

Suggestions for 10 CFR 52 Lessons Learned Rulemaking – January 2019

	Regulation	Comment/Basis	Recommendation
1.	10 CFR 52	<p>Changes during construction and construction to licensing basis challenges are created by NRC's position that as soon as the COL is issued there is an approved licensing basis and the licensee, therefore, needs to be in compliance with its licensing basis at all times regardless of whether there is any impact to the health and safety of the public.</p> <p>ITAAC verification and construction oversight via licensee programs (e.g., quality control), as well as implementation of operational programs, ensure that the facility has been constructed and will operate in accordance with its license.</p> <p>Restrictions should be removed thus allowing temporary deviation from the approved licensing basis during construction where configuration control, corrective measures or license amendments are implemented that restore conformance of the plant with its licensing basis. 10 CFR 52 when created was intended to ensure better control over standardization. The unintended consequence of hindering construction was not fully understood at that time.</p>	<p>Modify NRC interpretation to allow at-risk construction pending approval of an LAR or the processing of a 50.59-like change.</p> <p>This interpretation would acknowledge the potential for LARs to be denied. Changes at risk would need to be subject to configuration control to ensure that if the LAR is not approved or the licensee does not or cannot process a 50.59-like change, the change at risk will be reversed in the field.</p>
2.	10 CFR 52, Subpart A, ESP	<p>10 CFR 52.39(e) requires that a license amendment be submitted to change the SSAR. The experience of the first licensees under 10 CFR 52 demonstrates a need for a change process for ESPs and LWAs.</p>	<p>NRC should establish a 10 CFR 50.59-like change process for ESPs and LWAs.</p> <p>10 CFR 52.39(e)</p>
3.	10 CFR 52, DCR Appendices	<p>The experience of the first licensees under 10 CFR 52 has revealed a significant expenditure of NRC and licensee resources that is not commensurate with the safety</p>	<p>Need to provide for a more flexible change process for Tier 1 changes that do not decrease the level of safety, e.g., include a provision to allow administrative departures from Tier 1 without</p>

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	Add Tier 1 minor change process	significance of numerous Tier 1 changes that do not decrease the level of safety.	an LAR/Exemption. Note that DCR Appendices Section III.C dictates that if there is a conflict between Tier 1 and Tier 2 of the DCD, then Tier 1 controls. Many of the administrative changes processed are to reconcile conflicts between Tier 2 and Tier 1 information where the Tier 2 information was correct.  Note: Vogtle 3&4 - 4 example LARs 3 approved and 1 under review by NRC
4.	10 CFR 52.55, 57 & 61	The 15-year DC duration does not serve the underlying purpose of the rule – “to permit more operating experience with a given design to accumulate before the certification comes up for renewal”. Design certification rules should not expire. They are rules, not licenses. They have been reviewed and approved by the NRC to have met all regulatory requirements. Existing regulations already exist that allow the NRC to impose new requirements on the DC should a new safety significant lesson learned be identified. It should be the discretion of the DC applicant when lessons learned have accumulated that would warrant DC renewal. The 15-year DC duration and 2-year DC application window is arbitrary and has no safety basis.	Revise 10 CFR 52 to remove the 15-year DC duration and the 2-year DC application window.  The industry questions the basis for the need for DC duration and more specifically the basis for a 15 year duration.
5.	10 CFR 52.57 and 52.59	Reconcile the renewal requirements of 10 CFR 52.57 vs. 52.59	Clarify 10 CFR 52.57 regarding what it means to “bring up to date” the information and data contained in the previous application” in the context of the 52.59 requirement that renewals comply with regulations applicable and in effect at time of the original certification.
6.	10 CFR 52.57 and 52.59	Part 52 does not distinguish DC renewals for designs that have been licensed and built in verbatim compliance (with a high volume of lessons learned) versus designs that have never been constructed in the United States (with a lower volume of lessons learned). A renewal process (similar to	Revise 10 CFR 52 to allow DC renewal applications to be submitted following a facility’s construction & initial operation. 1. Changes that bring the DC up-to-date with the operating facility’s UFSAR are considered resolved and need no NRC review & approval.

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		the COLA process outlined in RG 1.206 R1 Section C.2.14) should be developed to permit a DC to be brought up-to-date with an operating facility's UFSAR.	<p>2. Additional changes included in the renewal application beyond what is included in the operating facility's UFSAR may be evaluated by the DC applicant in accordance with Section VIII B.5 of the DCR.</p> <ul style="list-style-type: none"> <li>• Changes needing NRC approval per Section VIII B.5 are treated as Amendments per 10 CFR 52.57(c)</li> <li>• Changes that do not need NRC approval are considered resolved.</li> </ul>
7.	10 CFR 52 - TBD	The 50.59 process and departure process are similar in regulation but have been interpreted somewhat differently.	Directly use the 50.59 process for Part 52 regulatory changes.
8.	10 CFR 52 - TBD	S-COLA applicants need a process that avoids COL delays due to generic design issues encountered by the preceding COL licensees during construction of the FOAK (or first few of a kind) plant. Given the finality granted to certified designs, a process should be established to clearly allow S-COLAs to complete the process of obtaining a COL while generic design issues are resolved in an approach that maintains standardization. Without such a process, regulatory certainty for S-COLAs under review is reduced or eliminated.	<p>Establish a process that precludes construction of affected SSCs until known design errors are resolved.</p> <p>Options for addressing this issue were identified in NRC letter to NEI dated May 9, 2018 (ML18123A245).</p> <p>The preferred option for doing this is through the use of COL license conditions that identify the design error;</p> <ul style="list-style-type: none"> <li>○ Require a license amendment (or design certification amendment) to correct the error prior to the 10 CFR § 52.103(g) finding; and</li> <li>○ Specify the design methodology for correcting the error and the acceptance criteria for the design.</li> </ul>
9.	10 CFR 52 - TBD	At the time of COL issuance, NRC elected to duplicate Tier 1 information into COL Appendix C ITAAC. The benefit of maintaining both Tier 1 and the COL Appendix C is not understood.	<p>It would seem that all the info in Tier 1 could be issued with the COL as Appendix C with a full exemption from the need to maintain Tier 1 information. This would reduce the burden of multiple exemptions (which aren't being reflected in the COL), and also the burden of maintaining two documents with essentially the same requirements.</p> <p>Further, an acceptable 103(g) finding could simultaneously void the portions of the COL Appendix C which would no longer be applicable and authorize their removal. This would again reduce the burden of another license amendment to do the same action.</p>

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10.	10 CFR 52 - TBD	Prior to a 103(g) finding what is the process for changes to the TS Bases document. A licensee may be using the TS Bases Control Program to effect changes to the TS Bases document prior to the 103(g) finding, but the TS Bases Control Program is not in effect until after the 103(g) finding. The regulations are not clear. The regulations do indicate that the TS are not considered Tier 1 or Tier 2 material but is silent on the Bases.	Clarify whether the licensee should be using the TS Bases Control Program to implement changes to the TS Bases prior to 103(g). Also, clarify the appropriate change process to use.
11.	Subpart B of 10 CFR 52	Currently, it is NRC's practice to require a DC applicant to submit a complete application prior to docketing or beginning its review.	Allow DC/COL applicants the option of early submittal of segregable parts of the application that can be reviewed independently.  This is permitted under Subpart E (SDA) and guidance is being developed.
12.	10 CFR 52.1 and Subpart E, 52.135(a)	The NRC's draft regulatory review roadmap for non-LWRs allows preliminary design info to form the basis of an SDA, consistent with industry guidance on SDA. Conforming changes to the regulations are needed to reflect that intent and avoid confusion.	Confirm that preliminary design info may form the basis of an SDA, clearly document that NRC position and, if necessary, revise the definition of SDA in 52.1 and Subpart E.
13.	10 CFR 50.71(h)(1)	PRA Upgrade Requirements Prior to Fuel Load: 10 CFR 50.71(h)(1) requires COL holders to develop a level 1 & 2 PRA that includes initiating events and modes endorsed by the NRC one year prior to initial fuel loading. One year is not enough time to develop, peer review, and approve a PRA model to include newly endorsed standards, particularly in the busy year prior to fuel loading.  50.71(h)(2) requires an upgrade every 4 years, and that the upgrade must reflect endorsed consensus standards in effect one year prior to the upgrade. Again, one year is not sufficient time to develop, peer review and approve a model.	Modify the regulation to establish the standards to which the applicant is committed in the COL application.  Modify 50.71(h)(2) to provide more reasonable timeframes for incorporating recently-endorsed consensus standards, and a less frequent timeframe for conducting the upgrade.

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14.	10 CFR 55.46(c)(1)	Clarify definitions and use of commission approved simulators.	<p>Clarify 55.46(c)(1) definition of "commission approved" simulators and "plant-referenced simulators."</p> <p>The NRC issued an exemption allowing applicants for an operator license at VEGP 3 &amp; 4 to satisfy the requirement to provide evidence that the applicant, as a trainee, has successfully manipulated the controls of either the facility for which the license is sought or a plant referenced simulator by, instead, providing evidence that the applicant has successfully manipulated the controls of a Commission-approved simulation facility. Reference ML16090A176.</p>
15.	10 CFR 2.101(a)(5)	The NRC should revise 10 CFR 2.101(a)(5) to permit the first part of a phased COL application to consist solely of the environmental report plus the general administrative information specified in § 50.33(a) through (e). It is not necessary for the NRC to have complete seismic and other siting information, plus financial and emergency planning information, to review an environmental report.	<p>Revise 10 CFR 2.101(a)(5) to permit the first part of a phased COL application to consist solely of the environmental report plus the general administrative information specified in § 50.33(a) through (e).</p> <p>Consider the option of eliminating the detailed radiological evaluation in the environmental report since a facility licensed under Part 50 or 52 will have small impacts by definition.</p>
16.	10 CFR 26.4(e)(4)	Application of the Subpart K provisions of Part 26 show that some aspects need modification.	<p>1. Modify 10 CFR 26.4 to provide allowance for escorted access to allow visitors to perform safety or security related work activities, similar to operational plant provisions in 10 CFR 73.55(g)(7), and</p> <p>2. Currently Subpart K is silent on certain administrative provisions provided in Subpart A-H, N and O. For example – the authorization reinstatement provisions of 10 CFR 26.59. Clarify that these provisions also apply to Subpart K workers.</p>
17.	10 CFR 171	Currently, annual fees begin at NRC 52.103(g) decision in 10 CFR 170.15(e). Annual fees should be assessed at the time the licensee begins to experience a derived economic benefit.	Change annual fee provision to begin at the start of commercial operation (when economic benefit is derived) rather than the time the NRC 52.103(g) decision is made.

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18.	10 CFR 20.1406	Requires applicant to identify the methods to be used to limit radioactivity contamination of environment at time of application.	Allow development of methods to be used to limit radioactivity contamination of environment before NRC makes the 52.103(g) determination.

Recommendations for Policy Statement(s) or guidance associated with 10 CFR 52 LL RM

	Policy	Comment/Basis	Recommendation
1.	SOC for 10 CFR 52 LL Rulemaking	There is confusion as to whether the Tier 1 doc is considered part of the FSAR	Clarify that Tier 1 doc is not required to be part of the FSAR
2.	SOC for 10 CFR 52 LL Rulemaking	Strong emphasis on standardization and finality creates challenges in implementing 10 CFR 52 for first-of-kind designs/applicants.	Revisit the balance struck between standardization/finality and flexibility, especially for first of kind applicants, and make rule changes, as appropriate. This effort should also include consideration of the appropriate level of detail to be included in the application and licensing basis is also a key factor in providing flexibility to make changes during construction for issues that have no potential to impact the safety determination.