

# **Perspectives and Lessons Learned from Nuclear Construction Projects**

Fuel Facilities Construction Oversight Workshop – August 15, 2023

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# Lessons Learned

Captured lessons learned from fuel facility, non-power production and utilization facilities (NPUFs), and reactor construction inspection programs:

- LES, MOX, NFS, AREVA, ACP
- SHINE
- AP1000, Watts Bar Unit 2



# Generic Challenges with Construction Activities

- Dynamic construction schedule
- Different technologies and new processes
- Emergent technical issues
- Contractor oversight
  - Understanding key contractors and their roles
  - When key contractors change during construction
  - Processes, like internal reviews, licensees/applicants using to understand/identify challenges early in the process
  - Safety culture programs/allegation processes



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# What Worked Well with Other Construction Projects

- Early and often communications with the licensee, program office, and inspection division
- Use of dedicated readiness group
- Inspection planning meetings
- Construction schedules and changes
- Types of scheduling tools used, as applicable
- Best times to inspect or strategies to inspect complex or first-of-a-kind processes, Items Relied on for Safety (IROFS), etc.
- IROFS boundary package(s) establishes clear scope of inspections
- Using tabletop approaches to pilot new inspection manual chapter/inspection procedures or new inspection techniques
- Resource planning to remain prepared, efficient, and flexible
- Use of data to inform decision making

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# Questions?