Evaluation of Surge in ITAAC Submittals Near End of Construction

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Shaw a world of Solutions™

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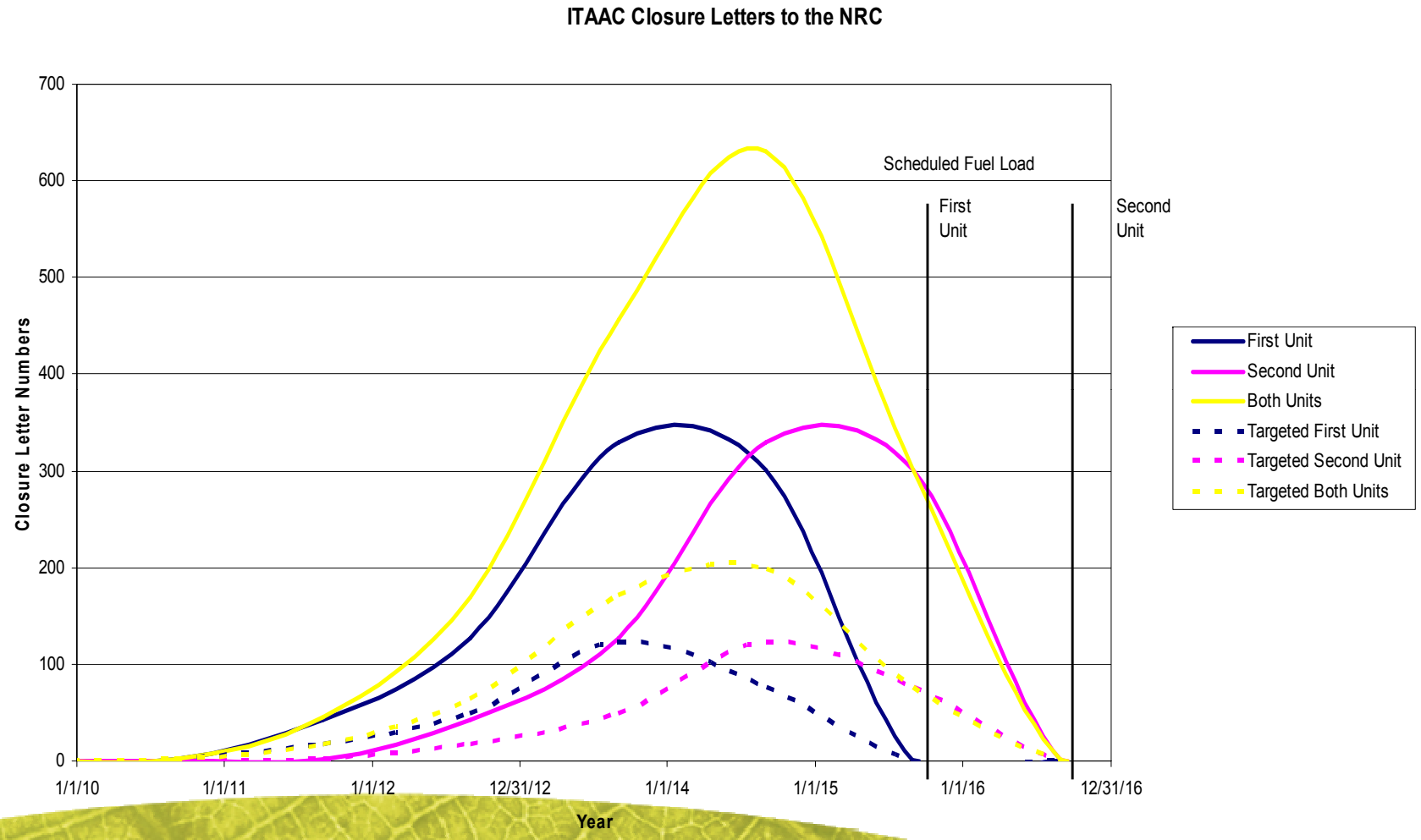
Presentation Purpose

- Present what has been provided in ITAAC Closure Letter Submittals Near End of Construction – “Bow Wave Presentation”
- Discuss two major types of ITAACs in Last Two Years of Construction
- Provide Examples of ITAACs and Graphs of Estimated Numbers

Early Estimate of ITAAC Closure Letters to the NRC



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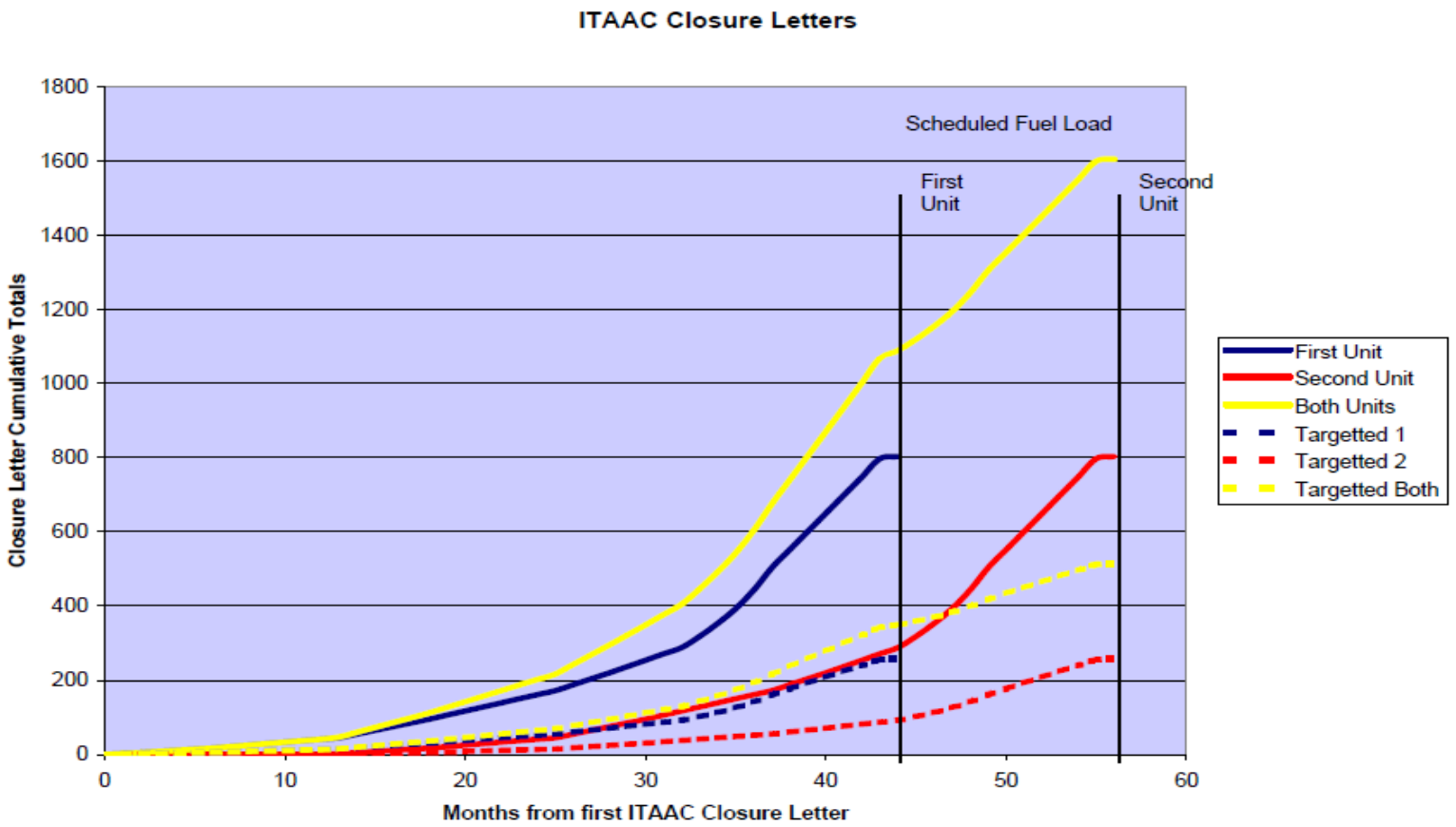
Early Estimate of ITAAC Closure Letters to the NRC



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ITAAC Closure Letters Timing

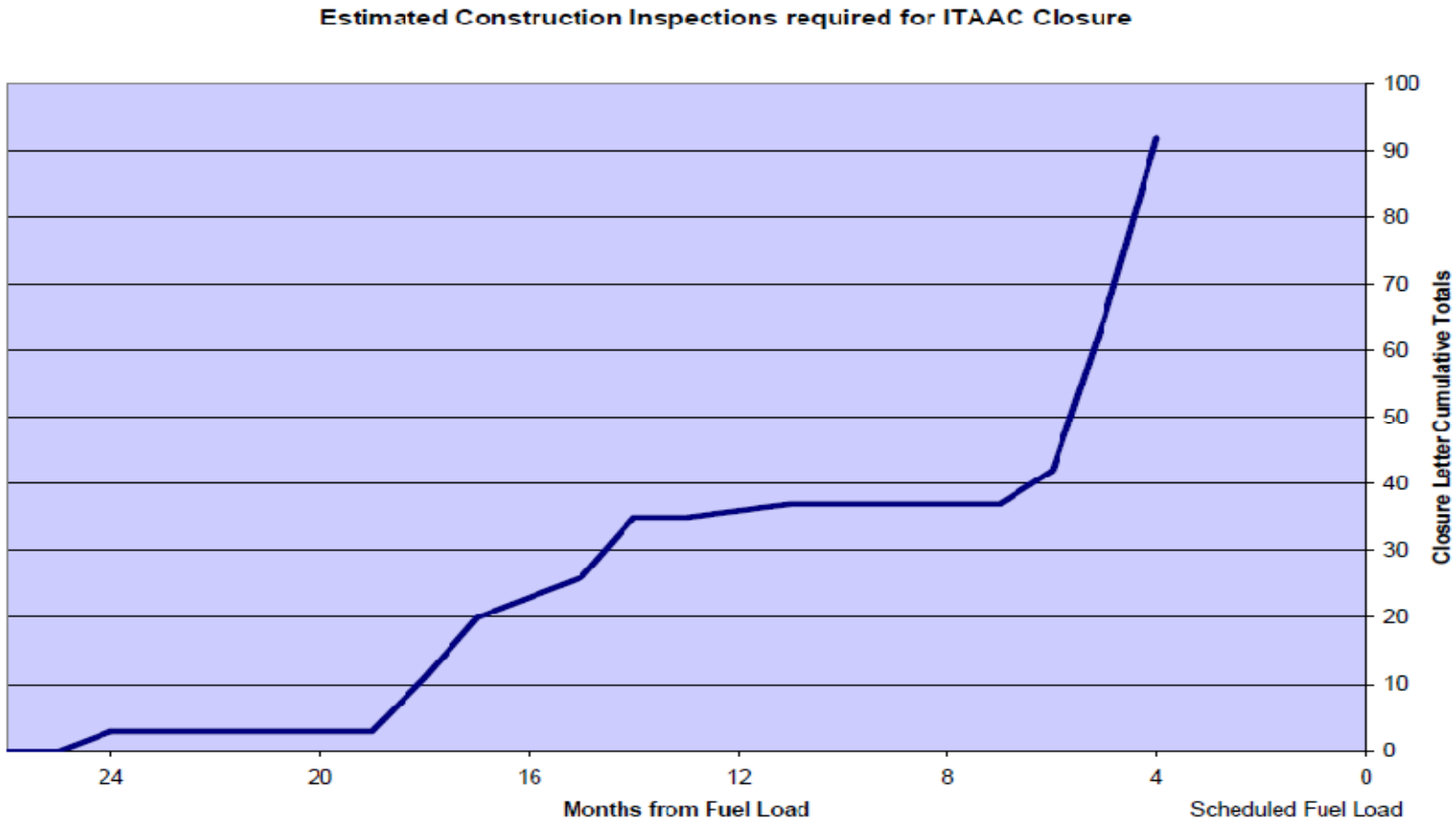
- ITAAC Timing of AP1000 ITAACs
  - 45 ITAACs related to Engineering Analysis (HFE, D-RAP, etc.) and Security
    - Earlier in the process than Construction type and Pre-Op type
  - 127 ITAACs related to components
    - ASME requirements, EQ Testing, Testing at Vendor
    - Won't be closed until component on-site or in place
  - 330 Construction Type Tests
    - 300 ITAACs During Construction/System Walkdown
    - 30 ITAACs that require Hydrostatic System Tests
  - 301 Pre-Operational Tests
    - Tests that start after system turnover
- Will require early and constant NRC review to remove end load of ITAAC Closure Letter Approvals

Evaluation of ITAACs Close to End of Construction

- Construction Inspection ITAACs
- ITAACs 2.2 01.01 and 2.2 02.07a.iii

Design Commitment	Inspections Tests and Analyses	Acceptance Criteria
1.) The functional arrangement of the CNS and associated systems is as described in the Design Description of this Section 2.2.1.	Inspection of the as-built system will be performed.	The as-built CNS conforms with the functional arrangement as described in the Design Description of this Section 2.2.1.
7.a) The PCS delivers water from the PCCWST to the outside, top of the containment vessel.	iii) Inspection will be performed to determine the PCCWST standpipes elevations.	iii) The elevations of the standpipes above the tank floor are: – 16.8 ft ± 0.2 ft – 20.3 ft ± 0.2 ft – 24.1 ft ± 0.2 ft

Early Estimate of ITAAC Closure Letters to the NRC



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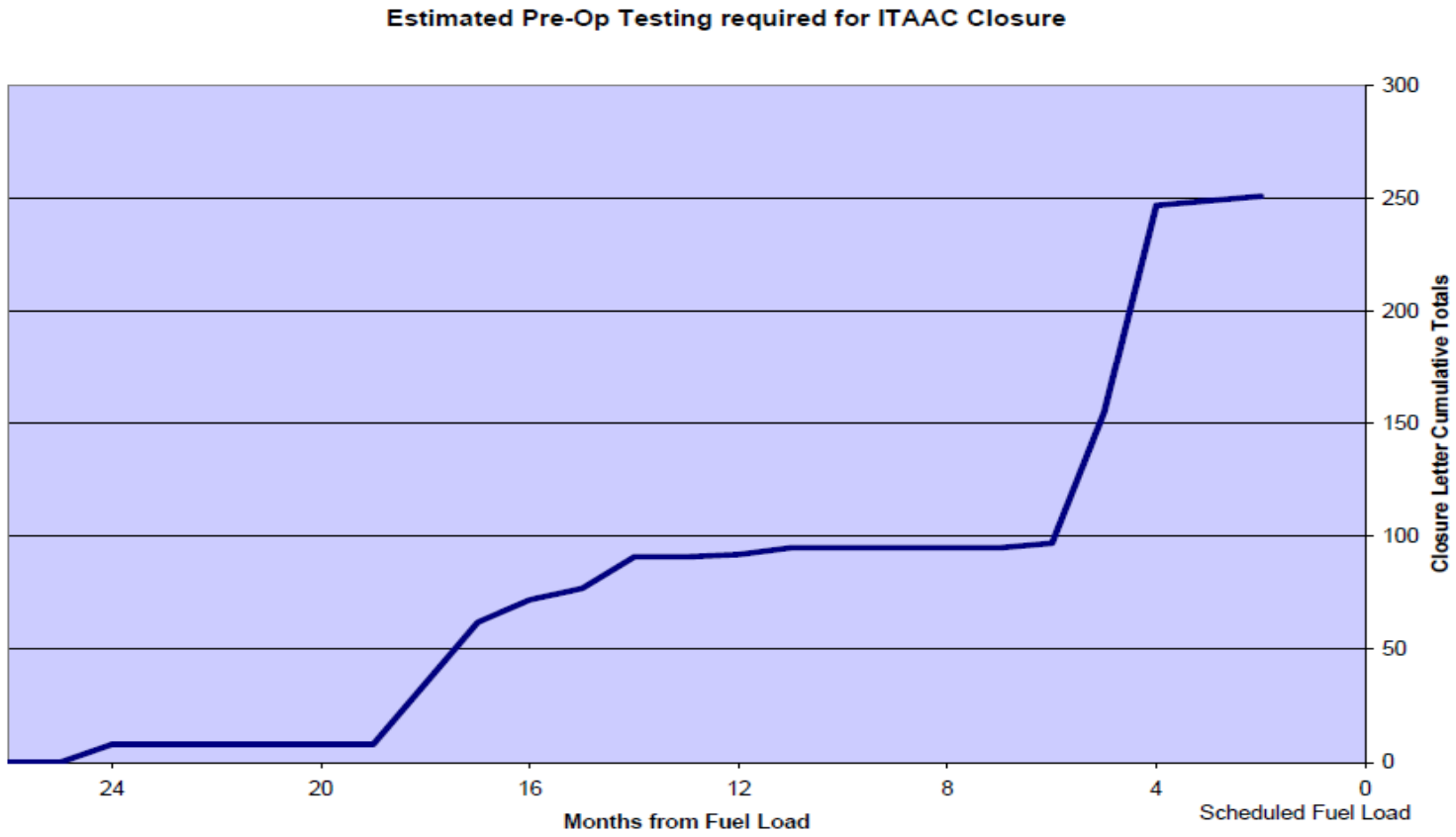
Evaluation of ITAACs Close to End of Construction

- Pre-Op Testing ITAACs
- ITAACs 2.2 01.10.a and 2.2 02.07d

Design Commitment	Inspections Tests and Analyses	Acceptance Criteria
10.a) Controls exist in the MCR to cause those remotely operated valves identified in Table 2.2.1-1 to perform active functions.	Stroke testing will be performed on remotely operated valves identified in Table 2.2.1-1 using the controls in the MCR.	Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.1-1 to perform active safety functions.
7.d) The PCS drains the excess water from the outside of the containment vessel through the two upper annulus drains.	Testing will be performed to verify the upper annulus drain flow performance.	With a water level within the upper annulus 10" $\pm$ 1" above the annulus drain inlet, the flow rate through each drain is greater than or equal to 525 gpm.

Early Estimate of ITAAC Closure Letters to the NRC



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Evaluation

- There are approximately 90 Inspections/System Walkdowns to complete in the last two years.

  ~50 of them are within the last 6 to 4 months prior to fuel load.

- There are approximately 250 pre-operational tests that will occur within the last two years.

  ~150 of them will come within the last 6 to 4 months prior to fuel load.

- Evaluation demonstrates that not only are there a lot of Closure Letters issued in the last year but there are a number of ITAAC Inspections and Test that will occur within the last year.