NRC Public Meeting: Possible Efficiencies on the Subsequent License Renewal Application Review

NRR/DNRL and NMSS/REFS

June 3, 2025
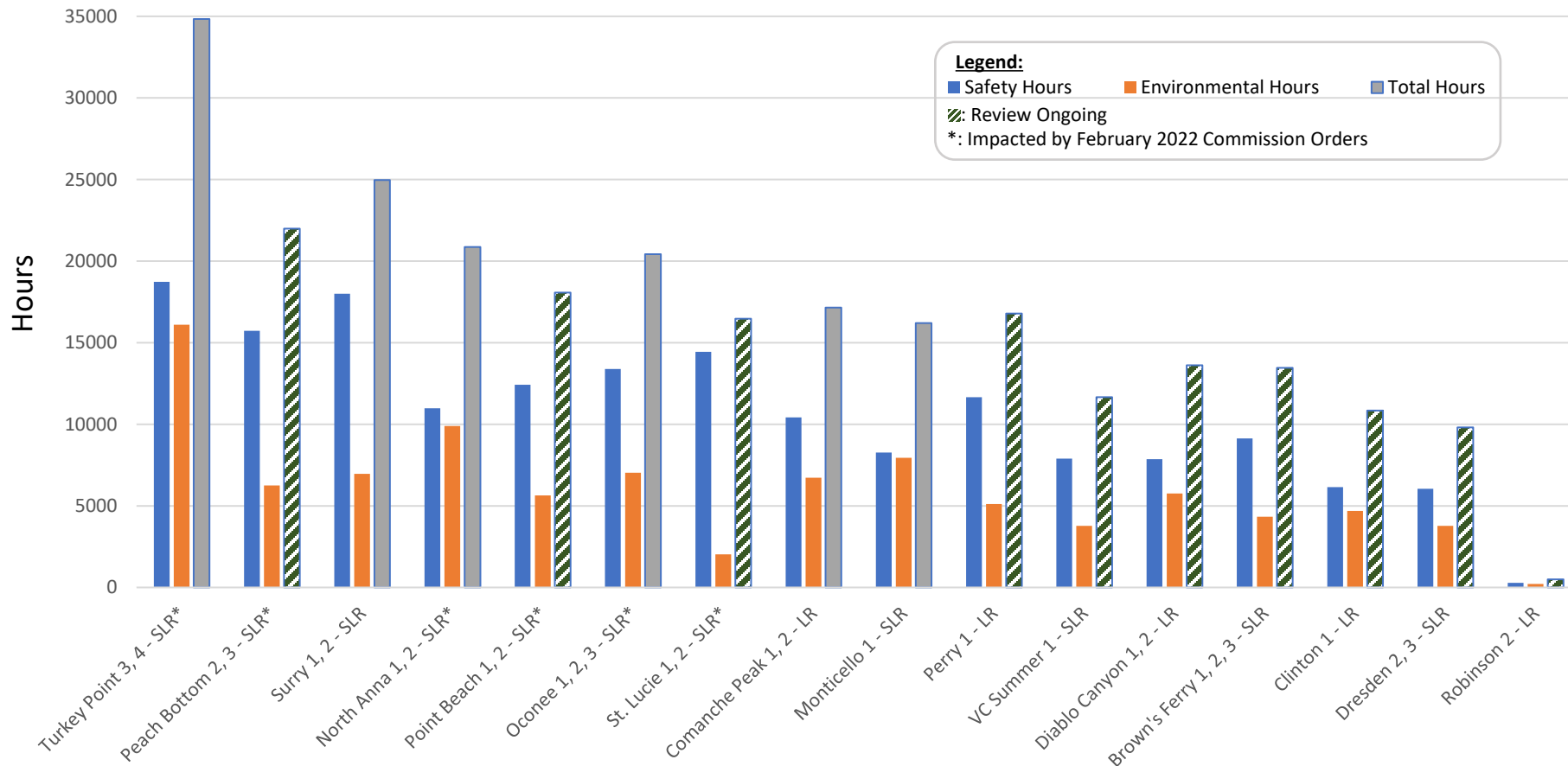
Meeting Agenda

A. LR/SLR Licensing Activity
   i.   Big Picture
   ii. Issuance of Oconee SLR
   iii. Acceptance of Robinson SLR

B. Environmental Review

C. Safety Review
   i.   License Renewal Roadmap – Status Update
   ii. Lessons Learned Series: Tiered Approach
   iii. NUREG-2191 and NUREG-2192
   iv. License Renewal Framework: Open Discussion

Big Picture

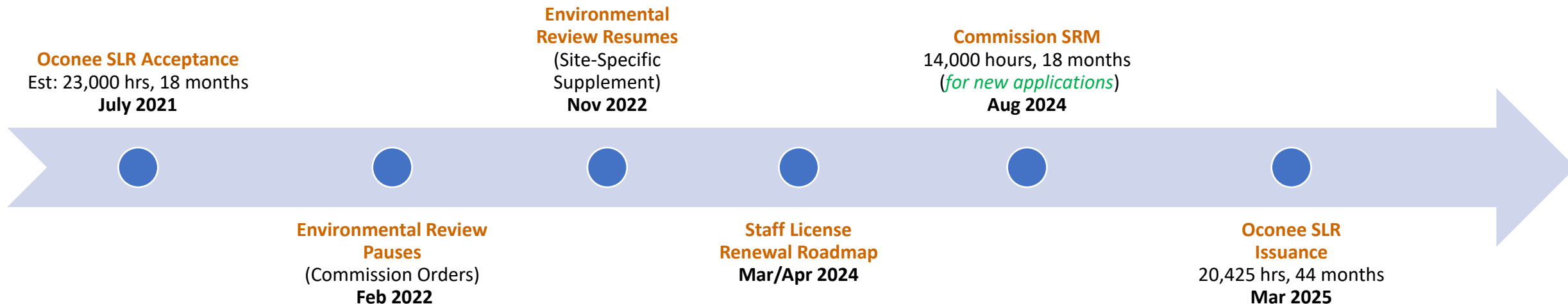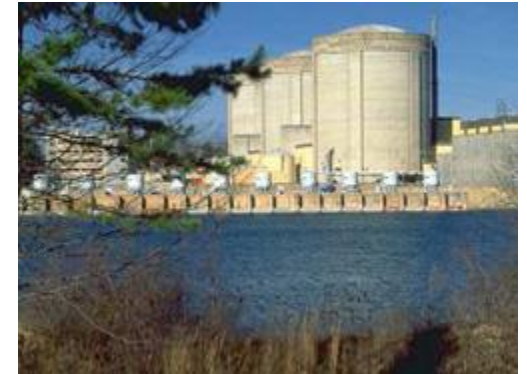## Initial License Renewal (LR) and Subsequent License Renewal (SLR) Reviews

Legend:
- Safety Hours
- Environmental Hours
- Total Hours
- ⊘: Review Ongoing
- *: Impacted by February 2022 Commission Orders

Y-axis: Hours (0 to 35000)

X-axis: LR/SLR Reviews (Since 2018)

Categories: Turkey Point 3, 4 - SLR*; Peach Bottom 2, 3 - SLR*; Surry 1, 2 - SLR; North Anna 1, 2 - SLR*; Point Beach 1, 2 - SLR*; Oconee 1, 2, 3 - SLR*; St. Lucie 1, 2 - SLR*; Comanche Peak 1, 2 - LR; Monticello 1 - SLR; Perry 1 - LR; VC Summer 1 - SLR; Diablo Canyon 1, 2 - LR; Brown's Ferry 1, 2, 3 - SLR; Clinton 1 - LR; Dresden 2, 3 - SLR; Robinson 2 - LR

- The hours represent staff hours processed through April 2025 and contractor hours received since March 2025.

- While this data captures both the NRC staff and contractor hours as one lump sum, the NRC staff and contractors have differing billing rates.

Oconee 1, 2, and 3 – Subsequent License Renewal

Oconee Nuclear Station, Units 1, 2, and 3 subsequent renewed licenses were issued March 31, 2025.

The review was completed **2,575 hours underbudget.**

Oconee SLR Acceptance
Est: 23,000 hrs, 18 months
July 2021

Environmental Review Resumes
(Site-Specific Supplement)
Nov 2022

Commission SRM
14,000 hours, 18 months
(*for new applications*)
Aug 2024

Environmental Review Pauses
(Commission Orders)
Feb 2022

Staff License Renewal Roadmap
Mar/Apr 2024

Oconee SLR Issuance
20,425 hrs, 44 months
Mar 2025

H.B. Robinson, Unit 2 – Subsequent License Renewal

Robinson SLR:
- Accepted for Review: April 28, 2025
- Estimated to be completed within 12,800 hours and 18 months

Consistent with:
Staff Requirements Memorandum, SRM–COMCTH-24-0003,
"LR and SLR Review Expectations"
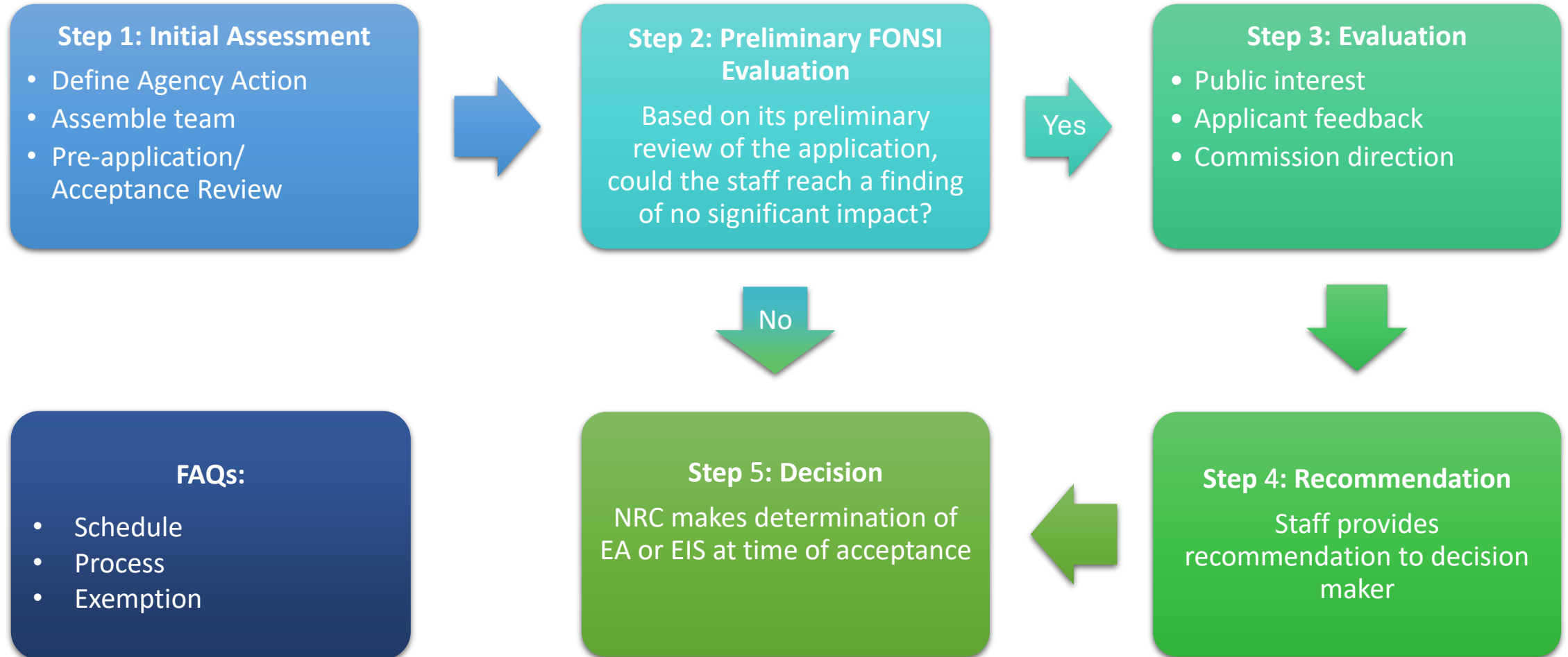ML24221A320 – August 8, 2024
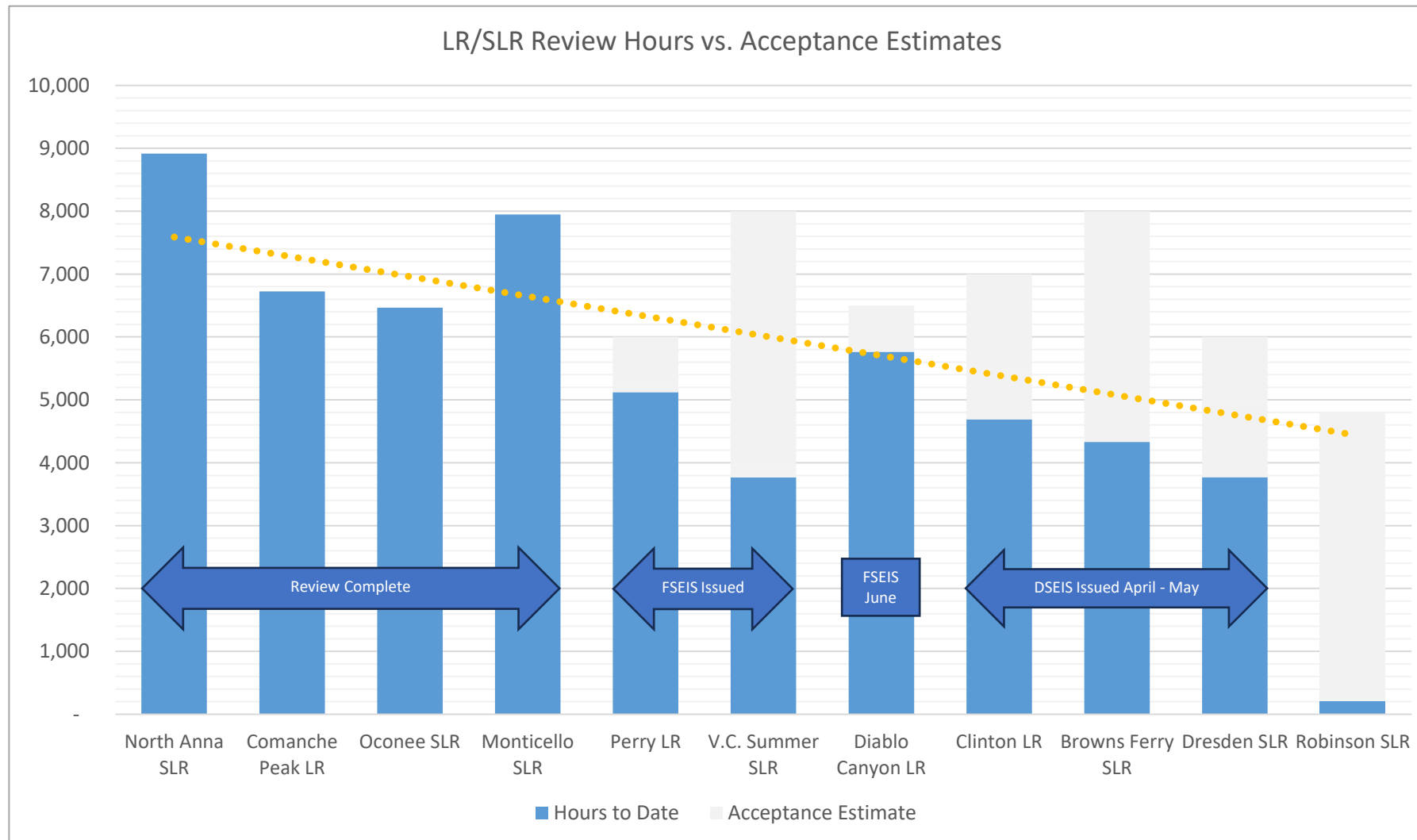
Environmental Review

Environmental Review Updates

- Level of environmental review (EA vs. EIS framework)

- Efficiency and outcomes

- Near-term focus areas

Level of Environmental Review

Step 1: Initial Assessment
- Define Agency Action
- Assemble team
- Pre-application/ Acceptance Review

Step 2: Preliminary FONSI Evaluation

Based on its preliminary review of the application, could the staff reach a finding of no significant impact?

Yes

Step 3: Evaluation
- Public interest
- Applicant feedback
- Commission direction

No

FAQs:
- Schedule
- Process
- Exemption

Step 5: Decision

NRC makes determination of EA or EIS at time of acceptance

Step 4: Recommendation

Staff provides recommendation to decision maker

Efficiency and Outcomes

LR/SLR Review Hours vs. Acceptance Estimates

Near-term Focus Areas

- Address issues in proportion to their significance
  - Level of documentation for Category 1 issues

- Ensure compliance with NEPA while taking a hard look at NRC implementation of NEPA
  - Identify areas **for additional efficiencies** while still meeting requirements

Safety Review

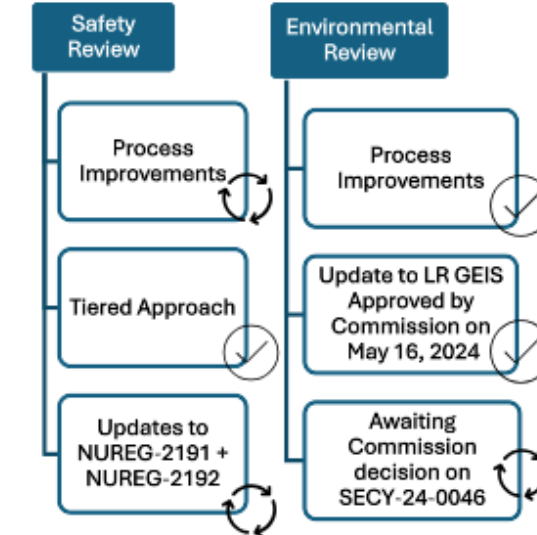| SECY-24-0026 – Commitments		Date	Status
1	Implementation of License Renewal Roadmap		In Progress
1a	Safety Review		
	• Phase 1: Process Improvements	March 2024	Complete
	• Phase 2: Tiered Approach	April 2024	Complete
	• Phase 3: Additional Process Improvements	August 2025	In Progress
1b	Environmental Review		
	• Process Improvements	Various times, starting Dec 2022	Complete
	• Implementation of LR GEIS		
	○ Process to streamline inflight LR/SLR reviews	April 2024	Complete
	○ Implementing streamlining efforts (leveraging Cat 1 issues) for inflight reviews	September 2024	Complete
	○ Process to restart paused SLR reviews when LR GEIS in effect	September 2024	Complete
	• FRA Requirements		
	○ FRA immediately effective requirements	June 2023	Complete
	○ Develop framework for consideration of EAs	June 2024	Complete
	○ Pilot for Dresden SLR	July 2024	Complete
	○ Additional FRA Actions	TBD	Under Consideration
2	Launch of public dashboard of updates to the License Renewal Roadmap	August 2024	Complete
3	Issuance of updates to GALL-SLR and SRP-SLR Reports	TBD	In Progress

Environmental Review: Process Improvements

1. Streamline EIS Development
2. Agile Methodology for Workload Planning
3. Realignment of the ECOE
4. Use of Technology Tools to Improve Audits
5. Requests for Confirmatory Information (RCIs)
6. Improvements in Comment Processing
7. Streamlining Administrative Prepublication Reviews
8. Assessment of Public Meetings
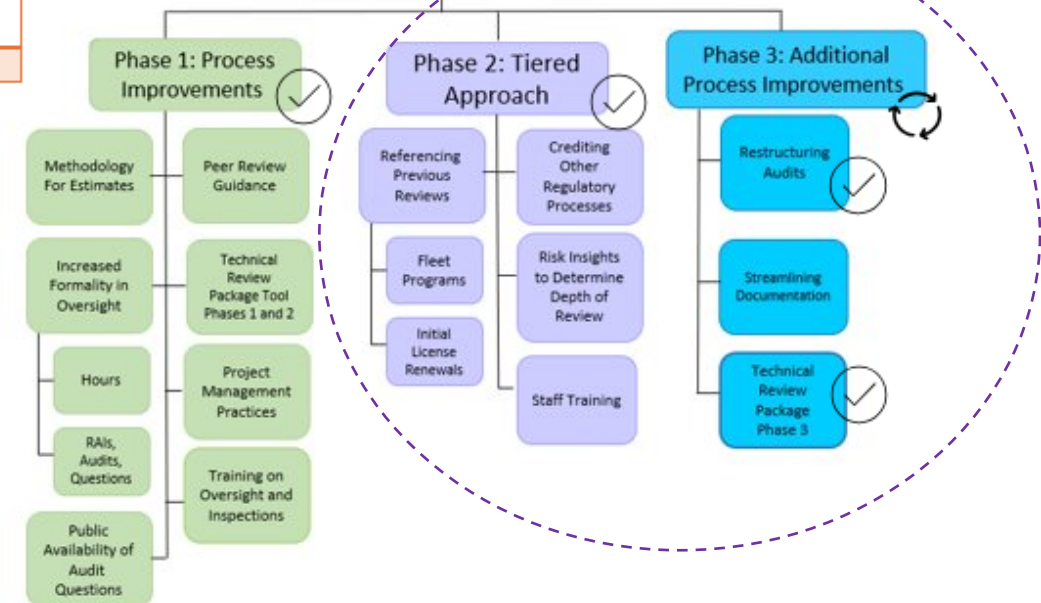9. Increased Use of Contractor Support for Reviews

✓ Applied to LR/SLR Reviews

↻ In Progress

Lessons Learned Series: Tiered Approach - NRC Approach

A) Initial Steps:

- Pre-application communications
- Assign tier designations for all aging management programs

B) Implementation:

- NRC reviews each AMP consistent with Tiered Approach expectations
- Dresden matched the level of documentation in the ePortal based upon the tier (NOT REQUIRED)
- NRC tracks the document requests and breakout questions for each AMP

Standard (High)	Modified (Medium)	Confirmation (Low)
A comprehensive review: Staff discretion to review all aspects of plant program implementation	A less extensive review: Application details are fully verified, OE is reviewed, and (as needed) deeper review of limited, key issues	A minimal review: Concise verification check of essential application details and absence of impactful OE
• Application • Operating experience • AMP and TLAA basis documents • System/program health reports • Engineering analyses • Implementing procedures • Inspection and test results • Corrective actions	• Application • Operating experience • AMP and TLAA basis documents *Discretion to review key details in other plant documents*	• Application • Operating experience • Essential application details in AMP/TLAA basis documents *(e.g., governing standards, key inspection criteria)*

Tiered Approach: NRC Approach

C) Data Gathering

- Analyze document requests and breakout questions

- Analyze resource and time needed to conduct the review

- Solicit feedback from NRC staff and applicant

Tiered Approach: Applicant Feedback

1. For Confirmation AMPs, ensure that document requests have a reasonable justification

2. Better clarification is needed regarding the expected review for a Modified AMP
   - NRC Response: There are aspects of the AMP that may include more complex activities that require more resources to determine consistency or evaluate associated enhancements/exceptions

3. AMP tiers were beneficial to applicant resource loading

4. There can be variance in the staff's review from project-to-project

5. Full documentation provided in the ePortal may reduce document requests and the effort expended to accommodate the request

6. Will other aspects of the review be incorporated into the Tiered Approach?

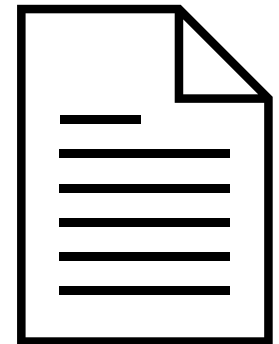# Tiered Approach: Initial Lessons Learned

- Clinton LR and Dresden SLR safety reviews are currently being completed within the estimated resources and schedule

- Identified potential refinements:
  - AMP generic tier designation
  - Pre-application preparations

Tiered Approach: Open Discussion / Industry Feedback

SLR Guidance (Safety Review)

- [NUREG-2191](#), "Generic Aging Lessons Learned for Subsequent License Renewal (GALL-SLR) Report"

- [NUREG-2192](#), "Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants (SRP-SLR)"

- Revision 1 to GALL-SLR and SPR-SLR: To be determined

License Renewal Framework – Another look

March 26, 2025 SLR Efficiencies Workshop (Safety Review):
NRC Presentation: ML25083A125

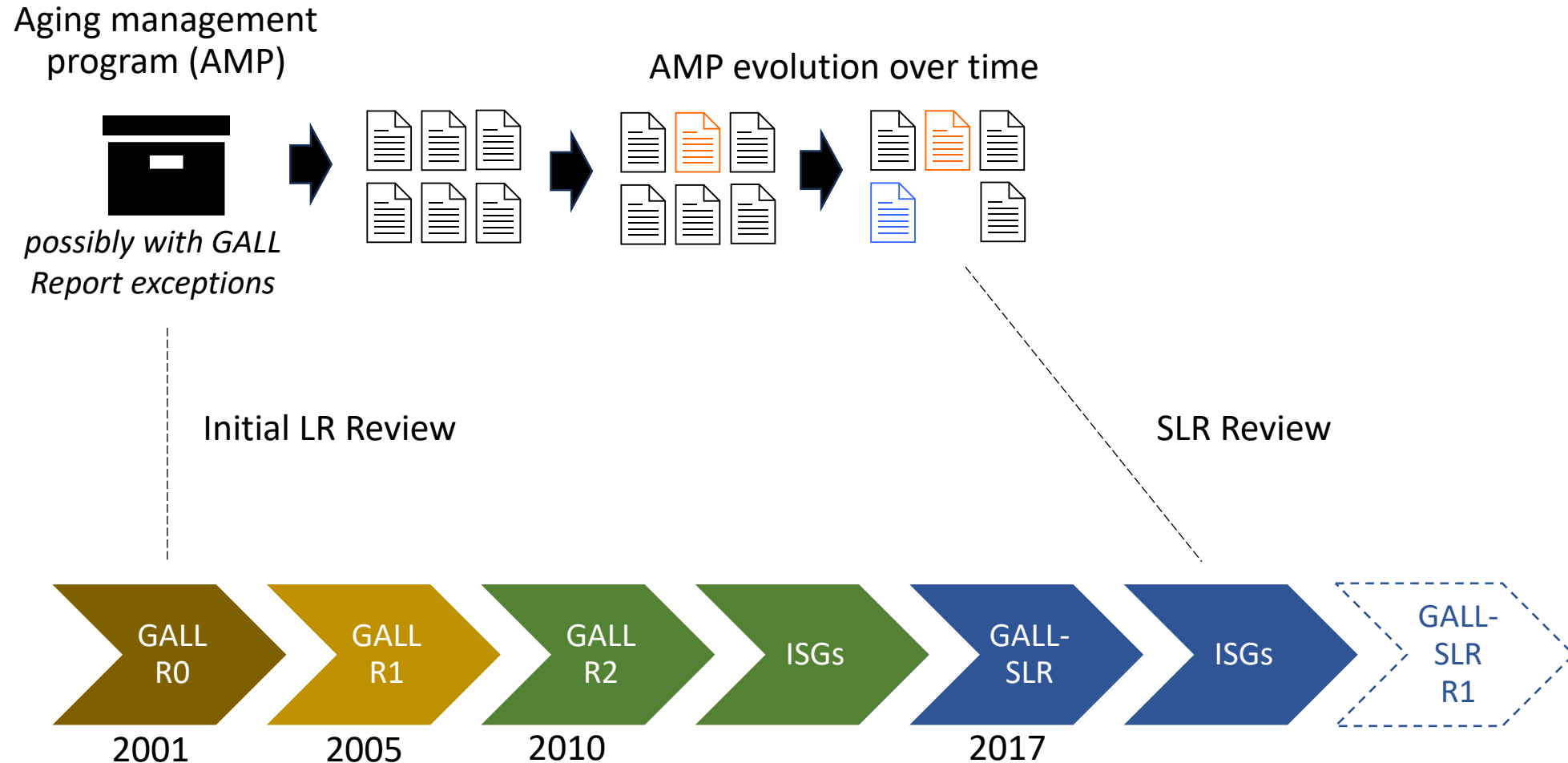| **Aging Management Review**	**Time-Limited Aging Analyses**	**10 CFR Part 54**
GALL Report referenced like a topical report Delta Review (Gap: LR vs. SLR) Methodology Review (Sampling-Based)	Graded/Tiered Approach (Risk, Margin, Prior Approvals) Delta review (Gap: LR vs. SLR)	Renewal Term Fundamental Framework

License Renewal Framework – Open Discussion

Discussion Topics:

1) GALL Report referenced like a topical report

   - Options for greater implementation flexibility than traditional TRs?
     (level of detail / scope of detail)

2) Application structure / streamlining

   - Support focused staff review of GALL deviations vs. aspects that are consistent

License Renewal Framework – Current Approach

Aging management program (AMP)

possibly with GALL Report exceptions

AMP evolution over time

Initial LR Review

SLR Review

| GALL R0 | GALL R1 | GALL R2 | ISGs | GALL-SLR | ISGs | GALL-SLR R1 |

2001   2005   2010   2017

Questions?