** prohibited operation in a configuration that could not be demonstrated to meet the ECCS acceptance criteria.
- **Web rule** operation permitted for a short period of time, after review and approval by the NRC of time and compensatory actions.
- **Discussion:** licensee required to take immediate steps to bring the configuration back into compliance after x units of time.

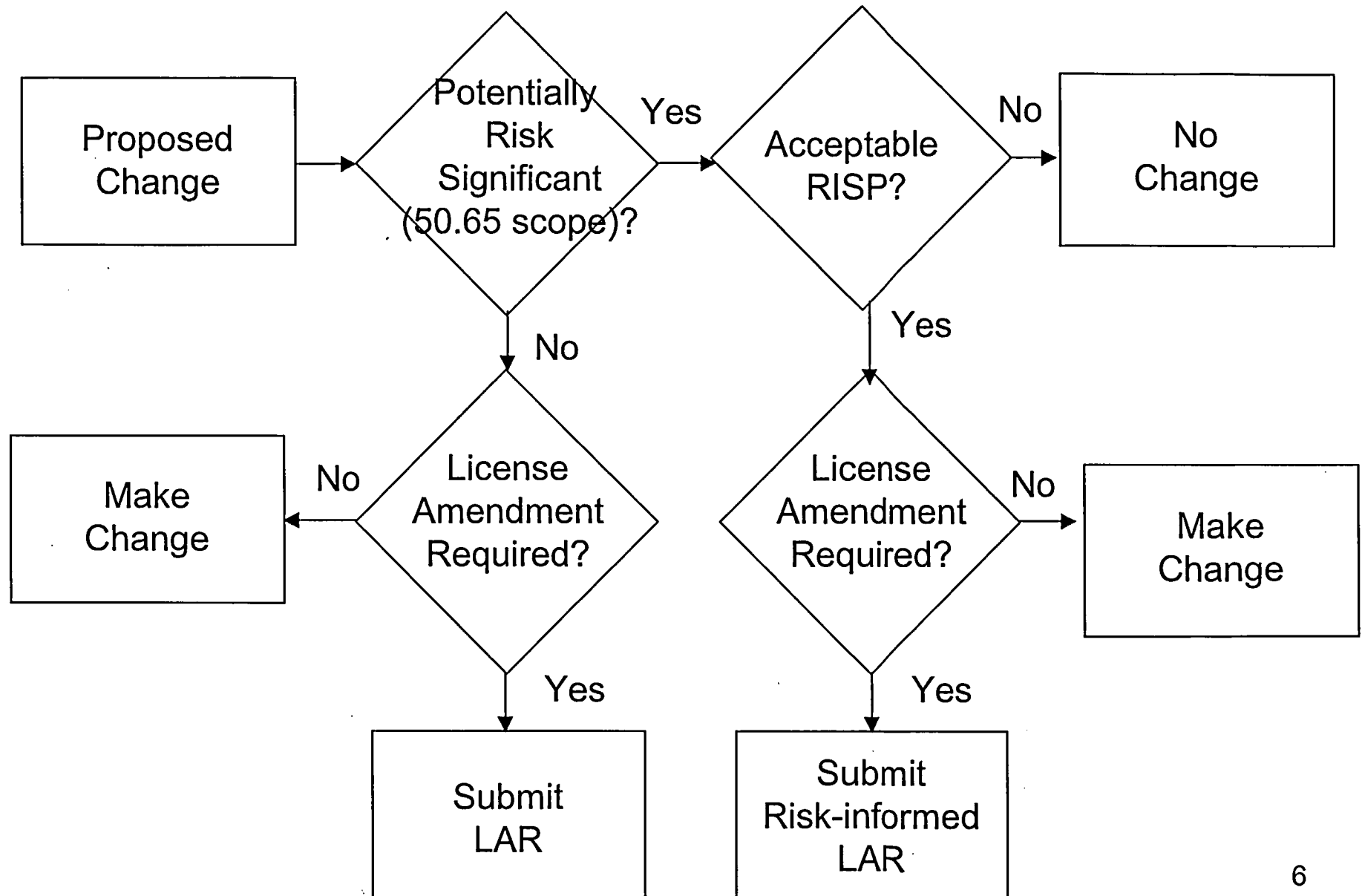


Scope of RISP

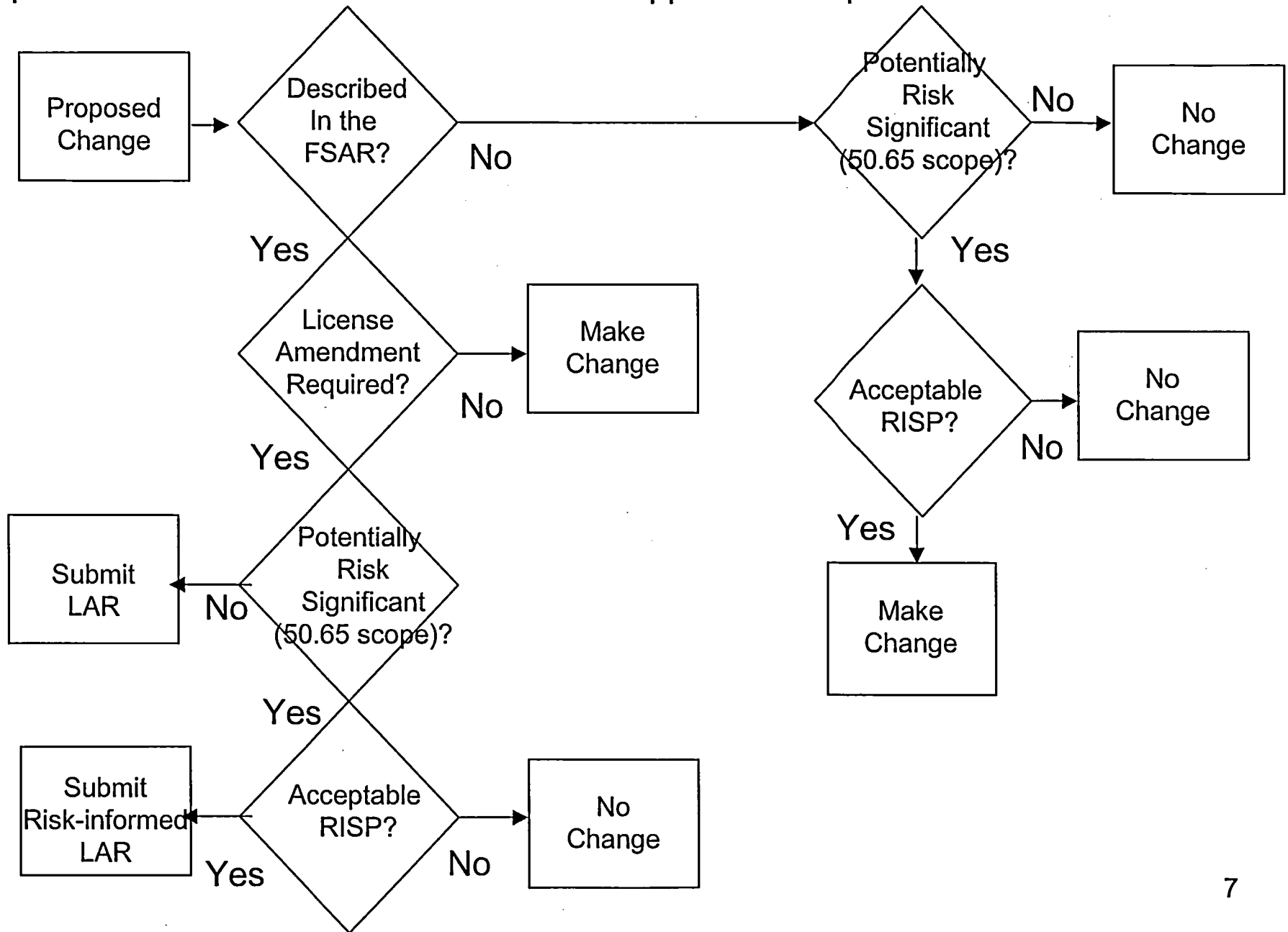
Scope of Risk-informed integrated safety performance process

- **Proposed rule** required that a RISP evaluation be performed for all facility changes.
- **Web rule** requires that the RISP be applied to any change to the facility accomplished under 50.59, or 50.90 or to any SSC within the scope of 50.65.
- **Discussion:** How to minimize multiple regulatory controls on any single change.

Apply RISP to all potentially risk-significant changes



Apply RISP to all potentially risk-significant changes unless other regulatory change processes have concluded that no NRC approval is required





Prior NRC review and approval of Changes

Criteria for determining when NRC review and approval is required

- **Proposed rule** included a “minimal” risk criteria that every facility change would be evaluated against. If the criteria was not satisfied, prior review and approval by the NRC was required
- **Web rule** relies on current regulatory change process to identify changes requiring prior review and approval



PRA Updating and Reporting

Periodic Updating

- Proposed Rule required
 - periodic updating of the PRA to incorporate changes and
 - taking action to ensure that the facility design and operation continues to be consistent with risk assessment assumptions
 - Reporting to the NRC any significant changes to the results after the update.
- Web rule requires
 - periodic updating of the PRA to incorporate changes and evaluation of cumulative effect of changes (d)(4)
 - Requires reporting to the NRC if the acceptance criteria are exceeded (d)(4)
 - Requires that report include steps and schedule to bring plant back into compliance (g)(2)



PRA Quality

Define minimum level of PRA scope and quality consistent with 50.69

- **Proposed rule** required PRA for initiators and operating modes that affect the regulatory decision in a substantial manner
- **Wed rule** is unchanged
- **Discussion:** Addition of a minimum of an internal initiating event, full power operation PRA assessed against a standard or set of acceptance criteria that is endorsed by the NRC.



Applicability to new Reactors

Applicability of the new ECCS alternatives to new reactor

- **Proposed rule** prohibited application to new reactors.
- **Web rule** permits application to adopt alternative ECCS requirements to new reactors determined by the NRC to be similar to the designs of reactors currently licensed

Maintaining Mitigation Rule Language



- Operational Restrictions
 - Web Rule: (d) (2) For LOCAs larger than the TBS, operation in an operating configuration not demonstrated to meet the acceptance criteria in paragraph (e)(4) must be limited to a short period of time commensurate with the safety significance of the configuration. The time limit and any compensatory actions must be contained in either a licensee procedure or other administrative control, and any change to the time limit must be approved by license amendment under § 50.90;
 - (d) (2) For LOCAs larger than the TBS, operation in an operating configuration not demonstrated to meet the acceptance criteria in paragraph (e)(4) must be limited to x units of time. The licensee shall take immediate steps to return to operation in a configuration demonstrated to meet the acceptance criteria in Paragraph (e)(4) after x units of time.

Applicability to New Reactors

Rule Language

- **Proposed rule:** (1) The requirements of this section apply to each boiling or pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical zircalloy or ZIRLO cladding for which a license to operate was issued prior to [EFFECTIVE DATE OF RULE], but do not apply to such a reactor for which the certification required under § 50.82(a)(1) has been submitted.
- **Web rule:** (1) The requirements of this section may be applied to each boiling or pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical zircalloy or ZIRLO cladding whose operating license was issued prior to [EFFECTIVE DATE OF RULE]; to each boiling or pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical zircalloy or ZIRLO cladding whose operating license, combined license or manufacturing license is issued after [EFFECTIVE DATE OF RULE] and whose design is determined by the NRC to be similar to the designs of reactors licensed before [EFFECTIVE DATE OF RULE]; to each boiling or pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical zircalloy or ZIRLO cladding whose design approval or design certification under part 52 of this chapter was issued after December 28, 1974, but before [EFFECTIVE DATE OF RULE]; and to each light water reactor design approval or design certification under part 52 of this chapter issued after [EFFECTIVE DATE OF RULE] whose design is determined by the NRC to be similar to the designs of reactors licensed before [EFFECTIVE DATE OF RULE]. The requirements of this section do not apply to a reactor for which the certification required under § 50.82(a)(1) has been submitted.