U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

RIC 2011

Construction Oversight Program

Vogtle Units 3 and 4 Modular Assembly Building (December 2010)

Aerial view of Vogtle Units 3 and 4 foundation excavation (April 2010)

Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)

Title 10 of the Code of Federal Regulations (10 CFR) 52.103(g) requires a Commission finding that all acceptance criteria are met before operation of the facility.

A simulated ITAAC closure and verification demonstration was conducted. The demonstration provided insights into the readiness of both the industry and the NRC to support ITAAC closure and to test aspects of the construction assessment program.

Licensee performs ITAAC and NRC inspects a sample

Licensee notifies NRC of ITAAC completion; and NRC performs a closure verification of all ITAAC notifications

All ITAAC are completed

Commission makes a 52.103(g) finding that all acceptance criteria have been met and facility may be operated

Vogtle Units 3 and 4 modular assembly building

New Reactor Construction Oversight Program

Oversight will verify that plants are constructed as designed.

Objectives:

- Confirm that each reactor is constructed in accordance with approved design and safety regulations
- Determine readiness for operation
- Communicate results to stakeholders
- Ensure an effective transition to the operating facility oversight program

Scope of New Reactor Construction Oversight Program:

- Construction Inspection Program
- Inspection and Closure Verification of ITAAC
- Programmatic Inspections
- Quality Assurance Inspections
- Vendor Inspections
- Enforcement, Allegations, and Construction Experience
- Licensee Assessment
- Closure and Transition
- Operator Licensing

V.C. Summer Unit 2 modular construction facility

Vendor Inspections

Ensuring the integrity of the worldwide supply chain

Types of inspections:

- Routine and reactive vendor inspections
- 10 CFR Part 50, Appendix B and 10 CFR Part 21 inspections
- Oversight of Third-Party Organizations (e.g., NUPIC)
- Inspection findings identified to date include the following:
  - o Inadequate implementation of Part 21 requirements
  - o Inadequate commercial-grade dedication programs
  - o Inappropriate oversight of subcontractors

International Cooperation

Participation in multinational organizations:

- Under the Multinational Design Evaluation Program (MDEP) the NRC is coordinating joint vendor inspections and working to harmonize codes and standards.
- The Working Group on the Regulation of New Reactors (WGRNR) which is led by the NRC is developing a worldwide construction inspection database and is cooperating in the areas of siting reviews
- Exchange of Staff
  - o The NRC has hosted foreign assignees from China, South Korea, Japan and Germany.
  - o The NRC has sent inspectors to observe construction activities in France, China and Finland.
- Vendor inspections
  - o The NRC has conducted joint vendor inspections with the regulators from South Korea and France.

NRC visit at Korean Shin Kori construction site as part of ongoing bilateral cooperation with Korean Institute of Nuclear Safety (KINS)

NRC observation of construction activities at Sanmen site, China, as part of the resident inspector exchange

Vendor inspection of reactor primary components at Japan Steel Works facility in Japan