

# Preparations for ITAAC - Vogtle 3&4 Experience

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# Preparations for ITAAC Closure

- Constructive public interactions with NRC (SECY-11-0111)
  - NRC Construction Inspection Program
  - NRC Region II
  - Simulated ITAAC Closure and Verification Demonstration sponsored by DOE
- ITAAC closure process development and oversight
  - Contractor interactions and oversight
  - Ongoing development of process

# Early Construction Experience

- LWA value
  - Limited scope construction program development
  - Early exercise of ITAAC process
- Contractual alignment – Licensee is Responsible
  - Licensee oversight

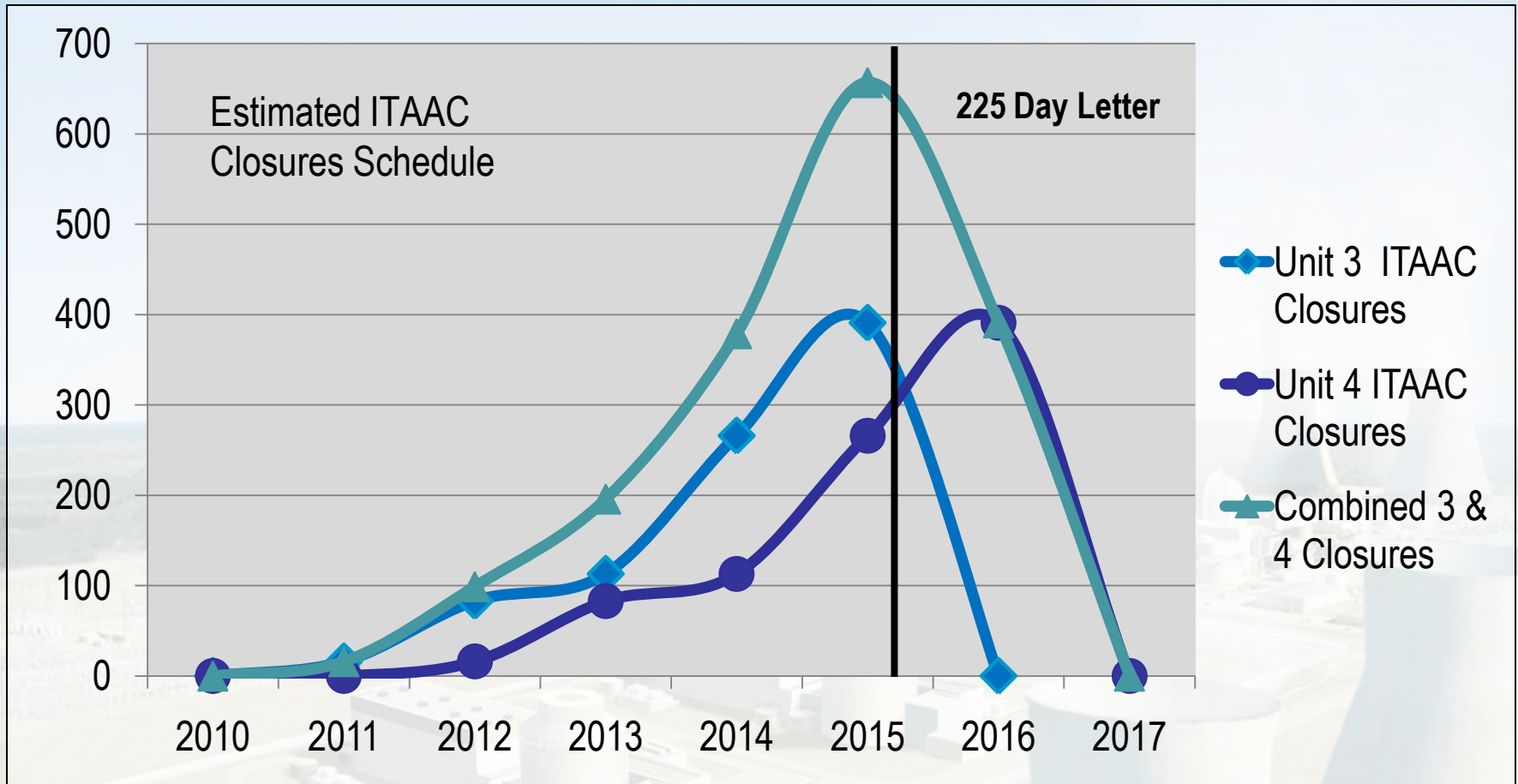
Vogtle

# Vogtle 3 and 4 Status

- ITAAC Underway
  - RPV charpy
  - Type tests
  - Backfill shear wave velocity
  - Waterproof membrane
- First ITAAC Closure Notification submittal soon

Vogtle

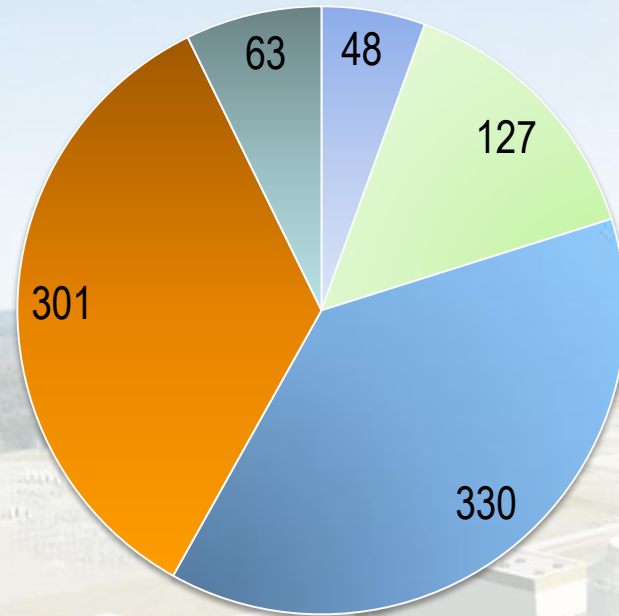
# ITAAC Process – The Challenge Ahead



# ITAAC Process – The Challenge Ahead

~806 AP1000 ITAAC  
~63 Site Specific ITAAC

## ITAAC Type Assessment



- Engineering Analysis
- Components
- Construction Type Test
- Pre-Operational Tests
- Site Specific

Vogtle

# ITAAC Process – The Challenge Ahead

- 20% of ITAAC have higher levels of complexity

<u>Design Commitment</u>	<u>Inspections, Tests, or Analyses</u>	<u>Acceptance Criteria</u>
<p>The Class 1E equipment identified in Table 2.1.2-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident ....</p>	<p>Type tests, analyses, or a combination of type tests and analyses will be performed on Class 1E equipment located in a harsh environment.</p>	<p>A report exists and concludes that the Class 1E equipment identified in Table 2.1.2-1 as being qualified for a harsh environment ....</p>

# ITAAC Process –Recent Lessons Learned

- Waterproof membrane ITAAC

<u>Design Commitment</u>	<u>Inspections, Tests, Analyses</u>	<u>Acceptance Criteria</u>
The friction coefficient to resist sliding is 0.7 or higher	Testing will be performed to confirm that the mudmat-waterproof-mudmat interface beneath the Nuclear Island basemat has a minimum coefficient of friction to resist sliding of 0.7	A report exists and documents that the as-built waterproof system (mudmat-waterproofing-mudmat interface) has a minimum coefficient of friction of 0.7 as demonstrated through material qualification testing.

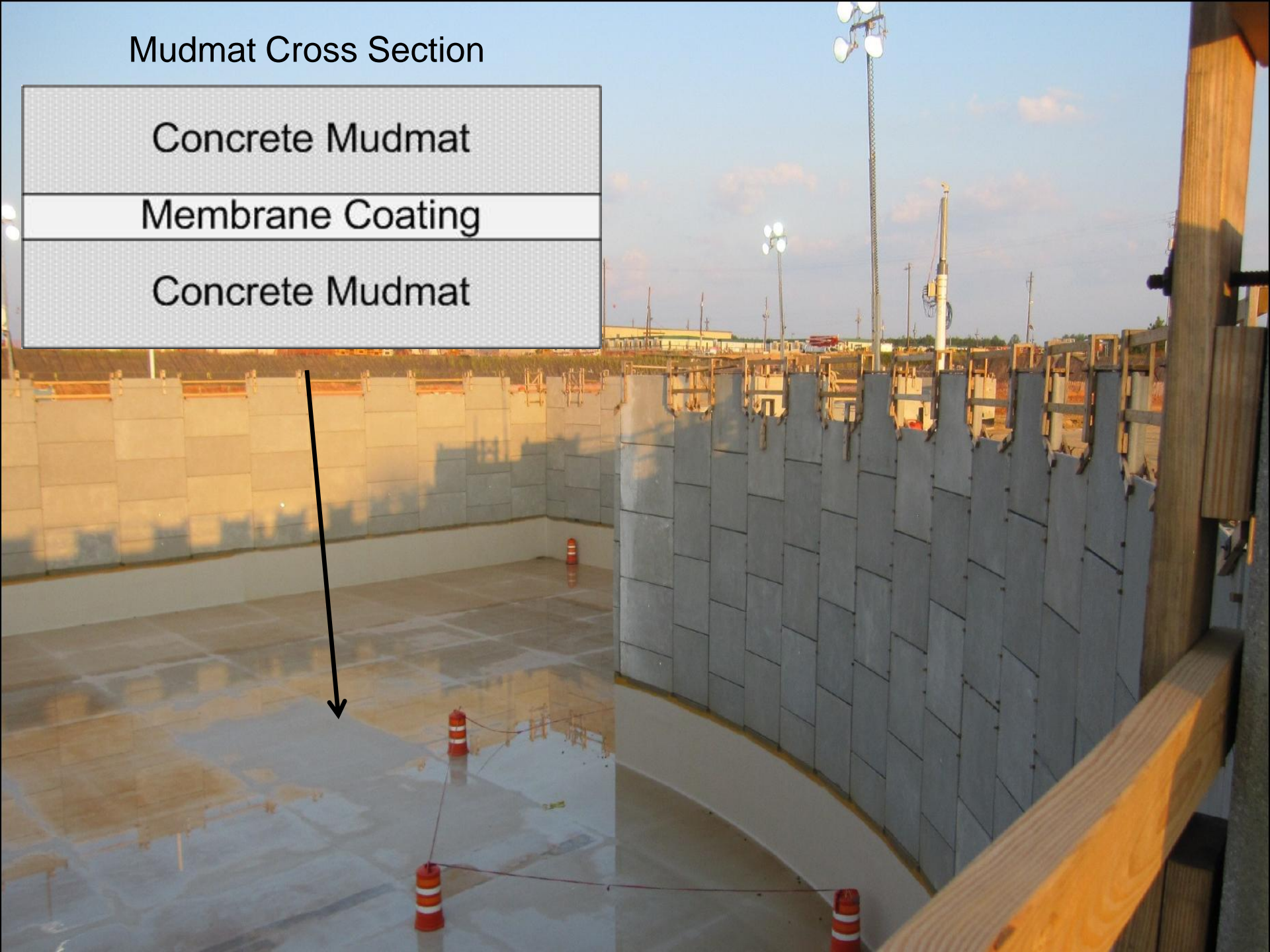


# Mudmat Cross Section

Concrete Mudmat

Membrane Coating

Concrete Mudmat



# Moving Forward

- Major area of focus between industry and NRC
- Progress continues to be made
  - Closure process maturing
  - Maintenance process developing
- Future demonstration projects may be appropriate to obtain greater clarity
- ITAAC lead plant approach for standard plant inspections

Vogtle