

Consideration of Scope of Rulemaking to Update Regulations for Future New Reactor Licensing Applications

January 15, 2019

Agenda



- Opening Remarks
- Staff Presentation
 - Background
 - Staff Scoping Activities
- Stakeholder Presentations
- Discussion
- Next Steps
- Closing Remarks

Purpose of Meeting



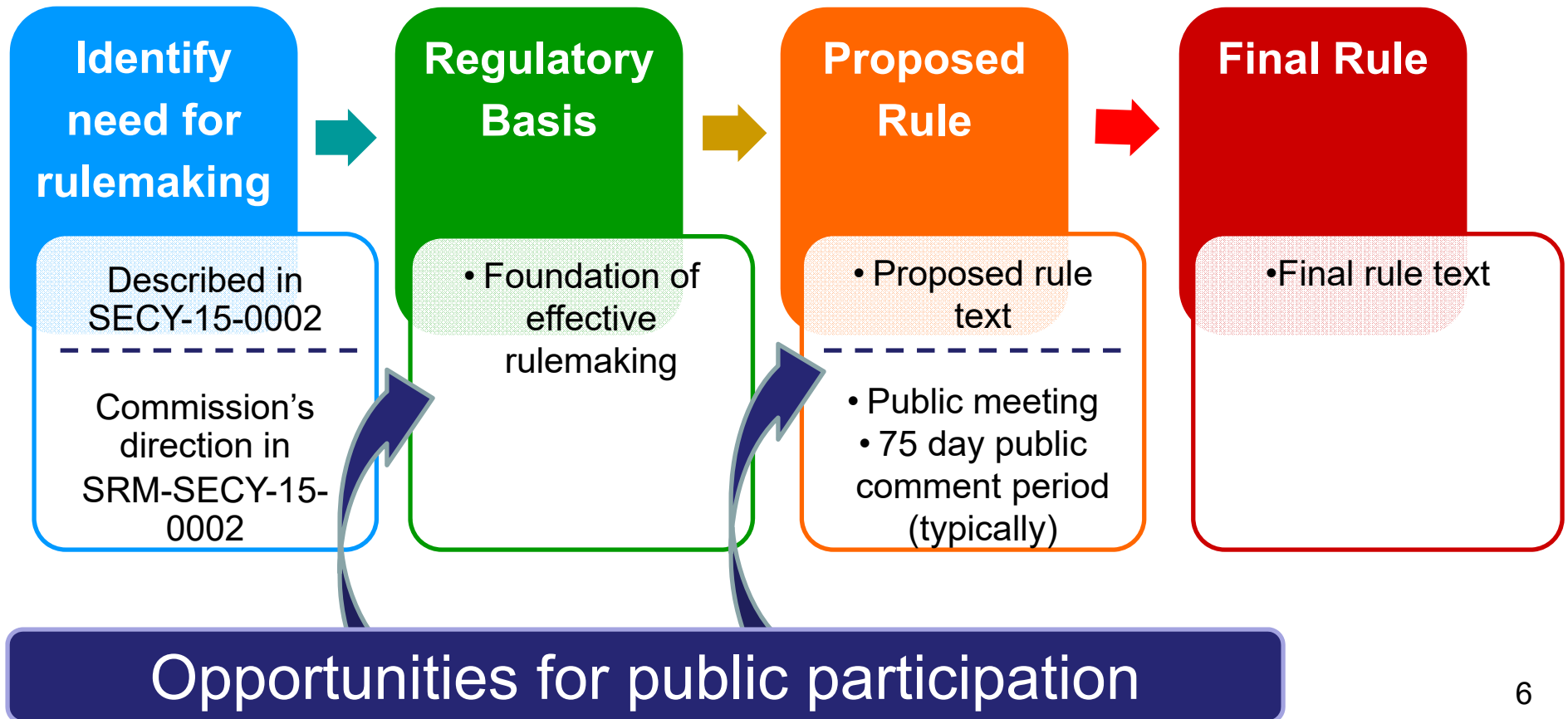
- Discuss the staff's plans for determining the scope
- Solicit ideas regarding what should be considered
- NRC will consider the input received, but will not prepare written responses

Opening Remarks

Fred Brown
Director
NRO

NRC Staff Presentation

Rulemaking Process



Regulatory Basis (RB)



- NRC requires a RB for sound, 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

Current Activities



- Staff is engaging in rulemaking as a result of SECY-15-0002 “Proposed Updates of Licensing Policies, Rules and Guidance for Future New Reactor Applications”:
 - Approved recommendations on alignment of 10 CFR Parts 50 and 52 (Enclosure 1 of SECY-15-0002)
 - Part 52 lessons learned that have unnecessarily challenged staff, applicants and licensees (Enclosure 2 of SECY-15-0002)
 - Transformational changes, some of which were not included in SECY-15-0002

Improving Alignment Between New Reactor Licensing Processes

(Enclosure 1 of SECY-15-0002)



- SECY-15-0002 requested confirmation that the following apply to new 10 CFR Part 50 power reactor applications in a manner consistent with 10 CFR Part 52 design and license applications:
 - Commission’s guidance given in the “Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants”
 - Other Commission direction provided in response to SECY-89-013, SECY-90-016, and SECY-93-087
- SRM-SECY-15-0002, which approved the staff’s recommendations, confirmed that the policy issues applied to Part 52 applications should also be applied to Part 50 applications

Parts 50 and 52 Alignment

(Enclosure 1 of SECY-15-0002, continued)



- In the rulemaking, staff will consider revising the regulations in 10 CFR Part 50 for new power reactor applications to more closely align with requirements in 10 CFR Part 52, such as:
 - a. Develop a plant-specific PRA, submit appropriate information describing that analysis as part of the CP and OL submittals, and maintain and upgrade the PRA throughout the duration of the operating license
 - b. Address the TMI requirements of 10 CFR 50.34(f), with the same exceptions given for 10 CFR Part 52 applications
 - c. Provide a description of design features for prevention and mitigation of severe accidents
 - d. Provide a description and analyses of fire protection design features and describe fire protection plans

Part 52 Lessons Learned

(Enclosure 2 of SECY-15-0002)



- Provided examples in the following areas
 - Corrections
 - Clarifications
 - New Requirements
- Staff identified approximately 150 scope items that are being evaluated
 - Focusing on issues to consider that have unnecessarily challenged staff, applicants and licensees
 - Design certification renewal review (ABWR experience)
 - Errors in a certified design while reviewing a COL application
 - Certified information that is referenced in the design certification rule (i.e., Tier 1 information)

Transformational Changes

(not in the scope of the SECY)



- What other changes could be considered to Part 52 to improve effectiveness and efficiency while maintaining safety and security?
 - Expiration date of certification
 - Impact on renewal regulations
 - Impact on amendment regulations
 - Impact on being referenced by a COL applicant
 - When would certification need to be updated, if at all?
 - Would any provisions need to be added to Part 52?
 - Design certification change process
 - Impact on standardization

Transformational Changes

(not in the scope of the SECY- continued)



- What other changes could be considered to Part 52 to improve effectiveness and efficiency while maintaining safety and security?
 - Clarify meaning of “essentially complete design” phrase in 10 CFR 52.47(c)(1)
 - Requirements to address SRP in effect 6 months before application submitted
 - Burden to produce this report vs. benefit to have during review

Stakeholder Presentations and Remarks

Open Discussion

Questions

- What elements of the Part 50 licensing process should be aligned with the Part 52 licensing process to achieve equivalent outcomes under both new reactor application review processes? What elements of the Part 50 licensing process should not be aligned with the Part 52 licensing process?

Questions



- What elements of the Part 52 licensing process should be changed to address difficulties encountered during previous licensing reviews and provide more effective and efficient reviews for future applications?

Questions



- What transformational changes can be implemented in the Part 52 licensing process, which would improve effectiveness and efficiency within the framework of reasonable assurance of adequate protection of safety and security?

Next Steps



- Staff will consider your feedback from this meeting
 - Determine the scope of the regulatory basis (late March 2019)
 - Communicate path forward to the Commission
 - Develop the draft RB (second quarter 2020)
 - The draft RB will be issued for public comment
- Hold additional stakeholder meetings if needed

How to stay involved?



The screenshot shows the regulations.gov website. At the top left is the logo "regulations.gov" with the tagline "Your Voice in Federal Decision-Making". To the right are navigation links: "Home", "Help", "Resources", and "Contact Us". Below these are three buttons: "Search" (with a magnifying glass icon), "Browse" (with an eye icon), and "Learn" (with a lightbulb icon). A central banner reads "Make a difference. Submit your comments and let your voice be heard." Below this is a search box with the text "SEARCH for: Rules, Comments, Adjudications or Supporting Documents:". The search input field contains "NRC-2009-0196" and a blue "Search" button is to its right. Below the search button is a link for "» Advanced Search".

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

Questions & Feedback



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How did we do?

- Link to NRC Public Meeting Feedback form:



References

<u>Document Title</u>	ADAMS Accession Number/ FR Citation
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

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