



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

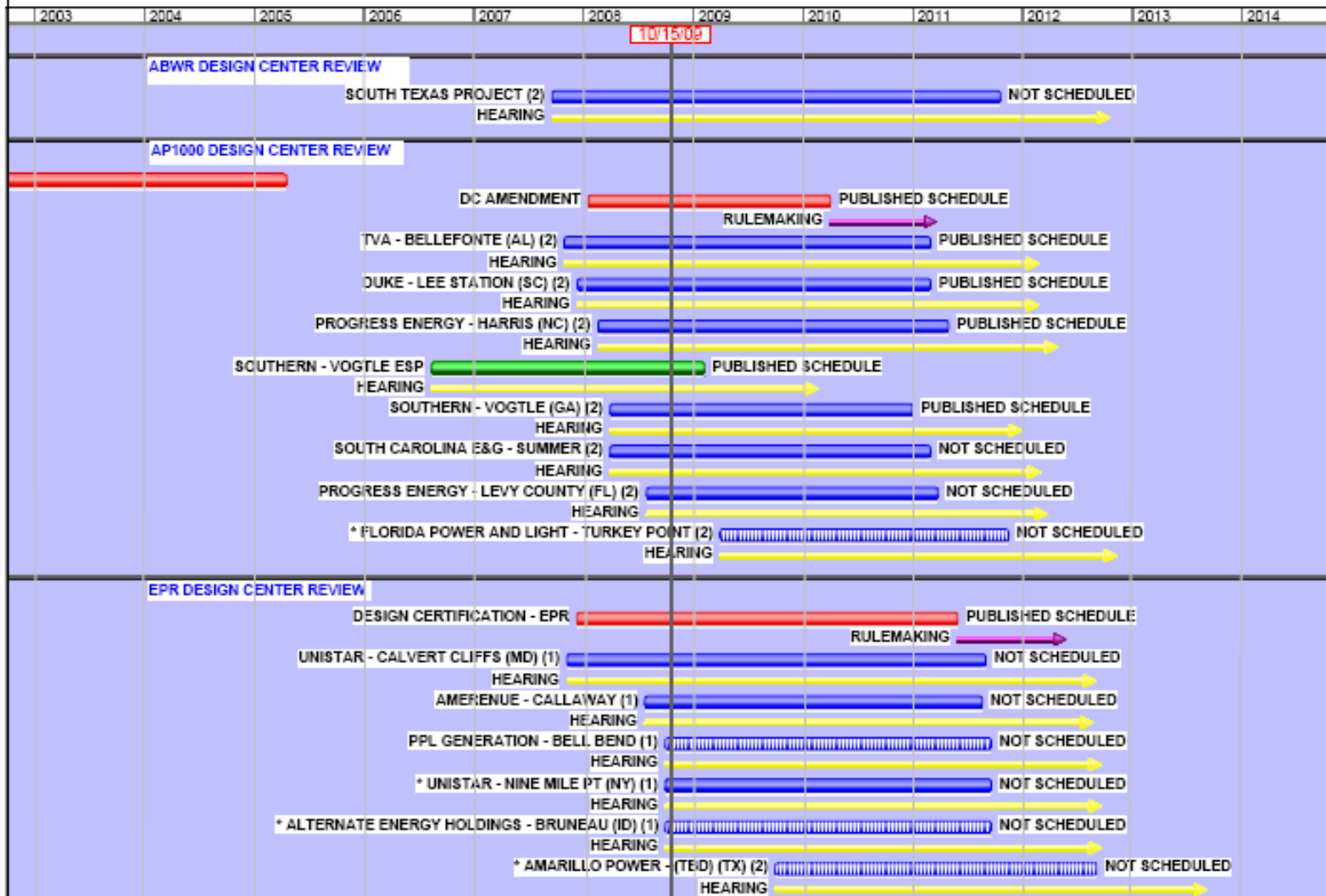
- COL – Combined License
- DCD – Design Control Document
- IT – Information Technology
- ITAAC – Inspections, Tests, Analyses, and Acceptance Criteria
- NRO – Office of New Reactors
- OGC – Office of General Counsel
- ROP – Reactor Oversight Process

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

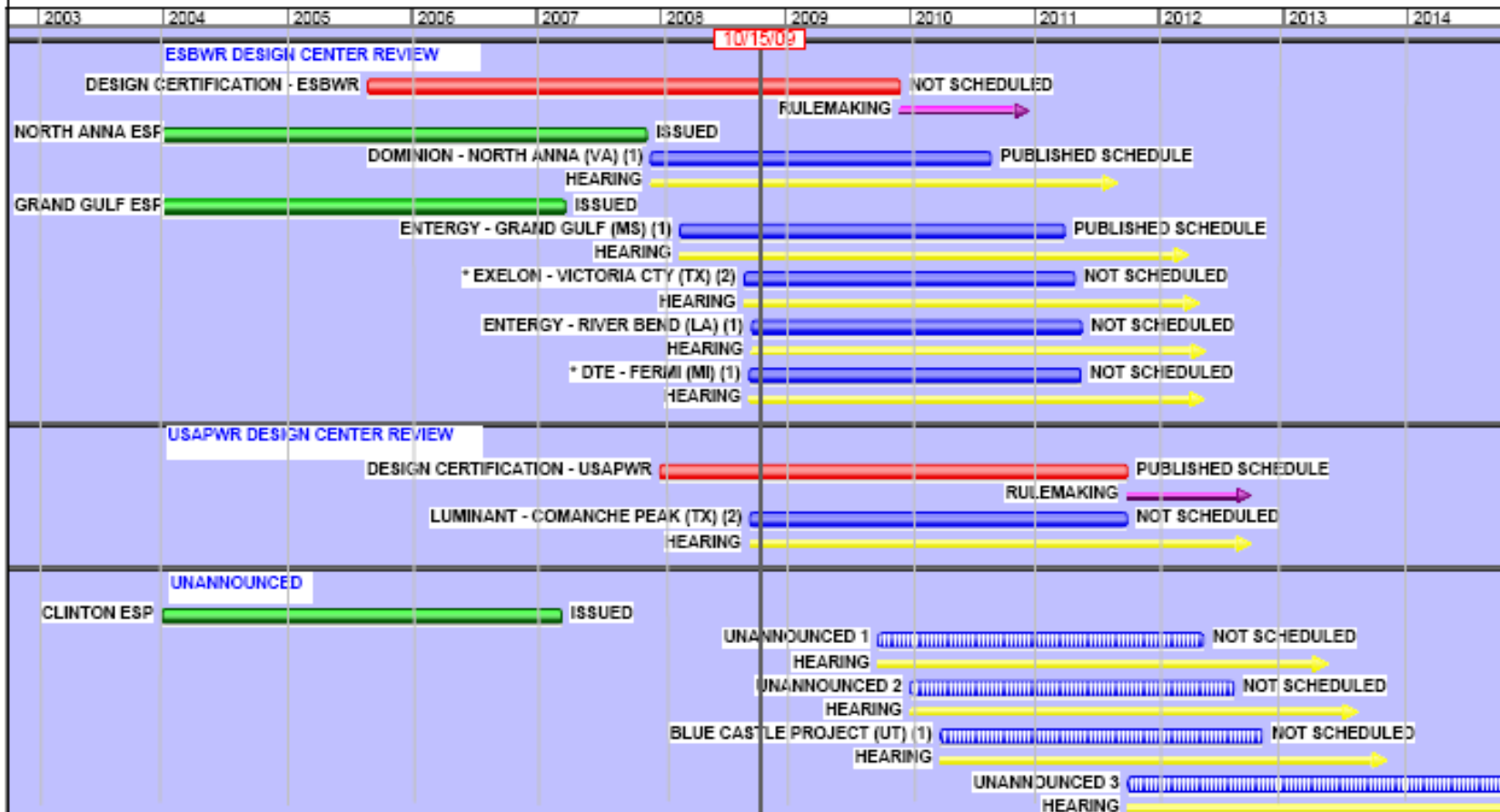
Schedulee by Calendar Year



Wed 10/15/08

New Reactor Licensing Applications

Schedules by Calendar Year



NOTE: Schedules depicted for future activities represent non-instantaneous review durations based on submitted time frames in letters of intent from prospective applicants. Actual schedules based on schedules shown on NRC public web pages.

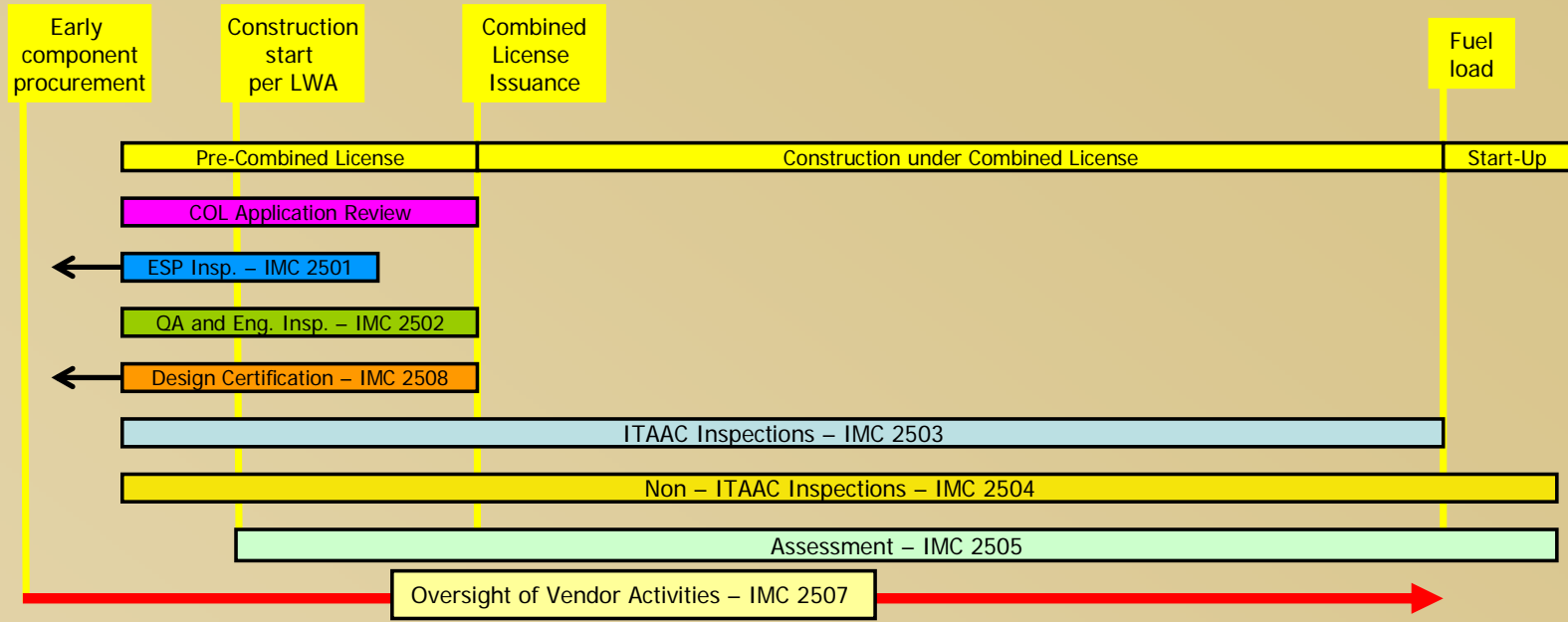
Legend



Numbers in () next to COL name indicate number of units/site.
 The acceptance review is included at the beginning of the COL reviews.
 * Addressed in NRC Fiscal Year 2009 Budget (NUREG-1100, Vol-24, pg. 24).

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

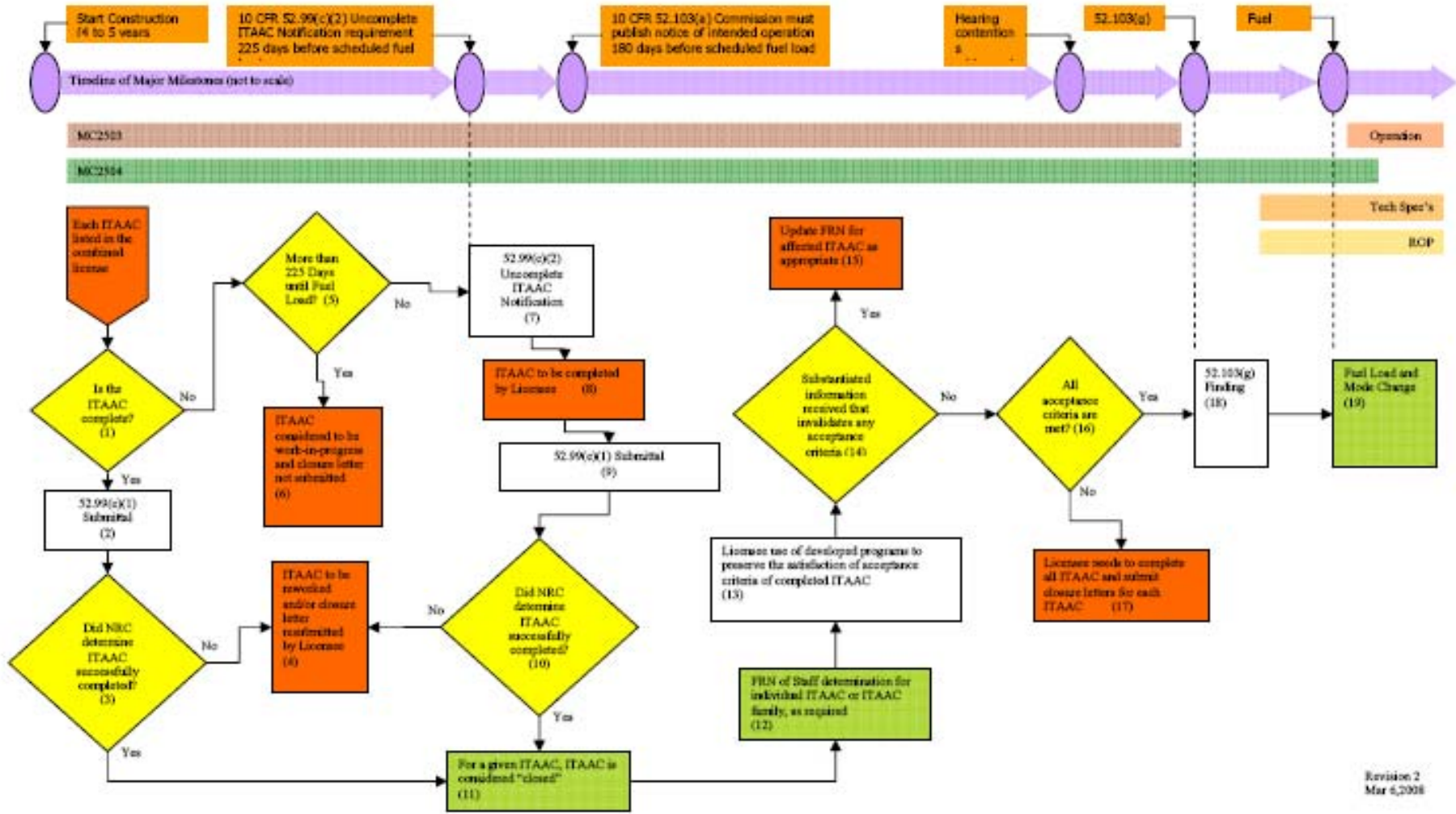
IMC 2507

- 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

