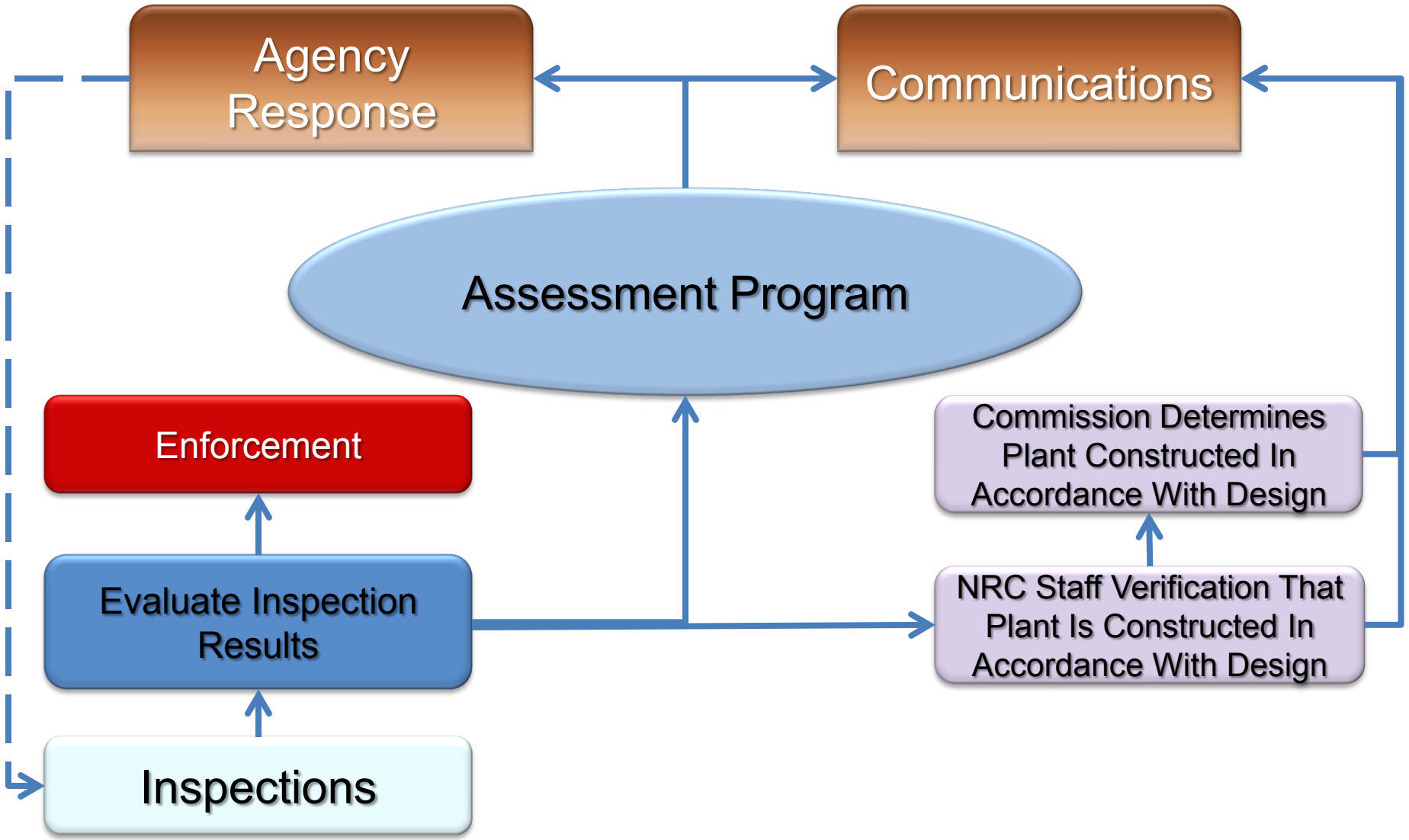
NRC Oversight of New Reactor Construction

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

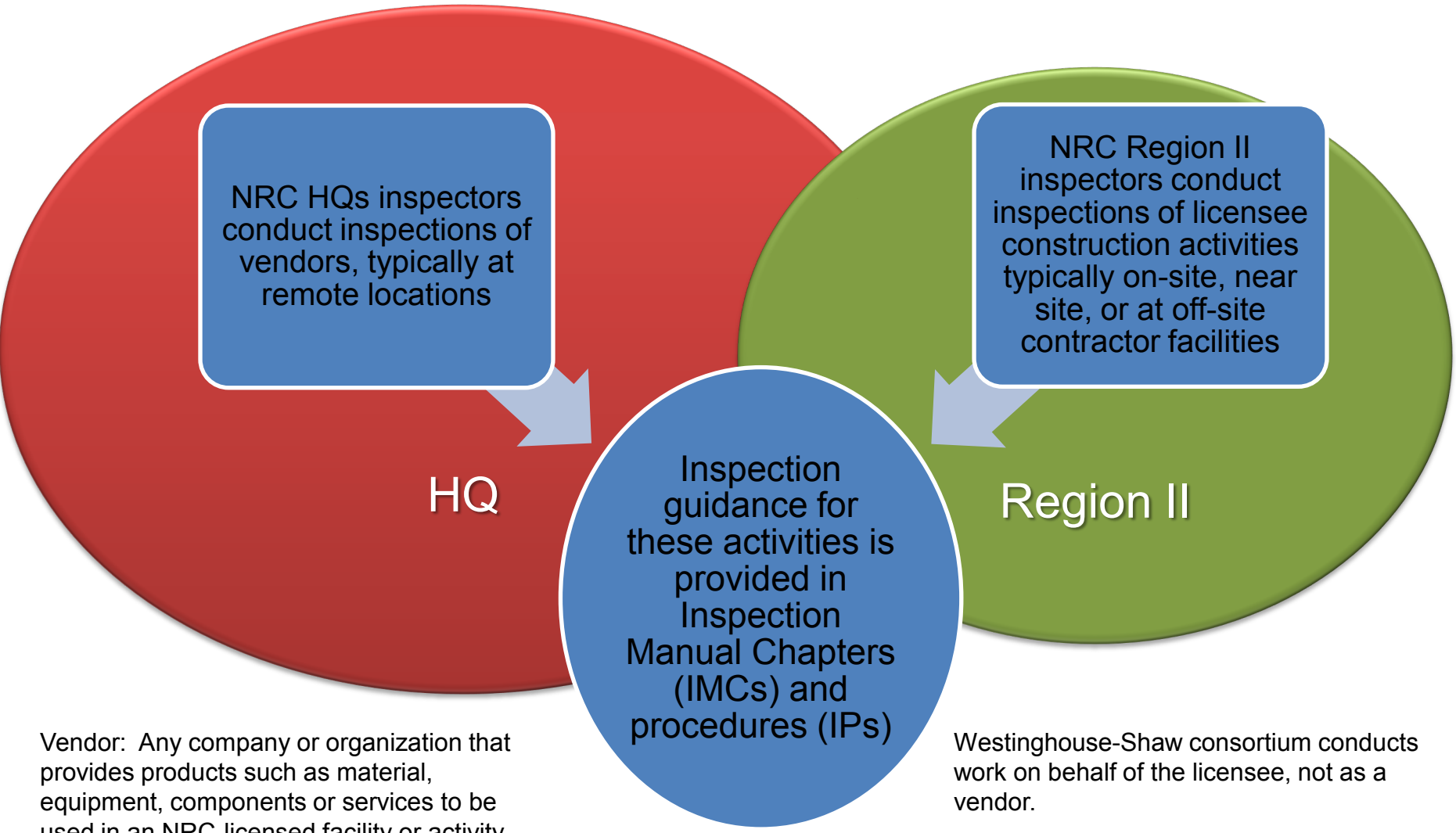
Today's Topics

- Construction Reactor Oversight Process Overview
- Status of Construction Oversight Process
- Initial Lessons-Learned
- Next Steps
- Public Feedback

Construction Reactor Oversight Process Overview



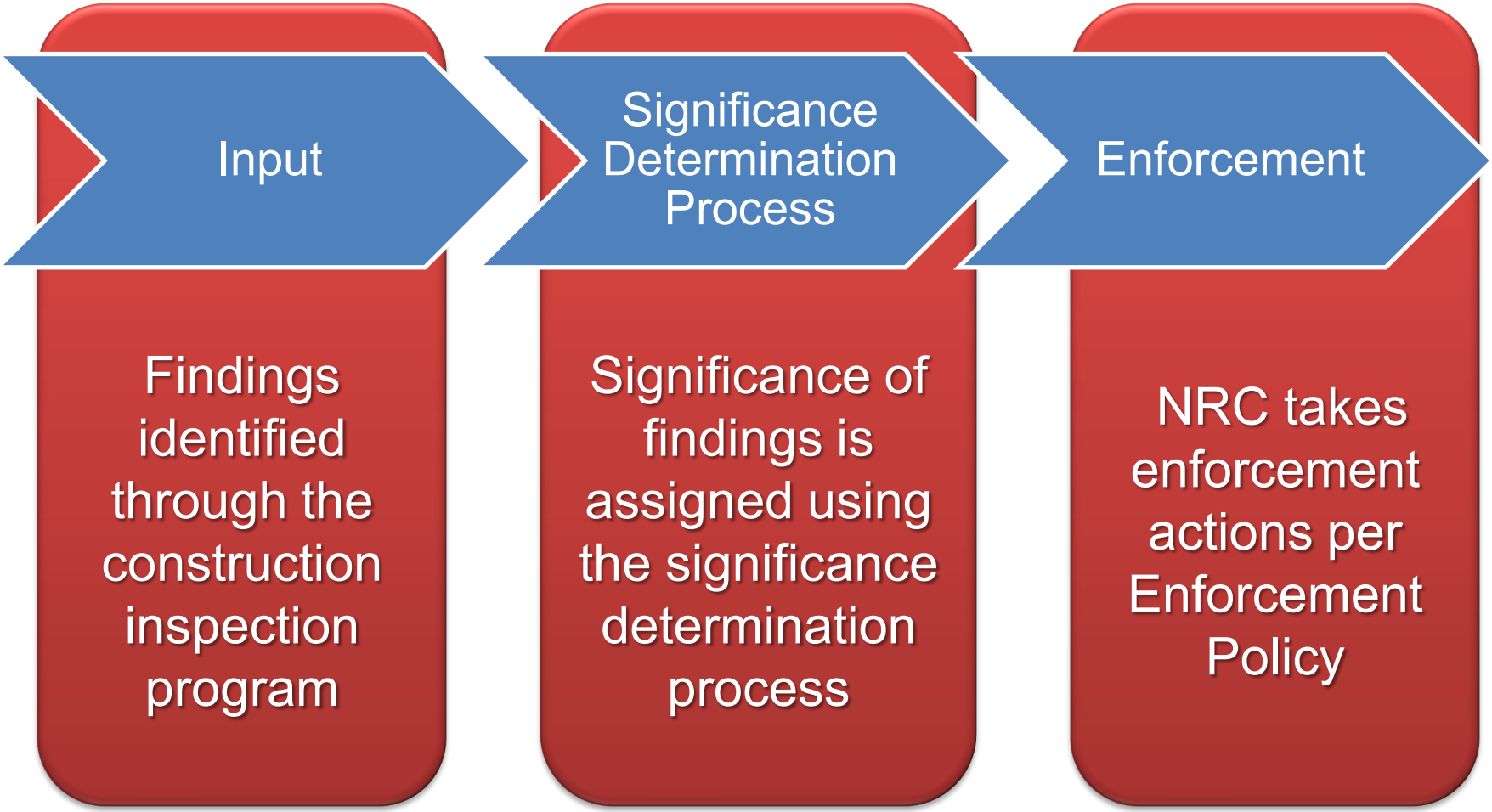
Conducting Inspections



Vendor: Any company or organization that provides products such as material, equipment, components or services to be used in an NRC-licensed facility or activity.

Westinghouse-Shaw consortium conducts work on behalf of the licensee, not as a vendor.

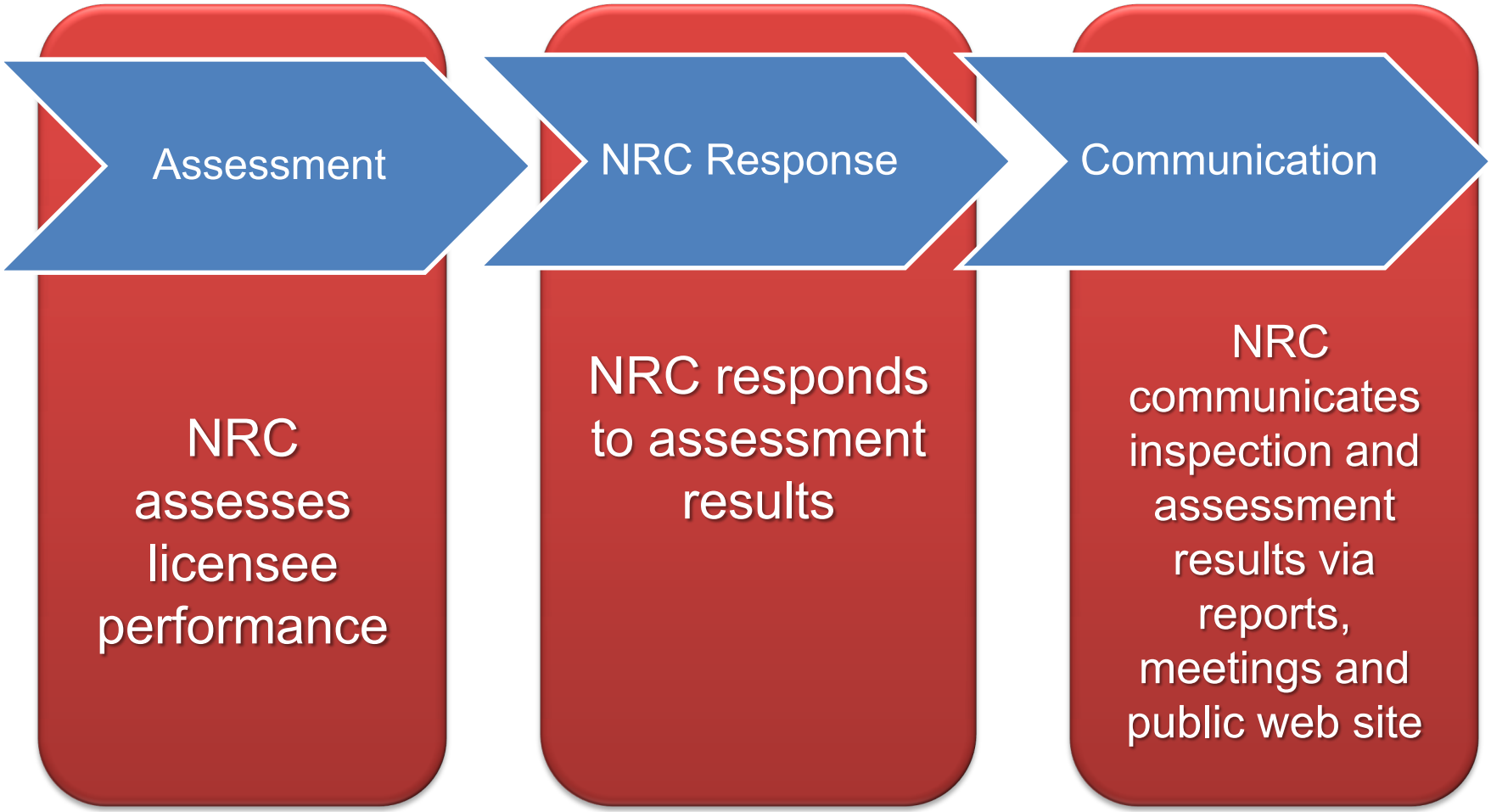
Enforcement



Enforcement Program

- Construction Significance Determination Process used to determine finding significance
- Findings assigned a color of green, white, yellow or red
- Results used as input to construction action matrix
- Severity levels assigned to certain violations
  - Willful violations
  - Violations for failure to make required reports
  - Violations that result in actual consequences such as an overexposure

Assessment


Assessment
NRC Response
Communication
NRC assesses licensee performance
NRC responds to assessment results
NRC communicates inspection and assessment results via reports, meetings and public web site

Assessment Program

- The IMC 2505 Construction Assessment Program was formally implemented at Vogtle Units 3 and 4 on July 1, 2010
- Consists of continuous, quarterly, mid-cycle and end-of-cycle reviews
- Significance of findings is the primary input to determine NRC response
- NRC response to findings is described in program guidance documents

Verification that Plant is Constructed In Accordance With the Approved Design

- Licensee submits a notification to the NRC stating that design requirements have been met
- There are approximately 875 design requirements for which the licensee is required to submit closure notifications
- NRC staff reviews each closure notification and verifies that the applicable design requirements have been met
- Once all closure notifications have been verified, the staff notifies the Commission
- If the Commission agrees that all design requirements have been met, fuel load is authorized
- If someone believes that a design requirement has not been met, there is a hearing opportunity if prima facie evidence is provided

Communications

- Detailed information available at NRC public website
- Demonstration of web pages content
  - http://www.nrc.gov/
  - http://www.nrc.gov/reactors/new-reactors.html
  - http://www.nrc.gov/reactors/new-reactors/oversight.html
  - http://www.nrc.gov/reactors/new-reactors/oversight/crop.html
  - http://www.nrc.gov/reactors/new-reactors/oversight/crop/con-pilot.html
  - http://www.nrc.gov/reactors/new-reactors/oversight/crop/vog3/vog3-chart.pdf
  - http://www.nrc.gov/reactors/new-reactors/oversight/crop/sum2/sum2-chart.pdf

CY 2012 Construction Reactor Oversight Process Implementation

- Implemented new assessment and enforcement programs on a pilot basis at Vogtle and Summer in early 2012
- To date, issued 6 Vogtle and 2 Summer Inspection Reports
- All findings identified to date were of very low safety significance (green)
- Conducted 1st quarter, mid-cycle, and 3rd quarter assessments for each unit
- In the process of evaluating the effectiveness of the construction reactor oversight process

Initial Lessons-Learned

- New assessment and enforcement approach is sound
- Corrective action program effectiveness reviews
- Design control issues
- Finding documentation
- Use of cross-cutting aspects

Next Steps

- Public meetings to solicit external stakeholder feedback being conducted near Summer on 1/8 and near Vogtle on 1/9
- Public meeting on 1/24 at NRC headquarters to evaluate pilot against success criteria
- Results reported to the Commission by end of April

Public Feedback