



Public Meeting:

**Status of Rulemaking to Align
Licensing Processes and Apply
Lessons Learned from New
Reactor Licensing**

April 29, 2020

Ground Rules

- This session is being transcribed. To facilitate the process, please:
 - State your name before speaking
 - Only one speaker at a time
- Please hold questions until after the NRC presentation



Today's Meeting

- Provide an update on the effort since the last public meeting on this rulemaking (Meeting summary: ADAMS Accession No. ML19344C768)
- Provide an opportunity to discuss specific items in the scope described in SECY-19-0084 and changes to scope of rulemaking since the issuance of the SECY
- Discuss public comments received since August 2019
- Provide an update on the rulemaking schedule

OPENING REMARKS

**Anna Bradford – Director
NRR Division of New and
Renewed Licenses**



NRC STAFF PRESENTATION

NRC Staff Presenters



Jim O'Driscoll,
NMSS
Rulemaking Project
Manager



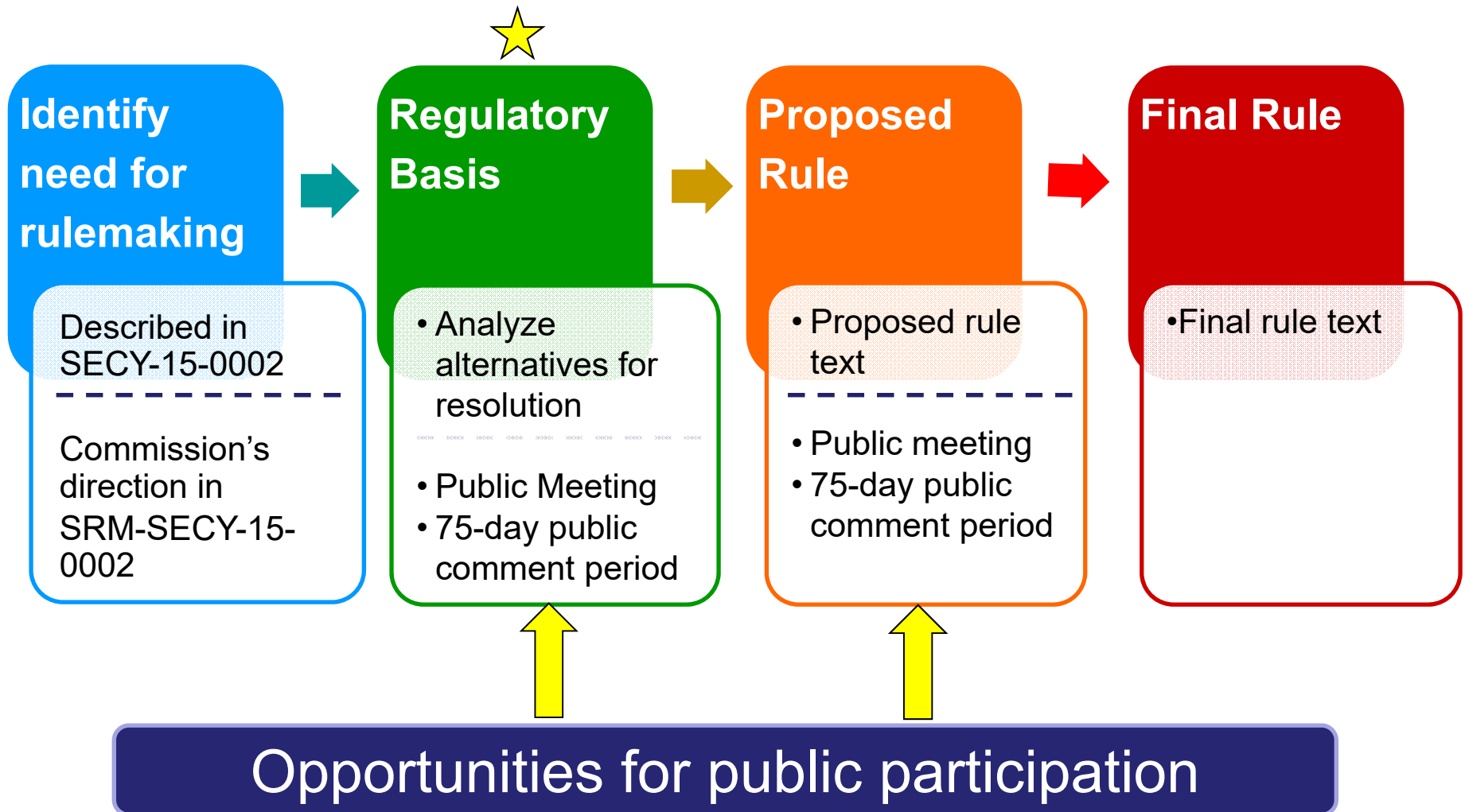
Allen Fetter, NRR
Senior Project
Manager



Purpose of the Rulemaking

- Implement Commission direction in SRM-SECY-15-0002, “Proposed Updates of Licensing Policies, Rules and Guidance for Future New Reactor Applications” to:
 - Align the reactor licensing processes
 - Improve clarity
 - Incorporating lessons learned in recent licensing proceedings
 - Reduce unnecessary burden on applicants and staff

Rulemaking Process





Regulatory Basis (RB)

- A regulatory basis provides a sound foundation for informed decision-making throughout the rulemaking process
 - RB describes the technical, legal and policy issues and the staff's consideration of options to resolve the issues
 - A cost/benefit analysis of options will be developed as part of the RB



Staff's Milestones of Rulemaking Activities

October 1, 2018

- Started scoping and outreach

January 15, 2019

- Held public meeting

July 11, 2019

- Internal alignment on the scope of RB

August 27, 2019

- Issuance of Commission Information Paper SECY-19-0084

September 20, 2019

- Held ACRS meeting



Staff's Milestones of Rulemaking Activities (cont'd)

November 21, 2019

- Held public meeting

February 2020

- First draft of RB inputs completed

Ongoing

- Staff and management review of inputs



Scope of the Regulatory Basis

- Number of items in scope: 54
- Number of alternatives evaluated: 129
- Items with rulemaking recommendation: 46
 - Number of items with rulemaking and guidance development or revision: 25
 - Number of guidance documents affected: 17
- Number of CFR Parts potentially affected by rulemaking: 9

Next Steps

June 2020

- Complete the technical development of the regulatory basis

November 2020

- Complete concurrence on the regulatory basis package

December 2020

- Issue the regulatory basis for public comment

February 2021

- Public comment period ends, staff commence drafting the proposed rule



August 2019 Scoping Results

- SECY-19-0084 included the following items:
 - Four alignment items
 - 52 lessons learned items
 - 8 additional items were corrections and addressed in the November 18, 2019 administrative rulemaking for corrections to the CFR



RB Scope Changes

- 4 items changed due to typos and/or inaccuracies in descriptions in SECY-19-0084
- 3 items deleted – staff decided not to recommend changes to:
 - 10 CFR 100.20(a)
 - 10 CFR Part 140
 - 10 CFR 52.79(a)(4), (a)(5), and/or (a)(23)
- 1 item scope expanded to include early site permits, in addition to design approvals and manufacturing licenses (changes to 10 CFR 50.109)



U.S. NRC RB Scope Changes (cont'd)

- 1 item changed related to continuing training for operator license applicants:
 - Staff decided to recommend a change to 10 CFR 55.31 rather than the original sections 10 CFR 50.54(i-l), 55.53(e) and (f), and 55.4



RB Scope Changes (cont'd)

- 1 item added:
 - Staff will recommend changes to Part 50 to require new Part 50 power reactor licensees and Part 52 COL holders to notify the NRC of the completion of power ascension testing
 - This item supports the proposed Part 171 rule that modifies the timing of the start of assessment of annual fees for Part 52 holders and future Part 50 power reactor licensees (85 FR 9328; February 18, 2020)



RB Scope – New Item

- Supports proposed rule recommended changes to amend § 171.15(a) regarding the timing of the start of assessment of annual fees
- The staff is considering two possible alternatives:
 - Alternative 1: No Action – continue to rely on license conditions to require new Part 50 power reactor OLs and Part 52 COL holders to notify the NRC of completion power ascension testing
 - Alternative 2: Rulemaking – amend Part 50 to include a requirement for new Part 50 power reactor OLs and Part 52 COL holders to provide timely written notification



Essentially Complete Design – Possible Alternatives

- The staff is considering three possible alternatives:
 - Alternative 1: No Action – leave the current guidance and regulations unchanged, resulting in the current need for further extended discussion with NRC staff and applicants in the proper interpretation of the term.
 - Alternative 2: Rulemaking – recommend rulemaking to add a definition of the term “essentially complete” to § 52.1. Possible elements of this definition include:
 - (1) those design elements of a plant, other than site-specific elements, that can affect its safe operation, and
 - (2) sufficient design information to allow the staff to resolve all technical issues using an approach graded on safety significance



Essentially Complete Design – Possible Alternatives (cont'd)

- Alternative 3: Guidance – this alternative would be limited to modification of the applicable guidance, RG 1.206, to define the term.
- The staff is still evaluating the costs and benefits between Alternative 2 and Alternative 3.



Operator Licensing, Continuing Training – Possible Alternatives

- The staff is considering two possible alternatives for Continuing Training:
 - Alternative 1: No Action – continue to rely on the use of regulatory exemptions, as necessary, to support operator licensing activities at cold plants
 - Alternative 2: Rulemaking – pursue rulemaking to amend the regulations in order to address simulation facilities at cold plants

Discussion of Public Comments





Discussion of Public Comments

- NRC should increase the transparency of the rulemaking
- Delays in issuance of COLs due to errors in certified design



Discussion of Public Comments

- Changes to facility licensing basis during construction without pre-approval
- Consideration of Vogtle 3 and 4 license amendment requests in determining the scope of the rule changes

- Defining the term “essentially complete”
- Further engagement on transformational changes (e.g., aligning the change process for DCs with 10 CFR 50.59 process, adding definitions of Tier 1, Tier 2, and Tier 2* information, and reducing requirements for standardization for certified designs)



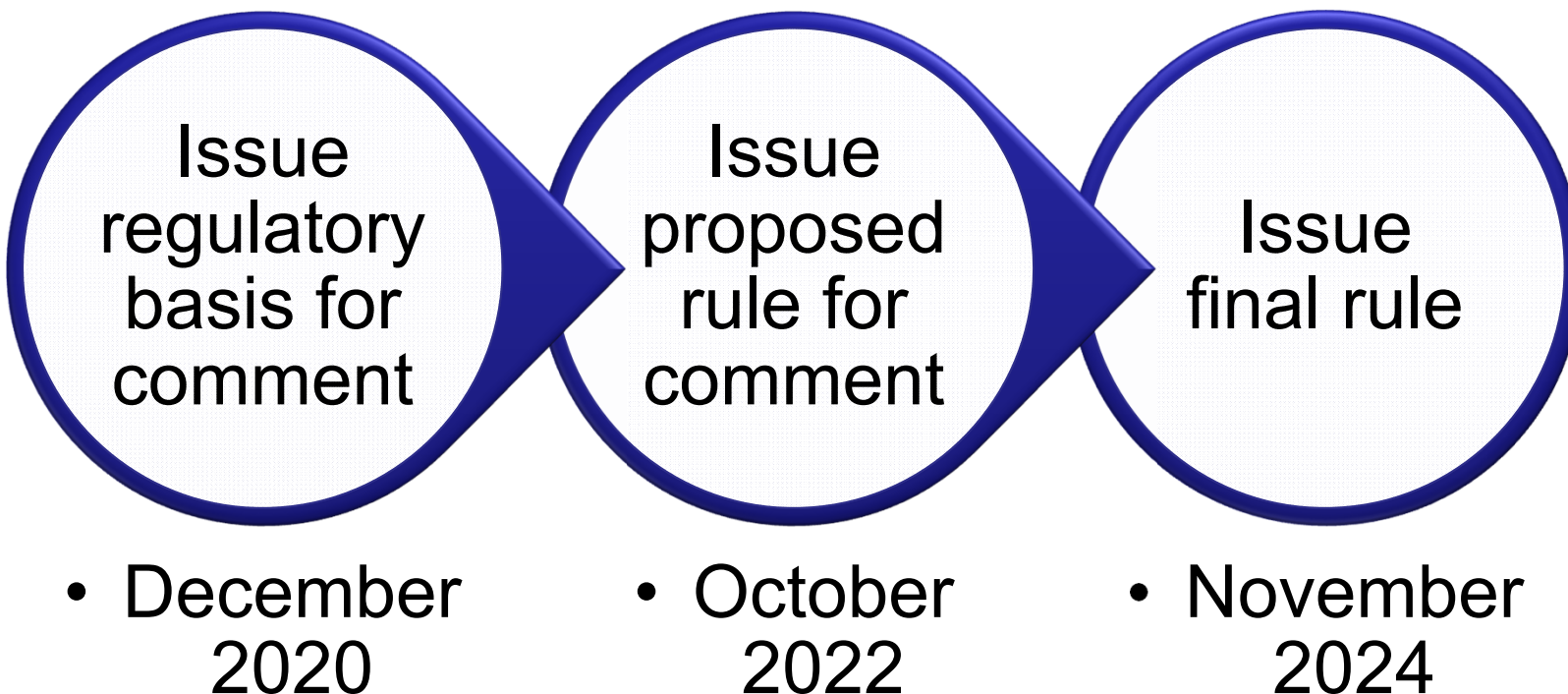
Discussion of Public Comments

- Current schedule for completion is not timely for near-term Part 50 or Part 52 applicants
- Schedule leaves little time between the creation of a technology-inclusive regulatory framework by 2027 required by NEIMA and effective date of this final rule (2025), creating regulatory uncertainty for applicants

Next Steps

- Finalize and issue the regulatory basis for public comment
 - Hold public meeting during the comment period
 - Consider comments received on the regulatory basis during the proposed rule phase
- Plan for additional public meeting(s) during the proposed rule phase

Rulemaking Schedule



Contact Information



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How Did We Do?

- Link to NRC Public Meeting Feedback form:



<https://www.nrc.gov/pmns/mtg?do=details&Code=20200416>



How to Stay Informed and Involved

- The meeting materials and meeting summary will be posted soon
- Search regulations.gov on the docket ID NRC-2009-0196

SUPPORTING INFORMATION



References

<u>Document Title</u>	ADAMS Accession Number/ FR Citation
85 FR 9328 - Revision of Fee Schedules; Fee Recovery for Fiscal Year 2020	85 FR 9328
2/14/20 - Letter to Petitioner M. Lorton on Behalf of Algnis, Inc.; Results of PRM Sufficiency Review; Petition for Rulemaking for 10 CFR Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants (Pkg)	ML20008D640
11/18/2019 - 84 FR 63565 - Miscellaneous Corrections	84 FR 63565
11/21/2019 - Category 3 Public Meeting Summary RE: Regulatory Basis: Rulemaking to Align Licensing Processes and Apply Lessons Learned from New Reactor Licensing (NRC-2009-0196)	ML19344C768
Transcript of the Advisory Committee on Reactor Safeguards Regulatory Policies & Practices-Part 50 52 Meeting - September 20, 2019.	ML19294A009
SECY-19-0084, "Status of Rulemaking to Align Licensing Processes and Lessons Learned from New Reactor Licensing (RIN 3150-AI66)"	ML19161A169
SECY-19-0034, "Improving Design Certification Content"	ML19080A034



References (cont'd)

<u>Document Title</u>	ADAMS Accession Number/ FR Citation
"Summary of January 15, 2019 Public Meeting to Discuss the Proposed Rulemaking to Align the Regulations in Parts 50 and 52 to Address Updates to the Licensing Processes and Lessons Learned for Future New Reactor Applications,"	ML19023A046
SECY-15-0002, "Proposed Updates of Licensing Policies, Rules and Guidance for Future New Reactor Applications"	ML13277A420
SRM-SECY-15-002, "Staff Requirements-SECY-15-002-Proposed Updates of Licensing Policies, Rules and Guidance for Future New Reactor Applications"	ML15266A023
"Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants"	50 FR 32138
SECY-89-013, "Design Requirements Related to the Evolutionary Advanced Light Water Reactors," dated January 19, 1989	ML003707947
SECY-90-016, "Evolutionary Light Water Reactor (LWR) Certification Issues and Their Relationship to Current Regulatory Requirements," dated January 12, 1990	ML003707849
SECY-93-087, "Policy, Technical, and Licensing Issues Pertaining to Evolutionary and Advanced Light-Water Reactor (ALWR) Designs," dated April 2, 1993	ML003708021
Bipartisan Policy Center Report Recommendations on the New Reactor Licensing Process	ML13059A240



Administrative Corrections

10 CFR	Description
§ 2.627	The references to § 2.617 in § 2.629(b) and § 52.83(b) should be to § 2.627.
Part 52 Appendices	Both the ABWR and System 80+ design certification final rules (Part 52, Appendices A and B, respectively) initially correctly referred to "ANSI/AISC N-690." Both the AP600 and AP1000 design cert final rules (Appendices C and D, respectively) incorrectly stated ANSI/AISC-690 (omitting the "N"). 64 Fed. Reg. 72,002, 72,018; 71 Fed. Reg. 4,464, 4,481. Unfortunately, the NRC changed the ABWR and System 80+ references to match the AP600 and AP1000 references in the 2007 Part 52 rulemaking. Correct the reference in Appendices A-D by adding the "N" back into ANSI/AISC N-690
Part 52 Appendix D Section VI.B.6	Part 52, Appendix D, Section VI.B.6 reads "except as provided in paragraph VIII.B.5.f . . ." but the reference is incorrect. It should be "except as provided in paragraph VIII.B.5.g . . ." (rather than VIII.B.5.f).
Part 52 Appendix E Section VI.B.6	Part 52, Appendix E, Section VI.B.6 reads "except as provided in paragraph VIII.B.5.f . . ." but the reference is incorrect. It should be "except as provided in paragraph VIII.B.5.g . . ." (rather than VIII.B.5.f).
Part 50 Appendix J	Under Option B, Subsection IV. Recordkeeping, refers to § § 50.72 (b)(1)(ii) and § 50.72 (b)(2)(i). There is no § 50.72 (b)(1)(ii), only § 50.72 (b)(1). 10 CFR Part 50, Appendix J references 10 CFR Part 52 and 10 CFR 50.54(o) imposes Appendix J as a requirement.
§ 21.3, "Basic component"	Revise definition by deleting text in brackets as follows: "(2) When applied to standard design certifications [under subpart C of part 52 of this chapter] and standard design approvals under part 52 of this chapter,..."
§ 52.43(b)	Correct the following text in 10 CFR 52.43(b) which was not updated when SDAs were renamed to state: "Subpart E of this part governs the NRC staff review and approval of a final standard design."
§ 52.79(c)(2)	Correct as follows: "all terms and conditions that have been included in the final standard design approval will be satisfied...."

Scope Changes



Change Log Report

Monday, April 27, 2020

4:42:28 PM

ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
13			E-1	55.31			

Brief Summary

Lessons Learned- Operator Licensing-Continuing Training for Operator License Applicants

Full Summary

The staff is considering adding a new requirement for holders of a CP or combined license to maintain operator license applicants' knowledge between the time of the NRC examination through establishment of the requalification program. This was raised as an issue after the first AP1000 operator license examinations because there is no regulatory requirement for applicants who defer completion of experience requirements between completion of the licensing examination and completion of the licensing process to demonstrate applicant knowledge retention.

Update reason

[Identified CFR sections changed from 50.54(i-i), 55.53(e) and (f), 55.4.] During the RBFC writing process, it was decided to pursue a change to 55.31 rather than the original sections identified because 55.31 addresses operator license applicants for whom the requirements would apply. Also, the staff determined that it does not need to address proficiency with a rulemaking.



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
14			E-4	55.45(b)			
Brief Summary	Lessons Learned- Operator Licensing-clarify requirements for plant walkthrough portion of operator test						
Full Summary	<p>This paragraph describes the requirements for administering the operator test in a plant walkthrough and in either a Commission approved simulator, a plant-reference simulator, or the actual plant. The staff is considering allowing combined license holders the option of developing plant walkthrough test items (i.e., job performance measurements (JPMs) used for the in-plant portion of the operating exam) using an alternative method for cold plants (Note: cold licensing of operators provides the method for operations personnel to acquire the knowledge and experience required for licensed operator duties during the unique conditions of new plant construction and initial operation.)</p> <p>This was an issue found during AP1000 plant construction because the regulations require in-plant walkthroughs during operator licensing examinations and an exemption to this requirement was granted to allow an alternative method which did not require applicants to enter the actual plant during JPMs.</p>						
Update reason	[Updated - Typo in SECY. CFR section changed from 55.46.] To Fix typo in SECY						



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
15			E-3	55.46			

Brief Summary

Lessons Learned- Operator Licensing- Establish new classification of Simulator: Commission Approved Simulator

Full Summary

This paragraph includes requirements for plant simulation facilities. The staff is considering a revision to the regulations governing simulation facilities so that if a simulation facility at a cold plant meets the criteria to be used for operator training and exams, then it can be used for those purposes regardless of whether it meets the literal definition of a PRS. The purpose of this change is to prevent new reactor licensees from having to submit a request in accordance with the requirements of 55.46(b) for Commission approval of a simulation facility as was done for the AP1000.

Update reason

[Updated - Typo in SECY. The affected CFR section was changed from 55.45(b). Summary description was not accurate.] To Fix Typo and to update the summary description. During the SECY writing process, the staff identified a more effective way to address the issue, but changes were not made to SECY before issuance.



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
16			E-2	55.46(c)(2)(i)			
Brief Summary	Lessons Learned- Operator Licensing- Clarify use of Commission Approved Simulator to satisfy manipulate controls requirements						
Full Summary	This paragraph requires that evidence is provided that the operator license applicant has manipulated either plant controls or the controls of a plant referenced simulator. The staff is considering revising these requirements for facilities constructing new reactors to use a suitable alternative to "models relating to nuclear and thermal-hydraulic characteristics that replicate the most recent core load," such as models that replicate the intended first core load. Based on AP1000 experience, it is not possible to complete the required control manipulations on the plant until after fuel load or on a PRS that replicates the most recent core load until after fuel load.						
Update reason	[The affected CFR section was changed from 55.31 (a) (5) and 55.46. SECY summary description was not accurate.] The affected CFR section was incorrectly listed in SECY-19-0084 as 55.31 (a) (5) and 55.46, and the information in the summary was not accurate.						



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
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40			G-8	100.20(a)			
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Brief Summary	Lessons Learned-Emergency Preparedness-remove requirement that requires SSAR to ID site physical characteristics that impede EP
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Full Summary	The referenced paragraph requires the site safety analysis report to identify physical characteristics that could pose significant impediment to the development of emergency plans. The staff is considering removing the requirement from this paragraph. The reason for the deletion is that this requirement is already included in 10 CFR Parts 50 and 52 and is therefore redundant.
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Update reason	Item is listed in SECY-19-0084 Enclosure 1, page 4, but no longer in scope. After SECY issuance, staff decided that this item should not be in scope, or developed. Upon further consideration, the staff recommends "no action" regarding this item because the staff does not believe the requirement is redundant.
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51			J-5	Part 140			
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Brief Summary	* Lessons Learned-Applicability of other processes-address ambiguous language and monetary amounts
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Full Summary	Applying the financial protection, insurance, and indemnity regulations in 10 CFR 140 (subpart B and appendices). The staff is considering revising these regulations to address challenges faced during COL licensing due to ambiguous language and applicability to greenfield sites and to revise the monetary amounts in the form indemnity agreements that are out of date..
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Update reason	Item is listed in SECY-19-0084, Enclosure 1 page 9, but no longer in scope. After SECY issuance, staff decided not to pursue or develop the item because the staff did not see a net benefit to the proposed changes.
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ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
60	01/07/2020	Allen Fetter	K-13	52.79(a)(4), 52.79(a)(5) and 52.79(a)(23)	Approved	High	06/23/2020

Brief Summary

Lessons Learned-Miscellaneous lessons learned-Revise regulations to address cogeneration

Full Summary

The staff is considering revising the application submission requirements of one or more of these paragraphs to account for multi-module small modular reactors to produce a mix of electricity and process steam. The reason for this change is at least one potential applicant for a combined license referencing a small module reactor is contemplating such an arrangement at their facility.

Update reason

On page 10 of SECY Enclosure 1. Staff decided to not pursue item development: Removal of item K-13, which would have addressed the use of process heat and steam in addition to electricity generation from nuclear plants, from the scope of the rulemaking. Rationale: A petition for rulemaking covering this matter was rejected. The specific petition for rulemaking submitted November 20, 2019 (Accession No. ML20008D649) asked NRC to revise its regulations for operating nuclear power plants to standardize the safe recovery and utilization of waste heat co generated from power operations, including the construction, operation, and maintenance of methods of recovering and utilizing waste heat. The petition was rejected because that NRC regulations do not currently prohibit an applicant or licensee from designing and implementing waste heat recovery systems, and optimizing use of waste heat is not within NRC's regulatory purview. Add discussion of this in the Front Matter.



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
61			J-4	50.109			
Brief Summary		Lessons Learned-Applicability of other processes-References to Issue Finality in 50.109					
Full Summary		Certain provisions in this section address design approvals and manufacturing licenses. The staff is considering revising this section to clarify that design approvals and manufacturing licenses [and early site permits] are covered by 10 CFR 52.145 and 52.171, "finality" sections, respectively. This change would eliminate any confusion regarding the appropriate criteria for imposing new requirements to design approvals and manufacturing licenses.					
Update reason		Item described in Enclosure 1 page 8 of the SECY. The item description expanded to include ESPs. During development of RBFC input, staff identified the need to add ESPs to the issue.					
62			G-2	Part 50, App. E, IV.B			
Brief Summary		Lessons Learned-Emergency Preparedness-Approval of EAL and Classification Schemes					
Full Summary		The referenced section establishes the requirements for the content of emergency plans with respect to the initial emergency action levels and classification scheme, and subsequent changes. The staff is considering modifications to the requirements to clarify when NRC approval of an initial set of emergency action levels and classification scheme, and subsequent changes is applicable. The reason for the proposed change is to align Part 52 with Part 50 requirements					
Update reason		[Updated - edits to 2nd sentence were not captured in issued SECY.] Previous edits provided during concurrence edits not captured in issued SECY-19-0084 enclosure.					



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
70	12/09/2019	Allen Fetter	K-16	52.104	Approved	High	06/23/2020
Brief Summary		Require report to NRC at completion of power ascension testing					
Full Summary		<p>The staff is considering revising the regulations to indicate that the start of a COL's 40 year timeframe would begin on the date that of the conclusion of power reactor startup testing. The change to the regulations would include a new requirement to require a notification be submitted by the COL Licensee upon successful completion of power ascension testing.</p> <p>This change would make conforming changes to Part 50 and 50 to reflect the closure of a petition for rulemaking related to 10 CFR Part 171 (see SRM-SECY-19-0081). In that SRM, the Commission approved rulemaking to amend Part 171 to require that licensing fees start to be incurred on the date that power ascension testing is completed.</p>					
Update reason		<p>New item added to scope after issuance of SECY-19-0084. The item was added as a result of a closure of PRM (see NON PUBLIC SRM-SECY-19-0081) It was added to scope after review and approval of Anna Bradford.</p> <p>See public proposed fee rule 85 FR 9328</p> <p>*POTENTIAL NEW ITEM* SRM-SECY-19-0081 may include the following:</p> <p>The staff should include in its Part 52 lessons learned exercise the revision of 10 CFR 52.104 to tie the beginning of the 40-year timeframe for the COL to also begin with notification of the conclusion of reactor startup testing.</p> <p>In addition, the staff may try to pursue revising the regulations to require a notification be submitted by the COL Licensee upon successful completion of power ascension testing.</p> <p>Proposed Fee Rule Update and potential corresponding changes to parts 50 and 52.</p> <p>Proposed Fee Rule Update (171) – Because Part 171 has no reporting requirements, the change in billing where annual fees (\$4,333,000 – prorated, as appropriate) are incurred by a licensee (from a licensee constructing a reactor to a licensee operating one) should be initiated by the reporting requirements in Part 50 and 52. Because power accession testing requires reporting to NRC and occurs just prior to the initiation of operation, this is considered a reasonable point in time to have licensees notify NRC about obligatory changes to their fee billing. As such, conforming changes regarding licensee reporting to NRC could be made in parts 50 and 52. This item can be added to the RBFC in Appendix K, "Miscellaneous Lessons Learned and Other Items". SRM-SECY-19-0081 notes that the staff needs to consider the implications of expanding the scope to include other Part 50 licensees (e.g., NPUFs), and provide an assessment of that expansion to the Commission as part of the fiscal year 2021 fee rule policy paper (N/A to our effort?)</p>					



ID	Date Received	Requester	Item ID	Section in 10 CFR	Status	Priority	Date decision required
72	01/07/2020	Allen Fetter	TBD-2	52.59	Approved	High	

Brief Summary Make duration of MLs consistent with DCs

Full Summary Propose/consider making the duration of manufacturing licenses (MLs) be to be consistent with what is being proposed for design certifications (DCs) in Appendix H.1 in the RBFC. We believe this should be done, and can be easily addressed by posing as a question in the FRN (suggested by Joe Colaccino and consistent with past rulemaking practices). Supporting rationale: On page 49393 of the 2007 SOC for the final Part 52 rulemaking, there is a discussion of the duration of an ML. The middle column, second full paragraph contains the statement that the duration of an ML was chosen to be consistent with the duration of a DC.

Update reason Observation during RBFC development



Section in 10 Item ID
 CFR

Full Summary

Part 50	A-1	In the staff requirements memorandum to SECY-15-0002, the Commission approved the staff's recommendation to confirm that the Commission's guidance given in the "Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants" and other Commission direction provided in response to SECY-89-013, SECY-90-016, and SECY-93-087, apply to new 10 CFR Part 50 power reactor applications in a manner consistent with 10 CFR Part 52 design and license applications. The staff will consider whether specific regulations in 10 CFR Part 50 should be modified to implement this Commission direction. For example, revise Part 50 to require construction permit and operating license applications include a description of design features for prevention and mitigation of severe accidents.
50.34	B-1	The requirements of this paragraph specify the technical information for contents of Part 50 licensing applications. The staff is considering a revision to this paragraph to require the develop a plant-specific probabilistic risk assessment (PRA), submit appropriate information describing that analysis as part of the construction permit and operating license application submittals, and maintain and upgrade the PRA throughout the duration of the operating license for new power reactor applications. This purpose of this change would be to align the Part 50 licensing process with the PRA requirements included in 10 CFR Part 52.
50.69(b)	B-2	This paragraph specifies applicability requirements for using the provisions for risk-informed categorization and treatment of structures, systems, and components. The staff is considering revising this provision to allow COL holders to use these alternative requirements.
50.71 (h)	B-3	This paragraph requires COL holders to develop a level 1 and a level 2 probabilistic risk assessment (PRA) that includes initiating events and modes endorsed by the NRC one year prior to initial fuel loading.. The staff is considering revising this paragraph to increase one year to four years. This change would align this requirement with the timeframe that consensus standards are updated.
50.34(f)	C-1	This paragraph describes contents of applications to address additional Three Mile Island (TMI) related requirements. The staff is considering revising this paragraph to include the same exceptions given for 10 CFR Part 52 applications. The purpose of the staff considering this change is to achieve alignment between the Part 50 and 52 licensing processes.
50.34(a)	D-1	This paragraph specifies the minimum information that must be contained in a preliminary safety analysis report for a construction permit. The staff is considering revising this paragraph to require construction permit and operating license applications include a description and analyses of fire protection design features and describe fire protection plans. The reason the staff is considering this change is to achieve alignment between the Part 50 and 52 licensing processes.



Section in 10 Item ID
CFR

Full Summary

55.31	E-1	The staff is considering adding a new requirement for holders of a CP or combined license to maintain operator license applicants' knowledge between the time of the NRC examination through establishment of the requalification program. This was raised as an issue after the first AP1000 operator license examinations because there is no regulatory requirement for applicants who defer completion of experience requirements between completion of the licensing examination and completion of the licensing process to demonstrate applicant knowledge retention.
55.46(c)(2)(i)	E-2	This paragraph requires that evidence is provided that the operator license applicant has manipulated either plant controls or the controls of a plant referenced simulator. The staff is considering revising these requirements for facilities constructing new reactors to use a suitable alternative to "models relating to nuclear and thermal-hydraulic characteristics that replicate the most recent core load," such as models that replicate the intended first core load. Based on AP1000 experience, it is not possible to complete the required control manipulations on the plant until after fuel load or on a PRS that replicates the most recent core load until after fuel load.
55.46	E-3	This paragraph includes requirements for plant simulation facilities. The staff is considering a revision to the regulations governing simulation facilities so that if a simulation facility at a cold plant meets the criteria to be used for operator training and exams, then it can be used for those purposes regardless of whether it meets the literal definition of a PRS. The purpose of this change is to prevent new reactor licensees from having to submit a request in accordance with the requirements of 55.46(b) for Commission approval of a simulation facility as was done for the AP1000.
55.45(b)	E-4	<p>This paragraph describes the requirements for administering the operator test in a plant walkthrough and in either a Commission approved simulator, a plant-reference simulator, or the actual plant. The staff is considering allowing combined license holders the option of developing plant walkthrough test items (i.e., job performance measurements (JPMs) used for the in-plant portion of the operating exam) using an alternative method for cold plants (Note: cold licensing of operators provides the method for operations personnel to acquire the knowledge and experience required for licensed operator duties during the unique conditions of new plant construction and initial operation.)</p> <p>This was an issue found during AP1000 plant construction because the regulations require in-plant walkthroughs during operator licensing examinations and an exemption to this requirement was granted to allow an alternative method which did not require applicants to enter the actual plant during JPMs.</p>
26.4(f)	F-1	This paragraph establishes the applicability of fitness for duty program for individual who are constructing or directing construction of safety or security related structures, system and components. The staff is considering modifying 10 CFR 26.4(f) to allow escorted access to visitors performing safety or security related work activities in a construction area, similar to operational plant provisions in 10 CFR 73.55(g)(7). The staff is considering this change to reduce unnecessary burden on combined license holders undergoing construction and to align 10 CFR Part 26 with the approach used in 10 CFR Part 73.55.



Section in 10 CFR
Item ID

Full Summary

73.55(a)(4)	F-5	This paragraph establishes the implementation requirement for physical protection of licensed activities in nuclear power reactors against radiological sabotage. The staff is considering changing the applicability of 73.55(a)(4) to "before fuel load" instead of "before fuel is allowed onsite". The staff is considering this change because the current language may impose an unnecessary burden to a COL holder because the possession and storage of unirradiated fuel is no different in radiological hazards or risks from a license issued under 10 CFR Part 70.
50.54(q)	G-1	The referenced section requires that 10 CFR Part 52 licensees follow and maintain the effectiveness of an emergency plan. The staff is considering clarifying that the regulation pertaining to the emergency plan change process provided by 10 CFR 50.54(q) applies to licensees during construction. In addition, 10 CFR 50.54(q)(2) will be added to the 50.54 introductory paragraph of provisions that aren't required until after the 10 CFR 52.103(g) finding is made.
Part 50, App. E, IV.B	G-2	The referenced section establishes the requirements for the content of emergency plans with respect to the initial emergency action levels and classification scheme, and subsequent changes. The staff is considering modifications to the requirements to clarify when NRC approval of an initial set of emergency action levels and classification scheme, and subsequent changes is applicable. The reason for the proposed change is to align Part 52 with Part 50 requirements
Part 50, App. E, IV.F.2.a.ii	G-3	The referenced paragraph establishes the requirements for the content of emergency plans with respect to provisions for the conduct of emergency preparedness exercises. The staff is considering modifying the regulation to remove an inconsistency with respect to the 5% power emergency planning ITAAC and the language in 10 CFR Part 50, Appendix E, IV.F.2.a.ii and a.iii. The staff is considering this change in order to clarify under what conditions the provisions of 10 CFR 50.54(gg) apply.
Part 50, App E, IV.F.2.a.iii	G-4	The referenced paragraph establishes the requirements for the content of emergency plans with respect to provisions for the conduct of emergency preparedness exercises. The staff is considering modifying the regulation to clarify when subsequent full participation exercises for each subsequent Part 52 reactor (at the same site) using the same technology, emergency response organization (ERO), or similar facilities is required. The staff is considering this change because subsequent exercises for each subsequent reactor may not be needed for the same technology, ERO, or similar facilities.
52.17 (b)(1), 52.18 and 100.20(a)	G-5	The regulations in 10 CFR 52.18 state that a determination on the siting criteria of 10 CFR 52.17(2)(b)(1) will be made by the Commission in consultation with the Federal Emergency Management Agency (FEMA). However, this is not a requirement of 52.17(b)(1) nor is it required by public law. Additionally, this review process would be inconsistent with a license review involving the siting criteria under 10 CFR 100.20(a) which would not require outside consultation. Therefore, the staff is considering revising these requirements to address inconsistencies between 52.17(b)(1), 52.18, and 100.20(a) as to when FEMA consultation is required.
52.17(b)(1)	G-6	This paragraph establishes requirements for contents of applications for early site permits pertaining to site characteristics that could pose a significant impediment to the development of emergency plans. The staff is considering revising this requirement to align with the siting criteria in 10 CFR 100.21(g).



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52.17(b)(4)	G-7	The referenced paragraph establish the requirements for technical content of Part 52 early site permit license applications with respect to the site safety analysis report. The staff is considering modifying the requirement that the site safety analysis report include a description of contacts and arrangements made with Federal, State, and local governmental agencies with emergency planning responsibilities. The staff is considering this change because it is premature to request such detailed information, and there is no corresponding safety benefit
52.59	H.1-1	This section of the regulations provides requirements for renewing approved design certification rules. The staff is considering whether the requirements to renew a certified design should be modified or eliminated. The reason the staff is considering the modification or elimination of these requirements is the experience gained from the evaluation of the application concerning the Advanced Boiling Water Reactor design certification renewal. Note that a modification or elimination of the requirements in 10 CFR 52.59 would have an impact on the requirements of 10 CFR 52.55 which specify the duration of a design certification rule.
Part 52.39(e)	H.2-1	This paragraph states that the holder of an early site permit (ESP) may not make changes to the ESP, including the site safety analysis report, without Commission approval (license amendment). The staff is considering establishing a 50.59- like change process for ESPs and LWAs. This would allow certain changes to be made without NRC approval
PART 52, Subpart B or C	H.2-2	The current requirements to change the information within the scope of a certified design are contained within each design certification appendix in Part 52, The staff is considering the need to maintain the 50.59-like process in the individual Appendices vs. moving it into either Subpart B or C of Part 52 The reason the staff is considering the change is to simplify the change process in Part 52 and more closely align the Part 52 change process with the change process in Part 50
Part 52 Appendix A-E, Sections IV.A.2.a and VIII.A	H.2-3	These paragraphs require COL applicants referencing a DCD to include as part of its application to include a plant-specific DCD containing the same type of information and using the same organization and numbering as the generic DCD and establish the change process for Tier 1 information. The staff is considering relaxing these requirements to eliminate the need for unnecessary exemption requests related to format inconsistencies between a COL and the referenced DCD and to provide a more
Part 52 Appendix A-E, Section VIII.5.B.a and VIII.5.B.b	H.2-4	The requirements in the referenced sections of each design certification appendix refer to the change process for Tier 2 information. The staff is considering modifying each Part 52 design certification appendix to adopt the "...prior to implementing a proposed change..." provision in 50.59(c)(2) in lieu of the "...proposed departure..." provision in Section VIII.5.B of each existing design certification appendix. The reason for this change is to align the change processes for design information included for plants that are licensed under Parts 50 and 52.
Part 52 Appendix A-E, Section VIII	H.2-5	Section VIII of each 10 CFR Part 52 design certification appendix provides requirements for changes and departures from the information within the scope of the certified design. The staff is considering modifications to Section VIII to include applicability provisions like those found in 10 CFR 50.59(c). The reason that the staff is considering the change is that the current requirements in this section do not apply to changes to the facility or procedures as compared with the more specific criteria in 10 CFR 50.59(c).



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52.1 and 52.47(a)	H.3-1	The staff is proposing to modify the requirements in these paragraphs for applications received after the date of this rulemaking to add definitions for Tier 1 and Tier 2 (and Tier 2* as applicant's choice for Tier 1) consistent with the definitions provided in SECY 19-0034. In addition, the staff is proposing to revise 10 CFR 52.47 to require that the applicant's final safety analysis report identify Tier 1, Tier 2, and Tier 2* information.
52.41(c)(1) and (2)	H.3-2	These paragraphs specify that an application for a certification of a nuclear power plant design, either evolutionary or that differs significantly from light water reactor designs must provide an essentially complete nuclear power reactor design except for site specific elements. The staff is considering further clarifying the phrase "essentially complete design." The reason that the staff is considering a change is to reflect that the meaning of this phrase, consistent with previous Commission policy, is to have sufficient design information to resolve all technical issues using a graded approach that provides more information in an application based on safety significance, or, strike "essentially complete" and replace with "sufficiently complete" design to allow staff to evaluate compliance with the applicable regulations and to confirm that proposed ITAAC will demonstrate that compliance.
52.63(a)(1)(vii)	H.3-3	Three specific requirements in this section are related to considering changes to the certified design based on standardization. The staff is considering whether these provisions should be modified. The reason the staff is considering these changes is that the certification of a design as a rule provides a high level of standardization and lessons learned in the AP1000 evaluation of licensing amendments showed that this test was an increased burden and not beneficial to the maintenance of standardization.
52.79(d), Part 52 Appendix A-E, Section IV.A.2.d	H.3-4	10 CFR 52.79(d) provides requirements for combined licenses that reference a standard design certification. Section IV.A.2.d for each Part 52 design certification appendix provides requirements to combined license applicants who reference the specific appendix. The staff is considering revising 52.79(d) to accurately reflect the terms "site parameters" and "site characteristics" as they relate to the information required to be included in a combined license application.
52.79(d), Part 52 Appendix A-E, Section IV	H.3-5	10 CFR 52.79(d) provides requirements for combined licenses that reference a standard design certification. Section IV for each Part 52 design certification appendix provides additional requirements and restrictions to combined license applicants who reference the specific appendix. The staff is considering revising 52.79(d) to cover how applicants could include or incorporate by reference generic design control document information and delete Section IV. The reason for the change is for clarification and consolidation of references.
Part 52 Appendix A-E, Section IX	H.3-6	This paragraph provides requirements to combined license applicants who reference the specific appendix regarding inspections, tests, analysis and acceptance criteria. The staff is considering modifying the language in all the corresponding design certification rule appendices, except for Appendix E, to delete the requirements and hold the section in reserve. The reason for proposing this change is to be consistent with the language in Part 52, Appendix E, Section VI.B.7, which concluded that these requirements were duplicative to the requirements in other portions of Part 52.



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52.133(a) 52.43(b), 52.145(a)	H.4-1	This paragraph states that an applicant for a construction permit or combined license may reference a standard design approval. The staff is considering clarifying that that one or more standard design approvals may be referenced in design certifications, as well as construction permit and combined license applications. The reason for considering the change is that these provisions are not explicitly included in the current regulations.
52.147	H.4-2	This paragraph specifies the length of a standard design approval. The staff is considering revising this paragraph to provide the option for NRC to rescind the standard design approval once the associated design certification rule is issued. The reason for considering this change is to reduce the burden on the applicant and the staff to rescind the standard design approval once the design certification rule is issued.
50.34(h) and 52.47(a)(9)	H.5-1	These paragraphs require an applicant to evaluate their application against the standard review plan revision in effect 6 months before the docket date of the application and specify how differences between the application and the acceptance criteria included in the standard review plan provide an acceptable method for complying with the regulations. The staff is considering whether this requirement should be modified. The reason the staff is considering a modification is to improve the efficiency and effectiveness (including safety focus) of the licensing process for the applicant as well as the agency.
50.100	H.5-3	A provision in this paragraph specifies that combined licenses are subject to the timely completion of construction requirements of 10 CFR 50.55(b). The staff is proposing to modify the provision in 50.100 for combined licenses because the 2007 revision to 50.33(h) removed the requirement for a COL applicant to specify the earliest and latest date for completion of construction. The purpose of the change is to correct the drafting error from the 2007 update.
52.47(a)	H.5-4	The requirements in this paragraph include a provision that the application for a design certification include a final safety analysis report that describes the facility. The staff is considering modifying this regulation to allow applicants to submit a design control document. The reason for the change is that all but one design certification applicant has submitted a design control document with their design certification application and the staff wants to make the regulations consistent with actual practice.
52.79	H.5-5	The requirements of 10 CFR 52.79(c) and (d) include a provision that the COL applicant demonstrate that the site characteristics fall within the site parameters specified in the certification or approval. The requirements of 10 CFR 52.79(b) include a provision that the COL applicant demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the ESP. The staff is considering modifying the requirements in 52.79 to clarify the demonstration that needs to be made for a COL applicant referencing both a design certification or approval and an ESP. The reason the staff is considering the change is that the language in the regulations is different for each of these provisions described above while the expectation for the demonstration should be the same.



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2.101(a)(5)	I-1	The requirements of this paragraph provide the applicant an option to submit an application under the requirements of Part 50 or 52 in two parts. The staff is considering modifying the requirements of this paragraph to permit the first part of a phased combined license application to consist solely of the environmental report plus the general administrative information specified in 10 CFR 50.33(a) through (e). The reason for this change is because 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 that is performed in the preparation of an environmental impact statement.
51.50(a)	I-2	This paragraph requires applicants of a construction permit to include an environmental report with the application. The staff is considering revising this paragraph to allow environmental reviews for construction permits to reference a completed environmental assessment from a certified design. The reason for considering this change is a clarification of current requirements.
51.75(c)(1) and conforming changes in 51.92(b) and 51.92(e)	I-3	These paragraphs specify what is required to be included in an environmental report at the combined license stage with or without referencing an early site permit. The staff is considering modify these requirements to specify under what conditions the NRC shall prepare an environmental assessment in lieu of an environmental impact statement for a combined license referencing an early site permit. The reason for considering this change is a clarification of current requirements.
2.4	J-1	This section provides definitions for 10 CFR Part 2, "Agency Rules of Practice and Procedures." The staff is considering amending the definition of a contested proceeding. The reason for the change is that the current definition does not include a hearing related to inspections, tests, analysis and acceptance criteria under 10 CFR 52.103.
50.71 (e)(3) (iii)	J-3	The requirements of this paragraph specify that applicants for a combined license shall periodically update the final safety analysis report originally submitted as part of the application. The staff is considering several changes including: 1) modifying this paragraph to clarify the applicability of these requirements to combined license holders who are not actively pursuing construction and for applications that have been submitted to the Commission but the applicant has requested that their review be suspended but not withdrawn; 2) the requirement for combined license applicants having to submit annual final safety analysis report updates to allow flexibility in the timing of submittals; 3) inconsistency in reporting frequencies between 50.59 and 50.71 (e); and 4) insure that any FSAR changes that impact specific ITAAC are docketed no later than the ITAAC closure notification (ICN) for the associated ITAAC (including by submission with the ICN as an acceptable option). The reason for the change is that the regulations do not specifically address combined license holders or the status of suspended applications.
50.109	J-4	Certain provisions in this section address design approvals and manufacturing licenses. The staff is considering revising this section to clarify that design approvals and manufacturing licenses [and early site permits] are covered by 10 CFR 52.145 and 52.171, "finality" sections, respectively. This change would eliminate any confusion regarding the appropriate criteria for imposing new requirements to design approvals and manufacturing licenses.



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52.6(b)	K-10	The paragraph provides requirements for completeness and accuracy of information from a Part 52 applicant or licensee. The staff is considering modifying the recipients of this notification that are referenced in this paragraph to include either the Executive Director for Operations or the NRR Office Director. The reason for the change is that this requirement also applies to design certifications and standard design approvals which do not have regional involvement.
52.47(a)(21), 52.79(a)(20)	K-12	The requirements of these paragraphs specify an applicant shall include in their application resolution of applicable unresolved safety issues and medium and high priority generic safety issues. The staff is proposing to revise both paragraphs to reflect that the NRC has discontinued the use of the priority ranking model for Generic Issues and has instead implemented a screening process using the risk criteria in RG 1.174 (MD 6.4-1999).
52.97(a)(2)	K-14	This paragraph allows for the closeout of ITAAC included in a DC or ESP that are referenced in a COL application. The staff is proposing a minor revision to clarify the wording for ITAAC closeout to be consistent with the language in 10 CFR 52.103(g) that the ITAAC "are met."
52.98(d)	K-15	The requirements of this paragraph address the finality of a combined license referencing a manufacturing license. The staff is proposing to modify the language to clarify the reference to manufacturing license and Subpart F. The reason for the change is that there appears to be unnecessary wording in the paragraph that is confusing.
52.104	K-16	The staff is considering revising the regulations to indicate that the start of a COL's 40 year timeframe would begin on the date that of the conclusion of power reactor startup testing. The change to the regulations would include a new requirement to require a notification be submitted by the COL Licensee upon successful completion of power ascension testing. This change would make conforming changes to Part 50 and 50 to reflect the closure of a petition for rulemaking related to 10 CFR Part 171 (see SRM-SECY-19-0081). In that SRM, the Commission approved rulemaking to amend Part 171 to require that licensing fees start to be incurred on the date that power ascension testing is completed.
2.106(b)(2)(ii)	K-2	The requirements of this paragraph direct the Director of NRO to provide a notice of issuance of the finding regarding inspections, tests, analyses, and acceptance criteria. The staff is considering revising the language in this paragraph to more exactly reflect the 10 CFR 52.103(g) finding as described in 10 CFR Part 52.
21.3	K-4	Although the definition of license in 10 CFR 50.2 clearly covers an ESP, COL, or manufacturing license under 10 CFR Part 52, the staff proposes to add "or part 52" to the definitions of "Critical characteristics," "Dedicating entity," and "Dedication," in 10 CFR 21.3 to be consistent with the definitions of "Basic component," "Defect," and "Substantial safety hazard" in 21.3. This change would specify that the definitions are applicable "to nuclear power plants licensed pursuant to 10 CFR part 50" or part 52 of this chapter.
50.34(f)(2)(iv)	K-5	This paragraph requires applicants to have a plant safety parameter display console that will display to operators the minimum set of parameters defining the safety status of the plant. The staff is considering revising this paragraph to require a plant safety parameter module (SPDS). This change will eliminate the need for exemptions given that an integrated SPDS rather than a stand-alone console, reflects state-of-the-art control room design practices for new reactors.



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50.36(a)(1)	K-6	It is not clear what change process licensees should use for change to the technical specification (TS) Bases document prior to the 10 CFR 103(g) finding. A licensee may be using the TS Bases Control Program to effect changes to the TS Bases document, but the TS Bases Control Program is not in effect until after the 103(g) finding. The staff is considering clarifying whether the licensee should be using the TS Bases Control Program to implement changes to the TS Bases prior to 103(g).
50.46(a)(3)	K-8	The requirements of this section include a provision that certain applicants or holder of certain licensees or approvals shall estimate the effect of any change to or error in an acceptable evaluation model or in the application of such a model to determine if the change or error is significant. The staff is considering a change to this provision such that holders of a design certification, standard design approval, and a manufacturing license are not required to report errors in emergency core cooling system models until a combined license, construction permit, or operating license applicant references use of the applicable ECCS model.
50.55a	K-9	The current requirements in this section include a provision to require ASME code repairs to the facility be conducted in accordance with ASME Section III until the 10 CFR 52.103(g) finding is made. The staff is considering removing the condition from 10 CFR 50.55a that requires maintaining Section III for all systems until the 103(g) finding. The reason the staff is considering this change is to permit transition to ASME Section XI for repair and replacement activities once all Section III activities have been completed for each individual system.



Acronyms

ABWR	Advanced Boiling Water Reactor
ADAMS	Agencywide Documents Access and Management System
CFR	<i>Code of Federal Regulations</i>
COL	Combined License
CP	Construction Permit
DC	Design Certification
DCD	Design Certification Document
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OL	Operating License
PRA	Probabilistic Risk Assessment
RB	Regulatory Basis
SOC	Statement of Considerations
SRP	Standard Review Plan
SRM	Staff Requirements Memorandum
TMI	Three Mile Island