Potential LAR Process Improvements

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Outline

Background	The purpose and the team.
Observations/Opportunities	Industry data observations and the opportunities they present.
Other Ideas	Leveraging technology and other processes.
Conclusion	The key message.
Next Steps	A course of action.

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License Amendment Requests (LARs)

- Things are good
  - NRC metrics are being met
  - Industry-requested completion dates are largely met
  - Vast majority of LARs processed within 12 mos.
  - Almost all reviews (~96%) do not exceed resource estimates

- Drivers for continuous improvement
  - Workforce/staffing challenges
  - Knowledge Management/Knowledge Transfer
    - Why do we do it this way?
    - How can we do it better?
  - Longstanding tenet of the nuclear industry – Strive for excellence

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Background

- A strategic review of Technical Specifications (TS) and TS-related processes identified improvements and streamlining that could reduce NRC and licensee resources for LAR reviews
- Industry-wide effort with Core Team members representing the BWROG, PWROG, and NEI
- Core Team reviewed data and procedures for trends and opportunities to be discussed with NRC

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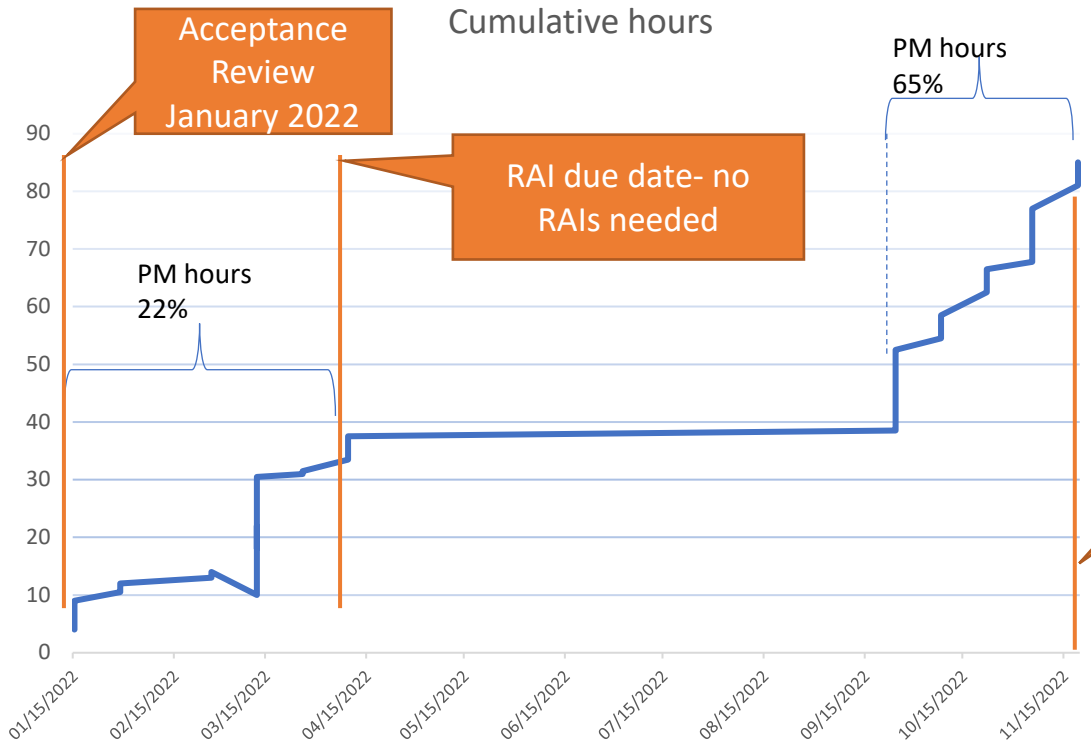
Illustrative Example of Hours Expenditure



- Submitted December 2021
- Est. Completion by January 2023
- Estimated hours: 230
- Actual hours: 85

Observation #1 – Template-driven schedule

- Selected milestones drive LAR issuance

- 12-month template for project milestones is being used independent of scope/resource estimates

  (i.e., 100-hour LAR or 1000-hour LAR follow the same general timetable)

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Opportunity #1 – Resource-driven schedule

- Develop graded schedule and milestone templates based on estimated review hours

- Benefits
  - Reduces start/stop “refamiliarization” inefficiencies
  - Allows earlier implementation of changes
  - Reduces LAR inventory

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Observation #2 – Estimates very conservative

- Data review identified several examples of actual hours being < 50% of estimates (minimum was ~13%)

- Unintended consequences of overly conservative estimates
  - Unnecessary allocation of additional resources – negating the pursuit of other work
  - Inaccurate tracking of progress completion

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Opportunity #2 – More realism in estimates

- Use data-driven tracking and feedback to monitor and refine future estimates
- Establish accuracy goal for estimates/actuals (not just exceedances)
- Benefits
  - Potential for additional plant improvements
  - Improved tracking of progress to project completion
  - Synergy with Opportunity #1: Resource-driven schedules

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Observation #3 – PM Contributions

- The NRC Project Manager is often the single largest contributor to review hours on LARs
- Their essential role should be examined for cross-cutting process and technology improvements applicable to all LAR reviews

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Opportunity #3 – Reduce burden on PM

- Feedback on industry best practices to reduce the burden on PMs
- Process improvements
  - Improve/revise the standard LAR format
  - Maximize the use of streamlined regulatory processes (i.e., LIC-206)
- Optimize tools and technology
  - Electronic submittal enhancements
  - Leverage internal file sharing (further)

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Other Ideas – TS Implementation Flexibility

- ***Relocating implementation period to the cover letter could alleviate additional, administrative amendments***
- For practicality (not compliance), all LARs include an implementation period
- Implementation period is currently part of the amendment – thus, changes to it require another (usually exigent) amendment
- Licensees could inform NRC of implementation date changes via letter
- Data review identified at least 10 examples in the last 5 years

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Other Ideas – Permanent Audit File Exchange Site

- ***Establishing a permanent exchange area for each licensee could facilitate streamlined information sharing***
- The NRC and industry have seen benefits from using the audit process to review files and calculations
- Currently, an exchange area is established for specific LARs on a case-by-case basis

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Other Ideas – Interactive RAI Process

- ***Expanding the interactive Request for Additional Information (RAI) process to complex LARs could streamline reviews***
- This process has been successfully used for specific LAR reviews (e.g., Improved TS Conversions)
- Workflow processes incorporated to ensure appropriate NRC and licensee internal review of questions and responses
- Maintains transparency to the public

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Conclusion

Using data, technology, and targeted process improvements will mitigate workforce and resource challenges by maximizing efficiency while maintaining the quality and openness of the LAR review process.

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Proposed Next Steps

- NRC reviews and considers information provided

- Future engagement and continued dialogue
  - Dedicated public meeting
  - Workshop to “table-top” the LAR process and identify additional opportunities
  - Follow-up during fall RITF public meeting

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