



Tier 2* Approach for Future Design Certifications

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Purpose

- Describe alternatives for future use of Tier 2*
- Seek stakeholder feedback on
 - Characterization of challenges
 - License amendment experience
 - Advantages and disadvantages of alternatives
 - Potential guidance adjustments and clarifications



Post-COL Lessons Learned Report

- “Clarity of design control document (DCD) Tier 2* information (i.e., information for which prior NRC review and approval is needed before changes can be implemented) could be enhanced.”



Tier 2* Commission Paper

- Inform the Commission of planned improvements in tiered information classifications for future design certifications.
 - Application content
 - Guidance improvements
 - Inspection program adjustments
- Describe regulatory history



Regulatory History

- SECY-92-287, “Form and Content of a Design Certification Rule”
 - it was expected that there would be a “...list of selected staff positions from the final safety evaluation report that will be treated as ‘unreviewed safety questions’ for purposes of the “50.59-like” change process.”



Tier 2* Intended Significance

- COMSECY-94-024: “In general, the staff believes that Tier 2* information is more appropriate for inclusion in Tier 1 than Tier 2 if the Tier 2* category is eliminated.”
- 10 CFR 52 revised final rule: “Tier 2* information has the same safety significance as Tier 1 information and would have received the Tier 1 designation, except that NRC decided to provide more flexibility for this type of information.”



Tier 2* Intent, continued

- SECY-95-023, "During the development of the Tier 1 information, the applicant for design certification requested that the amount of information in Tier 1 be minimized to provide additional flexibility for the applicant or licensee that references this design certification. Also, many codes, standards, and design processes, which were not specified in Tier 1, that are acceptable for meeting ITAAC were specified in Tier 2. The result of these actions is that certain significant information only exists in Tier 2 and the Commission does not want this significant information to be changed without prior NRC approval."



Tier 2* Intent vs. Practice

Intent

- Minimize Tier 1 information
- Greater flexibility to make changes

Practice

- Some Tier 2* content would have otherwise been ordinary Tier 2, not Tier 1.
- Category has been used as expeditious means to resolve certification issues
- Tier 1 changes via exemption haven't been appreciably more difficult than Tier 2* change via amendment
- Some Tier 2* changes are linked to Tier 1, requiring an exemption, regardless
- Haven't yet faced challenges to standardization

Stakeholder feedback desired



Tier 2* LAR Experience

- 29 Tier 2* amendments to date
 - 4 Tier 2* LARs also involved Tier 1 changes
- Are there topics that would require LAR, regardless, due to “50.59-like” process?
- Are there topics which wouldn’t trip “50.59-like” criteria, but should receive NRC review, regardless?

Stakeholder feedback desired



Alternatives

- Status quo: already determined to be undesirable per the post-COL lessons learned report
- End use of Tier 2*
- Reduce scope of Tier 2*



December 19, 2014 NEI Letter

- Future design certifications can be completed without use of Tier 2*
 - Claimed other change control processes provide adequate control
 - Provided views on how change controls would apply to AP1000 Tier 2* information
 - Improved criteria and guidance for Tier 1 and Tier 2 will be beneficial



End Use of Tier 2*

Advantages

- Tier 2 change controls are adequate in many cases
- Reduce licensee and NRC effort for processing low safety significance LARs
- Not clearly needed
- Reduce complexity of certification applications

Disadvantages

- Some Tier 2* may move to Tier 1, but some Tier 2* expires
- Could have negative effect on fuel design flexibility
- Eliminates possible useful tool
- Potential ITAAC risk
- Guidance challenges

Stakeholder feedback desired



Reduced Use of Tier 2*

Advantages

- Provides useful regulatory control for certain topics
- Reduce licensee and NRC effort for processing low safety significance LARs
- Reduced potential for ITAAC disagreements

Disadvantages

- Potential for scope creep
- Additional certification application, review, and rule complexity
- Need to develop objective guidance for Tier 2* content

Stakeholder feedback desired



Supporting Activities

- Improve descriptions of Tier 1 and Tier 2 information
 - Some Tier 2* expected to be Tier 1
 - Other Tier 2* expected to be Tier 2
- Review the “50.59-like” process
 - Ensure adequate control of Tier 2
 - Incorporate lessons learned
 - Address all relevant criteria and effects



Supporting Activities, cont.

- Develop plan to develop/update
 - Regulatory guidance
 - Supporting the planned course of action for future design certifications
 - Clarification of methodology change controls
 - Adjust inspection program guidance and implementation to ensure implementation of robust licensee change controls
 - Staff training, as needed



Summary and Next Steps

- Stakeholder feedback
- Additional discussions?
 - LAR experience
 - Guidance adjustments
 - Tier 1 and Tier 2 descriptions
 - Change controls
 - Other topics
- Complete Commission paper considering stakeholder feedback



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