Right-sizing SLR Reviews

Brett Titus Licensing Director Regulatory Affairs

October 31, 2023







©2023 Nuclear Energy Institute

Agenda



Right-sizing Elements	Look holistically at the process.
A Graded Approach	Give credit where credit is due.
Categories & AMPs	Focus on what has changed and what is unique.
Environmental	Pursue opportunities for efficiency.
Discussion/Next Steps	Prioritize and execute the plan.

Right-sizing SLR Reviews

- Reexamine what is needed for reasonable assurance
- Strong leadership and staff discipline are essential
- Adopt a more graded approach for reviews
- Schedule and resource metrics must strive for excellence and predictability

Graded Approach



- Risk and safety significance should be a driver for depth of review
- Maximize credit for adherence to guidance and standardization
- Focus on what has changed since the ILR review
 - AMPs that are unchanged over GALL revisions
 - AMPs with minimal changes over GALL revisions
- Fleetwide programs already reviewed for another ILR/SLR
- Licensee commitments that continue from ILR through SLR
- Routinely inspected programs subject to other regulatory requirements
 - ISI, IWE, IWL, FAC, Fire Protection, App. J, Boric Acid Control

Graded Approach

Most

ŊÊI

		Least	Review Resource Model	
		Category 1	Category 2	Category 3
Licensee Program Adheres to GALL	Criteria	 Unchanged New w/o Exception Covered by Reg Program 	 Supplemented or Modified More detailed Further Evaluation 	 Plant-specific Exceptions Significant OE Substantial Further Evaluation
	Review Scope	 Sampling of population OE/Effectiveness Consistency 	 Confirmatory gap analysis Enhancement review 	 Detailed confirmatory evaluation Detailed OE review
		Category 4	Category 5	Category 6
Licensee Program Contains Plant- specific Considerations	Criteria	Unchanged	 Supplemented or Modified More detailed Further Evaluation 	 Plant-specific Exceptions Significant OE Substantial Further Evaluation
	Review Scope	 Sampling of population OE/Effectiveness Consistency 	 Confirmatory gap analysis Enhancement review Plant-specific considerations Unique program attributes 	 Detailed confirmatory evaluation Detailed OE review ©2023 Nuclear Energy Institute 5

SLR Aging Management Program Reviews



ELECTRICAL	Category 1	Category 2	Category 3
Licensee Program Adheres to GALL	 X.E1 XI.E1 XI.E2 XI.E4 AMR items with notes A or C 	 XI.E3A XI.E3B XI.E3C XI.E5 XI.E6 AMR items with notes B or D 	 XI.E7 Exceptions AMR items with notes E or above

SLR Aging Management Program Reviews



STRUCTURAL	Category 1	Category 2	Category 3
Licensee Program Adheres to GALL	 XI.S1* XI.S2 XI.S4 XI.S5 XI.S7 XI.S8 	• XI.S1* • XI.S3	
Licensee Program Contains Plant-specific Considerations	Category 4	Category 5	Category 6
		• X.S1 • XI.S6	

SLR Aging Management Program Reviews



MECHANICAL	Category 1	Category 2	Category 3
Licensee Program Adheres to GALL	 X.M1, X.M2 XI.M1 – XI.M17 XI.M19* XI.M22 - XI.M26 XI.M31 XI.M37 XI.M39 XI.M40 	 XI.M18 XI.M33 XI.M36 XI.M38 XI.M42 	• XI.M19*
	Category 4	Category 5	Category 6
Licensee Program Contains Plant-specific Considerations	• XI.M30	• XI.M42	• XI.M41

Leveraging Oversight



- Multiple AMPs have regulatory oversight outside of license renewal
- In addition to LR inspections (IP 71003), the NRC routinely inspects and observes:
 - Flow Accelerated Corrosion
 - Boric Acid Corrosion
 - In-Service Inspections
 - Focused Engineering Inspections
 - Fire Protection/Fire Water
 - Age-related Degradation
- Significant overlap in compliance requirements outside of LR (e.g., 10 CFR 50.55a)

Leveraging Oversight



The following list of Mechanical AMPs was identified as an example of programs that have overlap with other regulatory requirements or oversight that should be credited in LR reviews:

- XI.M1
- XI.M3
- XI.M4
- XI.M7

- XI.M8
- XI.M9
- XI.M16A
- XI.M22

- XI.M31
- XI.M37
- XI.M40
- XI.M41

Environmental Review Efficiencies

ŊĘĨ

- Eliminate or reduce the scoping process
- Fully leverage the LR GEIS and initial LR SEISs
- Use exemptions and develop a process for preparing an Environmental Assessment/Finding of No Significant Hazards vice a SEIS
- Utilize the applicant's ER as the DSEIS (or DEA)
- Ensure strict adherence to time and page limits of NEPA as revised by the Fiscal Responsibility Act
- Allow hearings on environmental contentions after the DSEIS is issued

Environmental Review Efficiencies



- Bound the discussion of climate change-related impacts by "rule of reason" and proportionality
- Take lessons learned and process improvements from new reactor licensing proceedings
 - e.g.; enhanced audits, earlier and better-defined onsite evaluations, increased use of RCIs
- Fully utilize "online and digital technologies" identified by Congress in Section 110 (E-NEPA)
- Expedite a lessons learned review of NRC SLR-related consultations with other federal and state agencies



Feedback and Discussion





- Evaluate exchanged information
- Examine updates or supplements to industry guidance
- Mid-December Public Meeting to focus on prioritization and actionable items
- Continue investigating innovative ideas (e.g., leveraging industry peer reviews, organizational enhancements)