



PERIODIC BRIEFING ON NEW REACTOR ISSUES

Bill Borchardt

Executive Director for Operations

October 22, 2008

Agenda

- **Summary of Recent New Reactor Activities**
- **New Reactor Construction Inspection Program**

Overview of New Reactor Accomplishments and Status

**Michael R. Johnson, Director
Office of New Reactors**

Accomplishments

- **Acceptance reviews**
- **Final Environmental Impact Statement for Vogtle Early Site Permit**
- **Next Generation Nuclear Plant Licensing Strategy Document**

Accomplishments (continued)

- **Memorandum of Understanding with the Army Corps of Engineers**
- **Final Rule on consideration of aircraft impacts**
- **Committed and obligated over \$75 million worth of contracts**

Status of Reviews

- **3 Design Certifications and 1 amendment under review**
- **1 Early Site Permit /Limited Work Authorization application under review**
- **17 Combined License applications under review**

New Reactor Construction Inspection Program

**Glenn M. Tracy, Director
Division of Construction Inspection
and Operational Programs**

Overview

- **Substantial progress in program development since last year**
- **Industry is moving towards construction**
- **The Construction Inspection Program will be ready to support the oversight of new plant construction**

Stakeholder Engagement

- **All program development activities proceeding with open and collaborative stakeholder communications**
- **Continuing and expanding interface with international colleagues to share experience and improve programs**

Inspection Readiness

**Robert Lukes, Team Leader
Inspection Program Team
Construction Inspection and
Allegations Branch**

Inspection Procedures

- **Inspection procedures will be in place to meet the challenge**
- **We are moving from developing to refining in many areas**

New Reactor Inspection Program IT Infrastructure

- **Established an Information Technology Working Group**
- **Inspection scheduling**
- **Inspection reporting methodology**

Inspection Program

- **Construction site inspections will be led by Region II**
- **NRC estimates 35,000 inspection hours**
- **Based on inspection of ITAAC and non-ITAAC**

ITAAC Implementation

**Richard Laura, Team Leader
Construction Oversight Team
Construction Inspection and
Allegations Branch**

Overview

- **ITAAC Quality**
- **ITAAC Inspection**
- **ITAAC Closure**
- **NRC Closure Verification**
- **Commission Finding**
- **Construction Experience (ConE)**

ITAAC Quality

- **Issued a generic communication on ITAAC lessons learned**
- **Reviewing DCDs and COLs to verify ITAAC are clearly written and maximize inspection effectiveness**

ITAAC Inspection

- **Developed generic NRC inspection schedules for ITAAC**
- **Developed list of ITAAC requiring NRO engineering support**
- **Targeted ITAAC lists made publicly available**

ITAAC Closure

- **ITAAC Closure Notifications**
- **ITAAC Closure Guidance on sufficient information and format**

NRC Closure Verification Process

- **Developed a flow process for review of the incoming closure letters**
- **Includes review of the inspection record, technical and OGC reviews, and issuing a Federal Register notice**

Commission Finding

- **Maintenance of closed ITAAC until the Commission finding**
- **The acceptance criteria for all ITAAC must be met**

Construction Experience (ConE)

- **NRO is systematically reviewing international ConE**
- **International exchange of construction inspectors**

Assessment & Enforcement

Robert Pascarelli, Team Leader
Assessment, Enforcement, &
Allegations Team
Construction Inspection and
Allegations Branch

Program Development

- **Lessons learned**
- **Programmatic relationships**
- **Types of findings**

Construction Assessment

- **Construction Response Table**
- **Findings and Construction Safety Focus Issues are Inputs**

Traditional Enforcement Process

- **NRC Enforcement Policy applies to NRC regulated construction activities**
- **Notices of Violation issued for inspection findings**

Region II Center for Construction Inspection

**Luis Reyes
Regional Administrator
Region II**

Center for Construction Inspection

- **Staffing**
- **Resident Offices**
- **Planning and scheduling**
- **Resource planning uncertainties**

Summary

- **Significant program development accomplishments**
- **Effective coordination with international colleagues and industry**
- **Broad participation and insightful contributions from stakeholders**

Next Steps

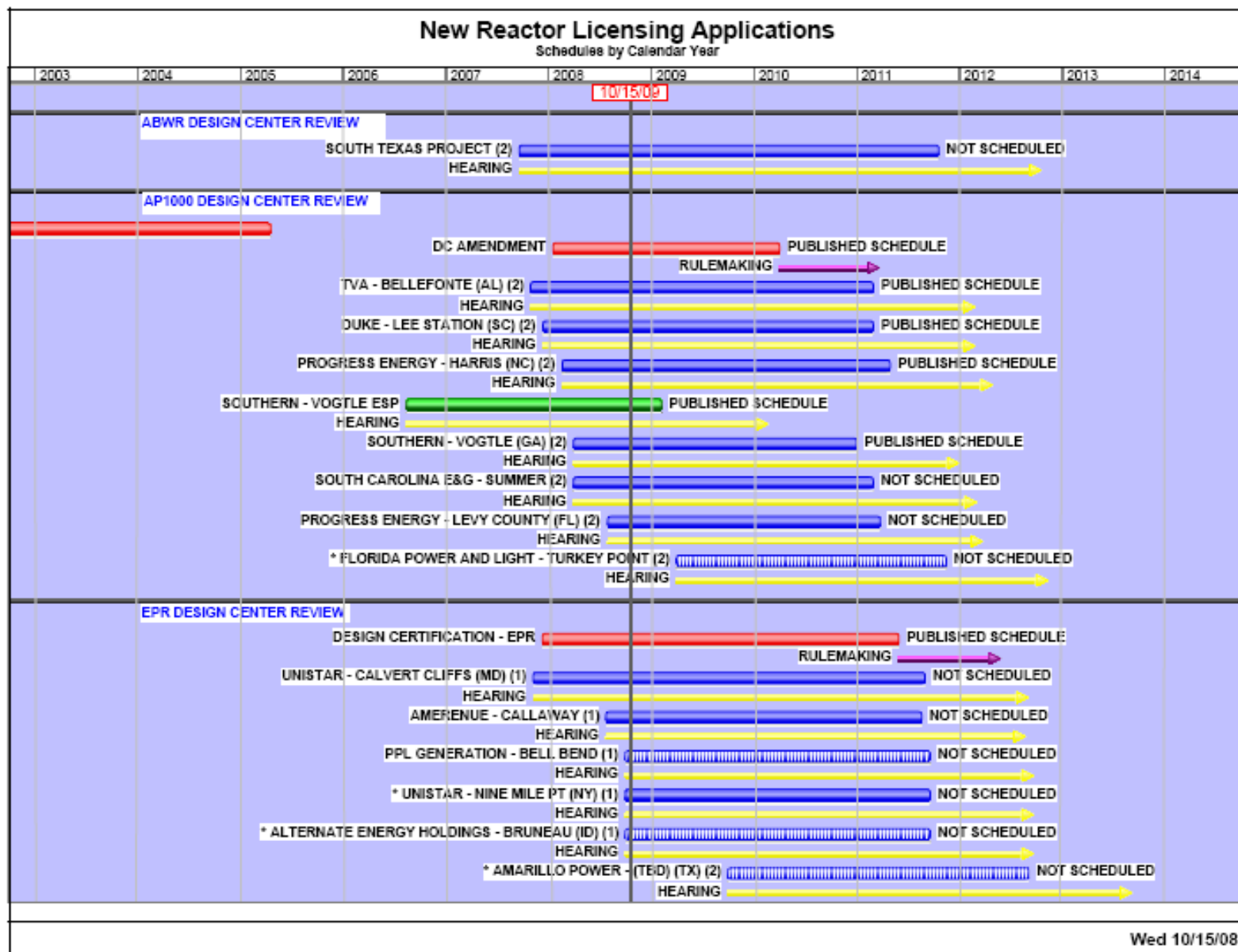
- **Areas of focus:**
 - **Engineering design verification inspections**
 - **Role of safety culture in inspection program**
 - **ITAAC inspection at module vendors**
 - **Transition to ROP**

Acronyms

- **COL – Combined License**
- **DCD – Design Control Document**
- **IT – Information Technology**
- **ITAAC – Inspections, Tests, Analyses, and Acceptance Criteria**
- **NRO – Office of New Reactors**
- **OGC – Office of General Counsel**
- **ROP – Reactor Oversight Process**

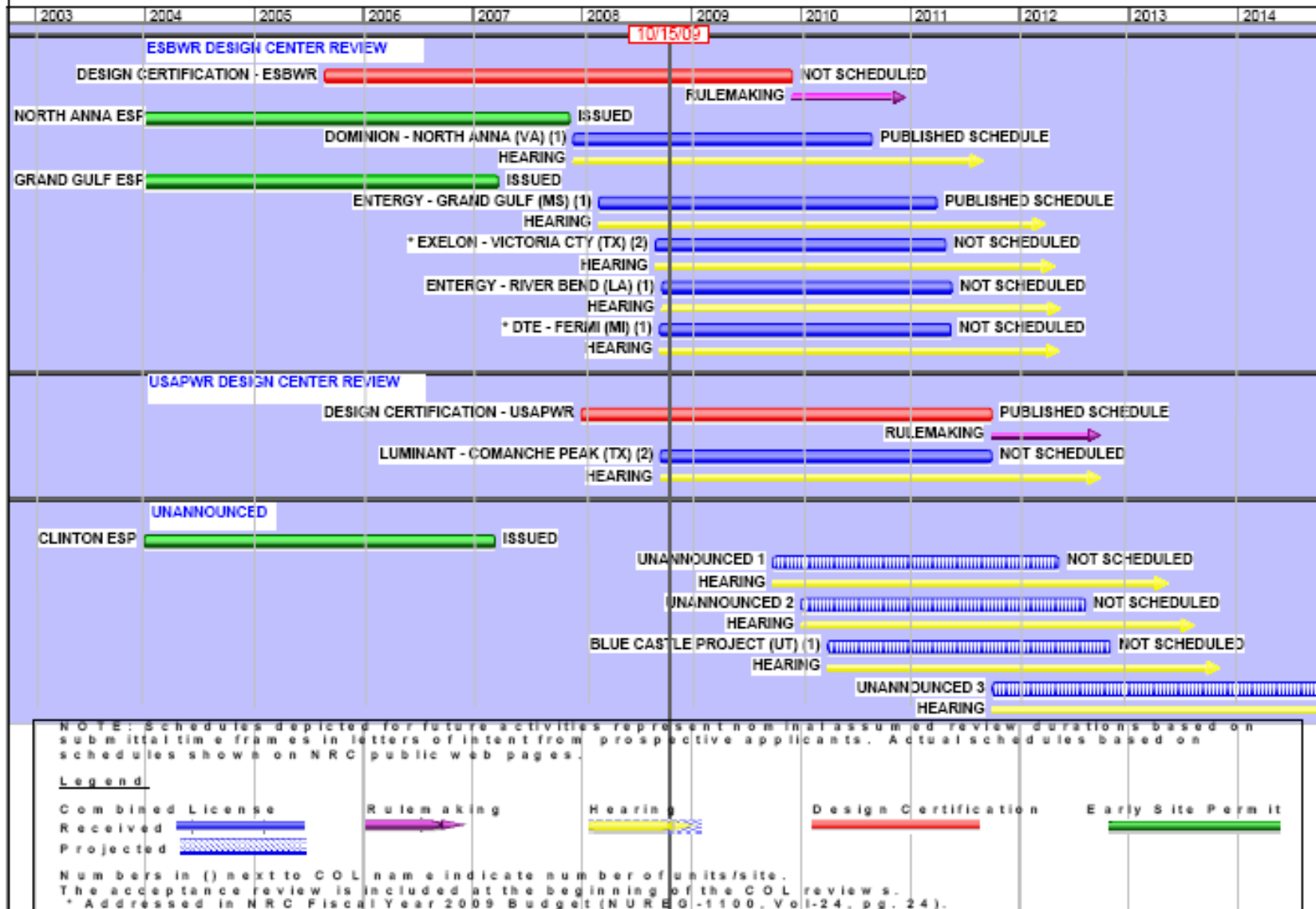
Background Slides

- 1. New Reactor Licensing Applications (2 slides)**
- 2. NRC Construction Oversight**
- 3. Implementation Under 10 CFR 52.99 and 10 CFR 52.103(g)**
- 4. Construction Findings Flowchart**



New Reactor Licensing Applications

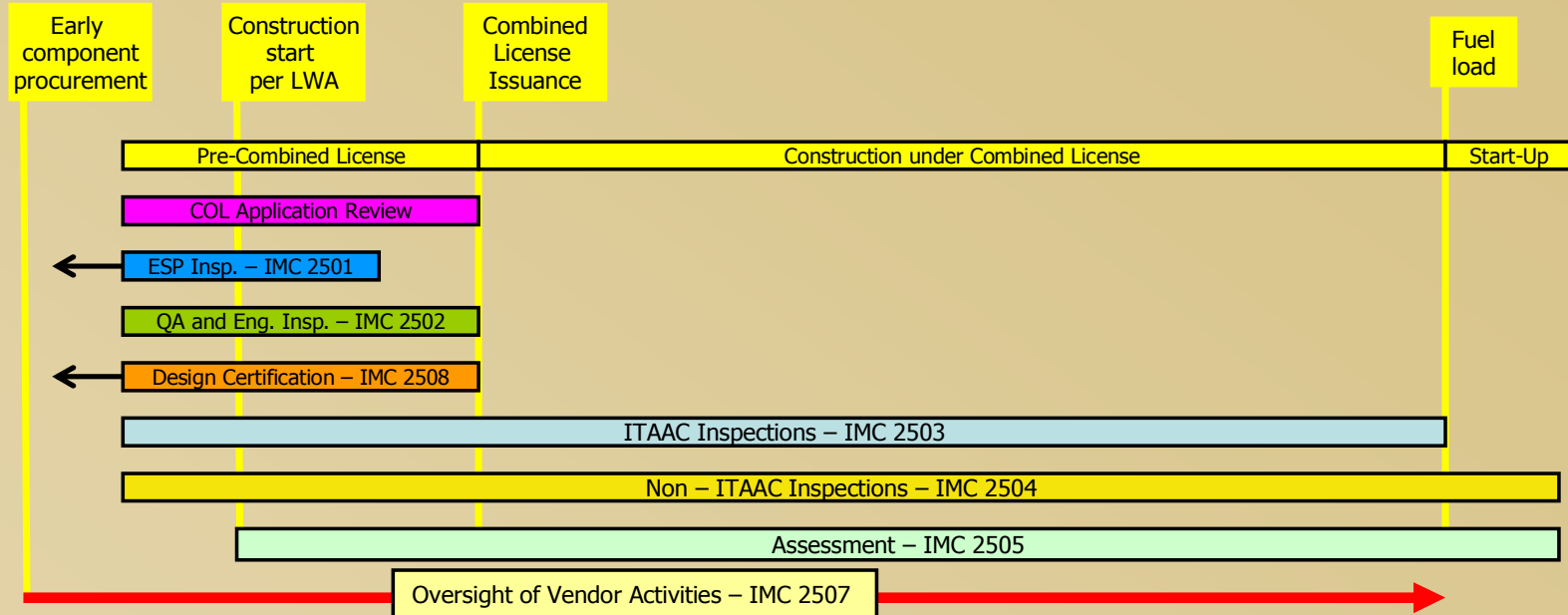
Schedules by Calendar Year



Wed 10/15/08

NRC CONSTRUCTION OVERSIGHT HAS MULTIPLE COMPONENTS

Oversight will assure plants are constructed as designed.



Abbreviations

ESP – Early Site Permit
 IMC – Inspection Manual Chapter
 ITAAC – Inspections, Tests, Analyses, and Acceptance Criteria
 LWA – Limited Work Authorization

IMC 2501

-ESP QA controls on integrity & reliability of data collected for site characterization.
 -ESP controls for application preparation

IMC 2502

-QA for design, procurement, & construction
 -Translation of certified design into design details
 -COL controls for application preparation

IMC 2503

Verification of successful performance of ITAAC-related activities

IMC 2504

-QA for construction & operations
 -Problem identification, reporting, & corrective action
 -Work planning/control over work & contractors
 -Translation of certified design into design details
 -Design change process
 -Pre-operational & startup testing
 -Operational programs & operational readiness

IMC 2505

-Guides inspection planning

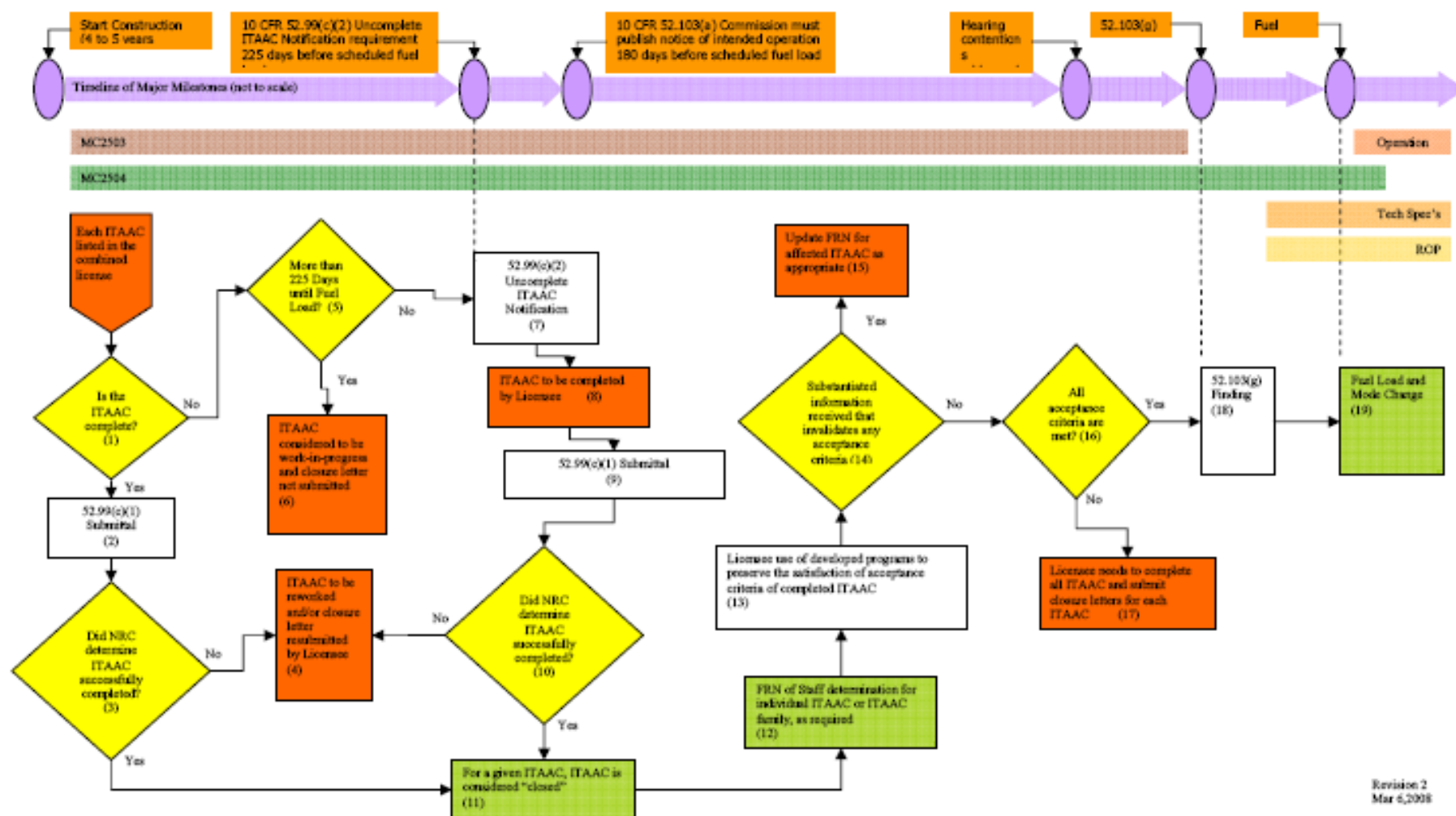
IMC 2507

- Verification of QA program implementation, compliance, reporting and corrective action

IMC 2508

- Verification of QA program implementation for the preparation of a Certified Design.

Flowchart and Description of Implementation Under 10 CFR 52.99 and 10 CFR 52.103(g)



Construction Findings Flowchart

