

New Plant Licensing Lessons Learned and Recommended Actions

Lessons Learned	Recommended Actions
<p>1. Growth in application content and level of detail</p> <p>The growth in application content is potentially unsustainable and frequently cited as a major obstacle to future new plant applicants. Recent new plant experience can and should be examined to understand and stem the continued growth in application scope and level of detail and associated NRC reviews.</p>	<ul style="list-style-type: none"> • NRC workshop(s) for NRC staff and stakeholders to explore the reasons underlying the growth in application scope and level of detail, strategies and opportunities to stem this growth, and ways to clarify the threshold for information necessary to support required NRC safety findings. • Reflect identified clarifications and improvements in the SRP or other appropriate guidance. • These activities would be in addition to, and will complement, ongoing efforts to develop new application and review guidance for non-LWRs.
<p>2. Need for more effective pre-application interactions and acceptance review process</p> <p>Experience with the TVA Clinch River early site permit and NuScale design certification applications pointed up a lack of common understanding and consistency regarding application of existing guidance on application acceptance reviews. This experience can be applied to develop and/or clarify guidance on the NRC's application acceptance review process, application docketing criteria, and the integration of pre-application interactions with NRC staff safety reviews.</p>	<ul style="list-style-type: none"> • NRC workshop(s) for NRC staff and stakeholders to discuss recent acceptance review experience and identify opportunities to improve efficiency and effectiveness e.g., clarification of NRO-REG-100. • Reflect identified clarifications and improvements in durable guidance for future applicants and NRC staff such as Regulatory Guide 1.206, "Combined License Applications for Nuclear Power Plants." RG 1.206 contains sections on Pre-application Activities, Readiness Assessment, and Application Acceptance Review, and is currently being updated by the NRC. • Reflect updated guidance in the Regulatory Review Roadmap for non-LWRs being developed by the NRC staff and in envisioned guidance on developing licensing project plans.
<p>3. Need to simplify the Part 52 change process, especially Tier 2*</p> <p>A principal lesson learned from Part 52 implementation to date is that Tier 2* unduly complicates the 50.59-like change process, placing undue burden on licensees, and is unnecessary. While not eliminating Tier 2*, a forthcoming SECY paper is expected to acknowledge the problem of Tier 2* excess and take steps to limit and control the staff's use of this category of design certification information.</p>	<ul style="list-style-type: none"> • Work closely with KHNP and NuScale to demonstrate that design certifications can be completed without use of Tier 2* designations. • Work with NRC to reflect KHNP and NuScale outcomes in an updated SECY paper and associated SRP guidance to provide for use of Tier 1 and Tier 2 only in future design certifications.

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<p>4. Need to standardize ITAAC and establish Tier 1/ITAAC First Principles</p> <p>Lack of guidance has led to unnecessary and inconsistent ITAAC being included in design certifications. Inconsistent, unnecessary and poorly crafted ITAAC add burden and the potential for ITAAC closure and hearing issues. Efforts begun in 2013 to develop Tier 1 First Principles and standardized ITAAC via NEI 15-02, "Industry Guideline for the Development of Tier 1 and ITAAC under 10 CFR Part 52," offer the opportunity to establish needed clarity and consistency concerning the level of detail required for Tier 1/ITAAC.</p>	<ul style="list-style-type: none"> • Leverage the KHNP and NuScale design certification applications to resolve remaining issues related to the scope and language of standard ITAAC. • Revise and resubmit NEI 15-02 for NRC review, including a complete set of standard ITAAC together with Tier 1/ITAAC "First Principles" on which they are based. • Achieve a common understanding on standard ITAAC and Tier 1/ITAAC "First Principles," and document NRC endorsement in a regulatory guide.
<p>5. Avoid delay in COL issuance due to required design certification changes</p> <p>A process solution is needed to avoid unnecessary delays in licensing when the need for changes in a referenced design certification is identified while a COL application is under review. Issuance of COLs without delay is appropriate because existing change processes assure that errors identified in a referenced design certification will be corrected prior to construction of affected SSCs.</p>	<ul style="list-style-type: none"> • Discuss options for addressing this issue in a public meeting, as proposed in the NRC's letter to NEI dated July 18, 2016. • Identify a preferred process solution and codify it in a Commission SRM or appropriate regulatory guidance, or via rulemaking if necessary.