



SLR Guidance Document Update Public Meeting

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Agenda

- GALL-SLR and Assoc. Guidance Doc. Project Overview
- Bases for Updates to Guidance Documents
- Guidance Document Update Process
- Estimated Milestones
- Guidance Doc. Update Statistics
- Overview of GALL-SLR Updates
- Overview of SRP-SLR Updates
- Completed ISGs to incorporate into the Guidance Documents
- Open Discussion, Opportunity for Comments
- Determine Items of Interest for Future Discussion

Project Overview

The SLR Guidance Documents

- Generic Aging Lessons Learned for Subsequent License Renewal (SLR) (GALL-SLR, NUREG-2191), published May 2017
- Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants (SRP-SLR, NUREG-2192), published May 2017
- Technical Bases for Changes in the Subsequent License Renewal Guidance Documents NUREG-2191 and NUREG-2192 (Technical Basis Document, NUREG-2221, published Dec 2017)

Project Overview

- Update SLR Guidance Documents
- Div. of New and Renewed Licenses (DNRL) lead, with inputs from Div. of Engineering and External Hazards (DEX) and Office of Nuclear Regulatory Research (RES)
- PMs - Manny Sayoc – PM, Jessica Hammock – PM
- Allen Hiser – Senior Technical Advisor
- Estimated Project Duration: 27 months from all August 2022 (staff draft inputs complete)
- Estimated completion: October 2024

Project Overview

Reduced Scope

Initial SLR Guidance Development

- Development of 60-80 Year Aging Management
- Revised and new guidance (codes, standards, (operating experience) OpE, etc.)
- Substantive corrections
- Incorporate completed since prior GALL (*LR-ISGs since GALL Rev. 2*)
- Comprehensive review of GALL and SRP
- Expert Panel Discussions
- Public Comment Period
- Many rounds of Public Meetings

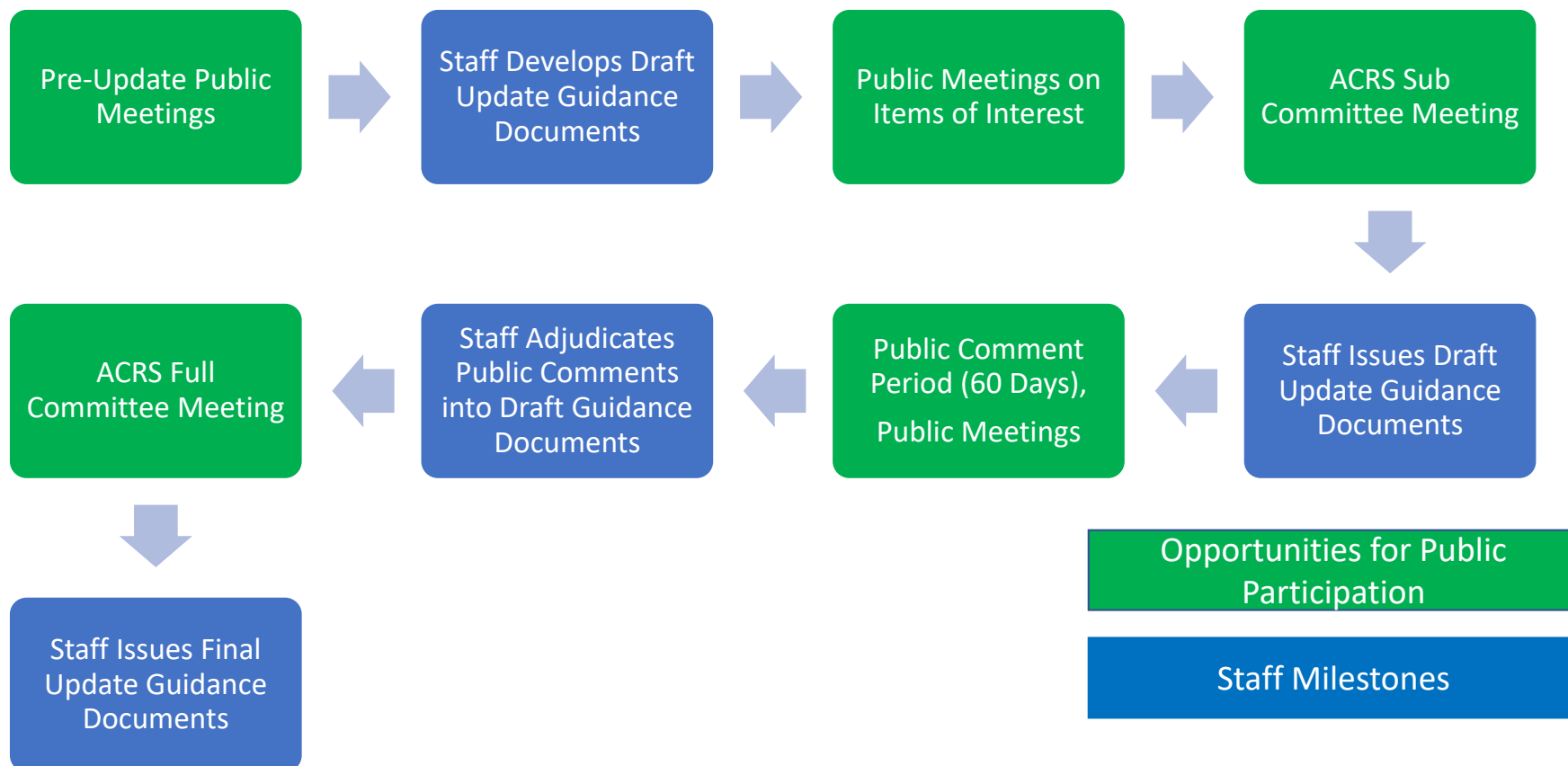
SLR Guidance Update

- ~~Development of 60-80 Year Aging Management~~
- Revised and new guidance (codes, standards, OpE, etc.)
- Substantive corrections
- Incorporate completed since prior GALL (*SLR-ISGs since GALL-SLR*)
- ~~Comprehensive review of GALL and SRP~~
- ~~Expert Panel Discussions~~
- Public Comment Period
- Many rounds of Public Meetings
- Incorporate Lessons Learned from SLRs

Bases for Updates to SLR Guidance Documents

- Bases for changes:
 - Revised and new guidance based on:
 - New or updated industry guidance, and Codes and standards
 - Plant operating experience
 - To fill gaps or make technical revisions in guidance identified from previous SLR reviews
 - Substantive corrections
 - Incorporate completed SLR-ISGs since initial GALL-SLR Update candidates
- Sources for potential changes
 - Staff
 - Industry/Public

Guidance Document Update Process



Estimated Milestones

Milestones	End Date
GALL-SLR and Guidance Document Public Meetings, Risk Informing Aging Management Programs	MAY 2022
Public Meetings on Items of Interest	SEP, OCT 2022
Staff Develops Draft Guidance Documents	MAY 20220 - MAR 2023
ACRS Subcommittee Meeting	MAY 2023
Staff Issues Draft Guidance Documents	JUL 2023
Public comment period (60 day) begins	JUL-SEP 2023
Public meeting on draft documents	JUL-AUG 2023
Staff Adjudicates Public Comments into Draft Guidance Documents	MAY 2024
ACRS Full Committee meeting	JUL 2024
Staff Issues Draft Guidance Documents	OCT 2024

Guidance Doc. Update Statistics

GALL-SLR/SRP-SLR Updates	Total
Mechanical/RV/RVI	49
Structural	5
Electrical	5
Total	59

* Includes two industry Risk Informed items revising XI.M33, "Selective Leaching," and XI.E3, "Inaccessible Power Cables Not Subject to 10 CFR 50.49 EQ Requirements."

Overview of GALL-SLR Updates

- 39 Technical Modifications
 - 22 AMPs
 - Revision of AMRs
- 7 Additions, ex.
 - AMRs for copper alloy (> 15% zinc), wooden pole, RPV steel supports
 - AMP for high density polyethylene pipe, carbon fiber reinforced polymer systems
- 8 related to new or updated industry guidance, ex.
 - ASME Code Case related to carbon fiber wrap materials
 - EPRI BWRVIP Reports
 - Reactor Head Closure Stud Bolting Guidance
 - TSTF-577
 - ASTM F3125
 - EPRI Technical Reports
- 7 related to Operating Experience
- 6 Corrections

Overview of GALL-SLR Updates

AMPs To Be Updated

- XI.M2 Water Chemistry
- XI.M3 Reactor Head Closure Stud Bolting
- XI.M9 BWR Vessel Internals
- XI.M12 Thermal Aging Embrittlement Of Cast Austenitic Stainless Steel (Cass)
- XI.M17 Flow-Accelerated Corrosion
- XI.M19 Steam Generators
- XI.M20 Open-Cycle Cooling Water System
- XI.M21 Closed Treated Water Systems
- XI.M26 Fire Protection
- XI.M27 Fire Water System
- XI.M29 Storage Tanks
- XI.M30 Fuel Oil Chemistry
- XI.M32 One-Time Inspection
- XI.M33 Selective Leaching
- XI.M35 ASME Code Class 1 Small-Bore Piping
- XI.M36 External Surfaces Monitoring Of Mechanical Components
- XI.M38 Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components
- XI.M41 Buried and Underground Piping and Tanks
- XI.M42 Internal Coatings/Linings For In-Scope Piping, Piping Components, Heat Exchangers, And Tanks
- XI.S6 Structures Monitoring
- XI.E1 Electrical Insulation for Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
- XI.E3 Inaccessible Power Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
- XIE3c Electrical Insulation For Inaccessible Low-Voltage Power Cables Not Subject To 10 CFR 50.49 Environmental Qualification Requirements

Overview SRP-SLR Updates

- 25 Technical Modifications
 - 22 AMPs
 - Revision of FE, TLAA
- 7 Additions
 - FE on irradiation embrittlement for RV steel supports
 - FE related to loss of OD piping due to insulation rubbing
 - FE on thermal fatigue in reactor coolant pressure boundary
 - Sections 4.7.4.1 and 4.7.4.2 on leak-before-leak and pump casing flaw tolerance TLAAs
- 3 related to new or updated industry guidance
 - ASME Code Case related to carbon fiber wrap materials
 - EPRI FAC, BWRVIP Reports
 - TSTF-577
- 3 related to Operating Experience
- 2 Deletion (FE)
- 2 Corrections

Completed ISGs to Add to GALL-SLR/SPR-SLR

- Following Completed ISGs will be added to the GALL-SLR, SRP-SLR, and the Technical Basis Document
 - Structural ISG (ML20181A381) issued 2/18/2021
 - Mechanical ISG (ML20181A434) issued 2/18/2021
 - Electrical ISG (ML20181A395) issued 2/18/2021
 - PWRVI ISG (ML20217L203) issued 1/8/2021

Open Discussion
Opportunity for Comments
Determine Items of Interest for Future Discussion