

Tier 2*

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Meeting to Discuss Tier 2*

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Overview

- Brief history
- Tier 2* Implementation
- Industry proposal

Brief History

- Strenuous industry objections to creating a category of Tier 2 information that required prior NRC approval to change
 - Unnecessary
 - Overly complex
- Industry eventually agreed to accept Tier 2* with the understanding that Tier 2* designations would be specific and narrowly focused in 3-4 areas, including fuel design and design methodologies associated with DAC

What transpired?

- Lack of adequate guidance and criteria led to expansion of Tier 2* scope beyond the original intent, and a lack of clarity in Tier 2* designations.
 - Design details, rather than the design methodology
 - NRC staff discretion
 - Wholesale designation of some codes and standards, rather than specific portions

Available Tier 2* Guidance

- SRP 14.3, App. A, Sec. III.2: The staff may determine that selected material in the SSAR, if considered for a change by an applicant or licensee that references the certified design, would require NRC approval prior to implementation of the change. This information is designated as Tier 2* information. Tier 2* is generally information that is not appropriate for treatment in Tier 1 because it is subject to change. Tier 2* is generally considered for areas associated with detailed structural and equipment design; design and analysis methodology for fuel and control rods; and supporting material for the DAC areas of the design.

Tier 2* Today

- For the ABWR, Tier 2* eventually expanded to seventeen areas, and later for the AP1000 it expanded to two dozen areas, including topics such as :
 - construction codes and standards
 - motor operated valves
 - fires areas
 - polar crane parked orientation
 - steel composite structural module details

Tier 2* Today, cont.

- Despite a common understanding that most Tier 2* provisions could expire when the NRC makes its 52.103(g) finding, existing design certifications include many Tier 2* provisions that do not expire but instead are effective for the life of the plant.
- Many of the license amendments approved have involved Tier 2* changes only.
- NRC itself has noted in safety evaluations that most of the license amendments for Tier 2* had negligible impact on safety, involved administrative details, or involved the use of recognized consensus standards.

Industry Proposal

- Eliminate Tier 2* for future design certifications
 - No safety need
 - No regulatory requirement
 - No practical need

Basis for Elimination of Tier 2*

- Not required by or even mentioned in the body of Part 52
- Rationale for Tier 2* largely rendered moot by 2007 rule change to the 50.59-like process for departures in method of evaluation
- Tier 2* implementation has been problematic
 - complexity & lack of clarity has caused uncertainty
 - lack of safety significance/focus
 - resource intensive
 - no added safety value

Basis for Elimination of Tier 2*, cont.

- Adequacy of 50.59-like change process, including criterion controlling departures in method of evaluation
- Tier 1 change process assures control of safety significant changes and preserves standardization

Basis for Elimination of Tier 2*, cont.

- Other tools remain for NRC to monitor, and intervene if necessary, in design areas of particular interest to the staff
 - Design engineering audits of specific design areas and the plant change process
 - Resident inspector access to info on licensee plant change activities, and normal inspection activities
 - Semi-annual reports to NRC on all departures from the DCD during construction

Benefits of Industry Proposal

- Improved safety focus
- Less complex
- Reliance on existing Tier 1 and Tier 2 change processes
- Clarity of licensing basis
- Reduced burden for NRC & licensees
- Consistent with Part 52

Conclusion

- Part 52 does not require the establishment of Tier 2*
- Tier 2* is not necessary given the requirements of the 50.59-like change process
- The Tier 2* process is not working as originally intended
 - Has been applied to changes that do not adversely affect safety
 - Is unduly burdensome
- NRC can and should eliminate the use of Tier 2*