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New Reactors: Licensing Process and Progress

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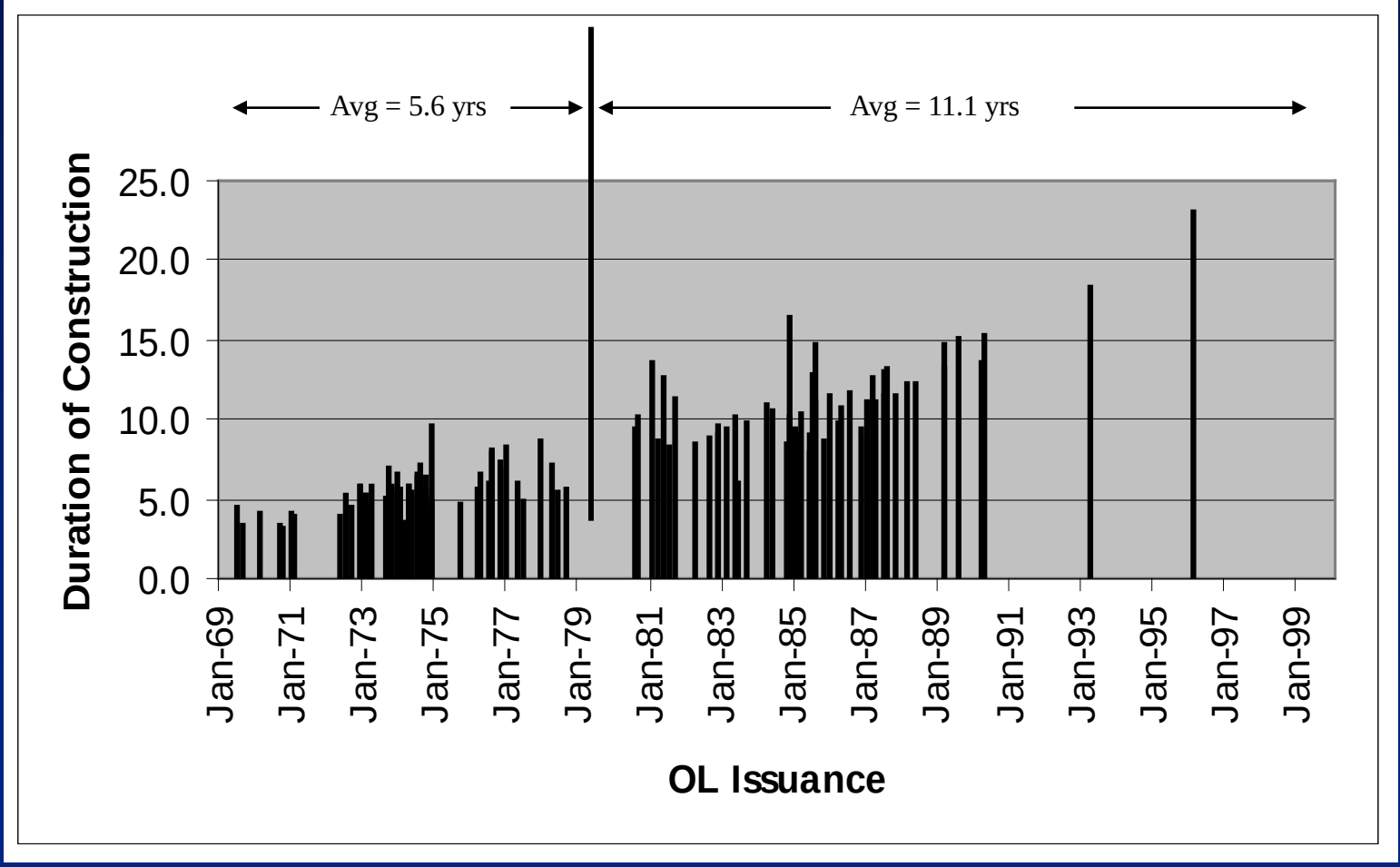
Completion Times for the Current Fleet



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10 CFR Part 52 Licensing Processes

- Provide a predictable licensing process
- Resolve safety and environmental issues before authorizing construction
- Provide for timely & meaningful public participation
- Encourage standardization of nuclear plant designs
- Provide regulatory stability to nuclear plant licensees

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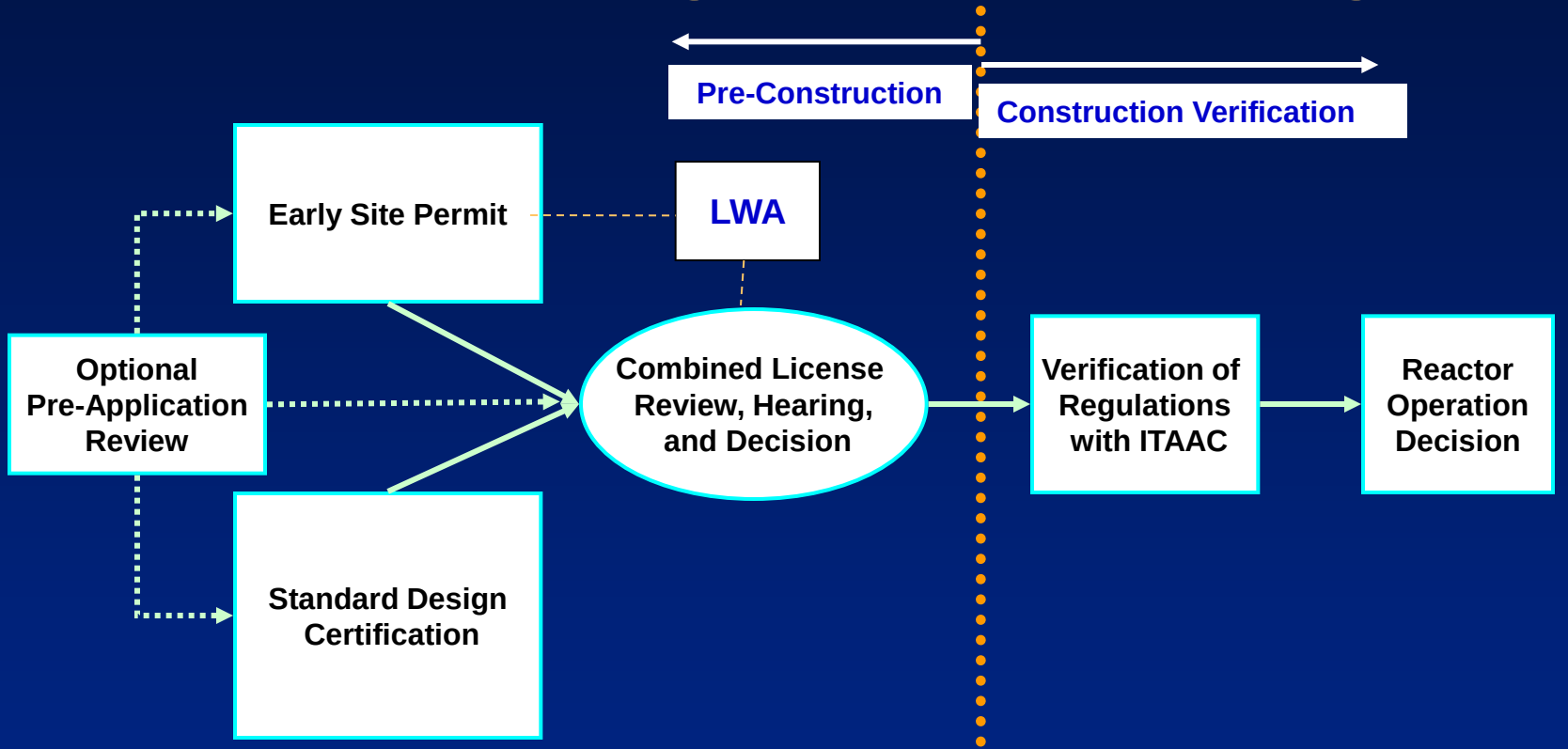
Part 52 - Fitting the Pieces Together



- Licensing decisions finalized before major construction begins
- Inspections w/ITAAC (Inspections, Tests, Analyses, and Acceptance Criteria) to verify construction
- Limited work may be authorized before COL issuance

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Early Site Permits

- Allows Early Resolution of Siting Issues and "Banking" of a Site for 10 – 20 Years

- Review Areas Include:
  - Site safety
  - Environmental impact
  - Emergency preparedness

- An applicant for an ESP may concurrently apply for a LWA under 52.27 and 50.10

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Design Certifications

- Allows an applicant to obtain approval of a standard nuclear plant design
- Essentially complete design
- Final design information
- Site design parameters
- Interface requirements
- Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)

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Combined License Applications

- Combined construction permit and operating license for a nuclear power plant
- May reference an early site permit, a standard design certification, both, or neither
- Objective is to resolve all safety & environmental issues before authorizing construction
- Prior to fuel load, must verify the facility has been constructed in accordance with the certified design
- The combined license process in Part 52 is fundamental for providing regulatory stability for companies building nuclear power plants

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Completed New Reactor Actions

- 4 Early Site Permits Approved
  - Clinton, North Anna, Grand Gulf, and Vogtle
- 4 Designs Certified
  - Westinghouse AP600 and AP1000
  - GE Advanced Boiling Water Reactor
  - C-E System 80+
- 1 Limited Work Authorization (LWA)

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New Reactor Applications [6/2010]

- 18 Combined License Applications – 13 Active

- 3 Design Certification (DC) Applications
  - GEH Economic Simplified Boiling Water Reactor (ESBWR)
  - AREVA Evolutionary Power Reactor (EPR)
  - Mitsubishi U.S. Advanced Pressurized Water Reactor (US APWR)

- 2 Amended DC Applications
  - Westinghouse AP1000 Certification Amendment
  - STPNOC ABWR Amendment for Aircraft Impacts

- 2 Early Site Permits
  - Victoria County Station
  - PSEG

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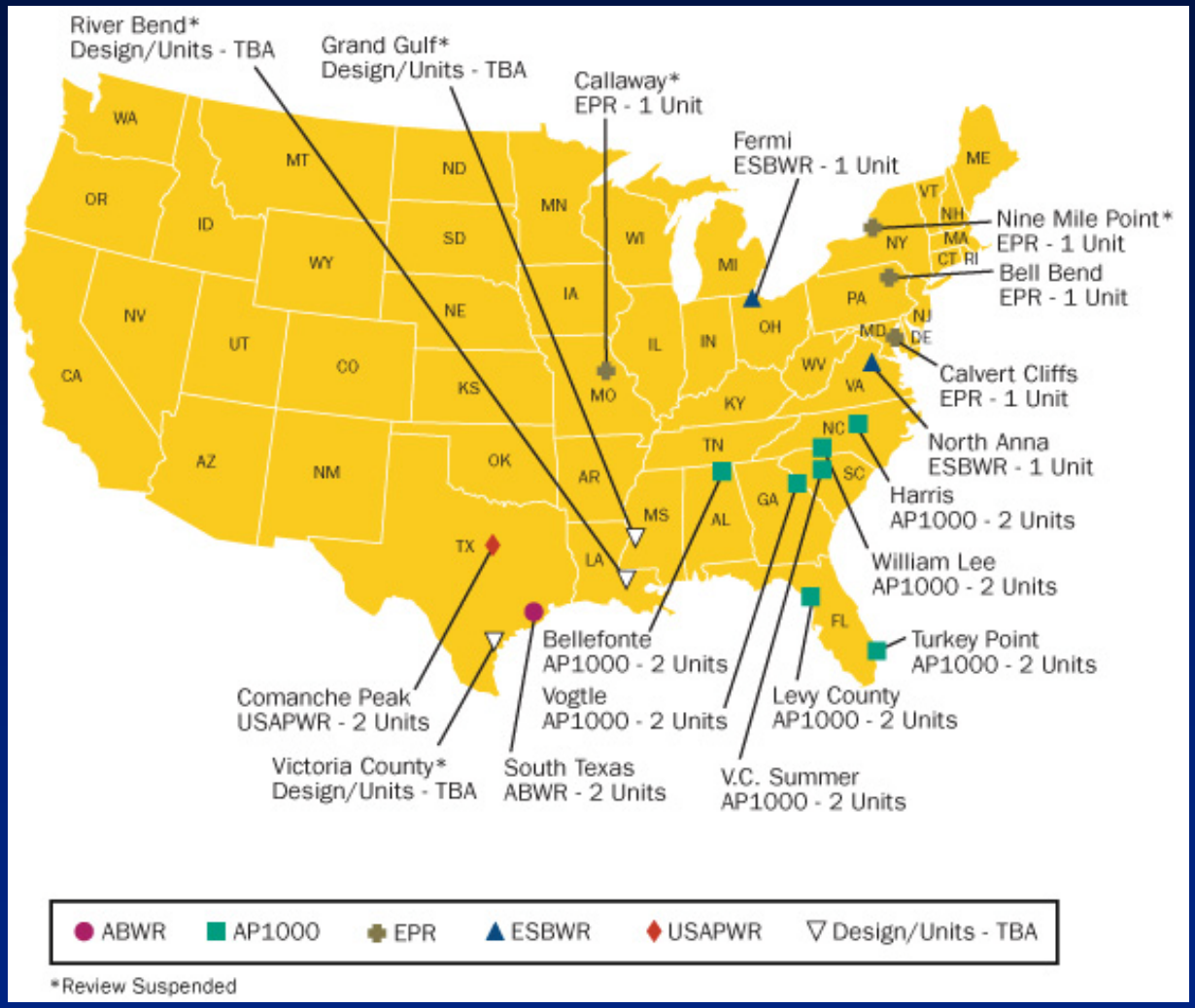
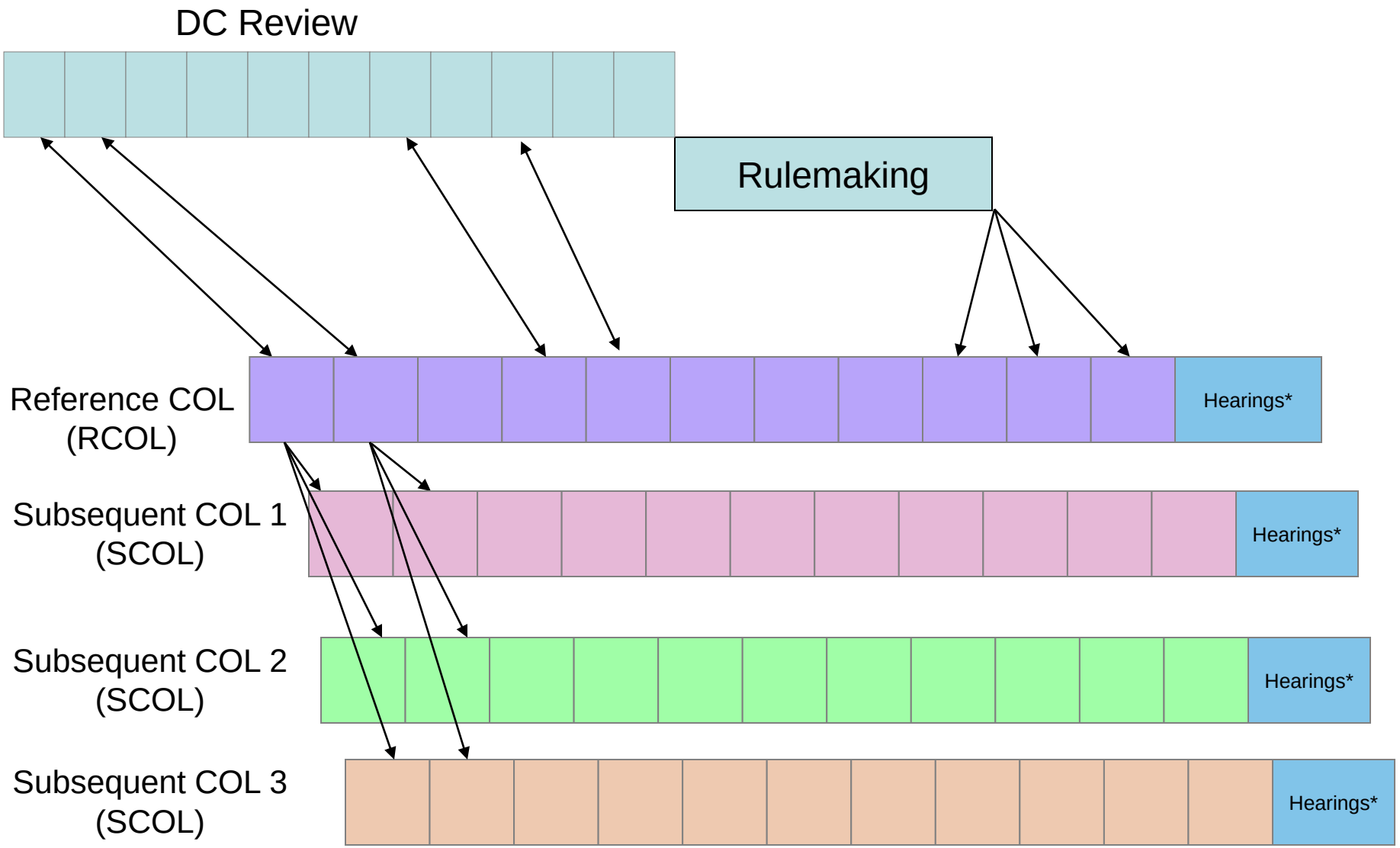


One Issue,One Review,One Decision



*The process for a COL includes an opportunity for a contested hearing by the ASLB and also a mandatory hearing that is uncontested before the Commission.

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CHALLENGES

- Maintaining both safety focus and schedule accountability when reviewing evolving designs and complex technical subjects

- ISG-11: Licensing Basis Freeze Point

- Timely and adequate responses to the staff's requests for additional information continue to challenge expected progression consistent with established schedules and within assumed resources.

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Looking Forward

- Preparing update to the Generic COL (SECY in 2010 w/generic license conditions)
- Transition from initial licensing to construction and beyond
- Review of design certification renewals
- ITAAC verification and closure

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Conclusions

- NRC will accomplish its mission to ensure adequate protection of public health and safety and the environment for new reactors licensed under 10 CFR Part 52
- NRC will review applications in a timely manner
- Utilization of the design-centered review approach is essential to achieving the benefits of Part 52