



Briefing on the Results of the Agency Action Review Meeting

June 10, 2021

Agency Action Review Meeting (AARM) Objectives



- Review the appropriateness of NRC actions taken for licensees with significant performance issues
- Review Nuclear Materials and Waste Safety Program Performance and Trends
- Review effectiveness of the Reactor Oversight Process (ROP) and the Construction ROP
- Ensure that trends in industry and licensee performance are recognized and appropriately addressed.

Agenda

- **Kevin Williams**
 - Nuclear Materials and Waste Safety Program Performance and Trends
- **Russ Felts**
 - CY 2020 ROP Self-Assessment Results
 - Status of the ROP during COVID-19
 - Inspection Findings Trend
- **Greg Bowman and Marissa Bailey**
 - CY 2020 cROP Self-Assessment Results
 - Vogtle Construction Update





Nuclear Materials and Waste Safety Program

Kevin Williams, Director

Division of Materials Safety, Security, and State
and Tribal Programs

Office of Nuclear Material Safety and Safeguards

Utilizing a Robust Performance Evaluation Process

- Systematic review of information to identify significant:
 - Operational performance issues
 - Licensee performance issues
 - NRC program issues/gaps
- For FY 2020, there were no licensees with significant performance issues



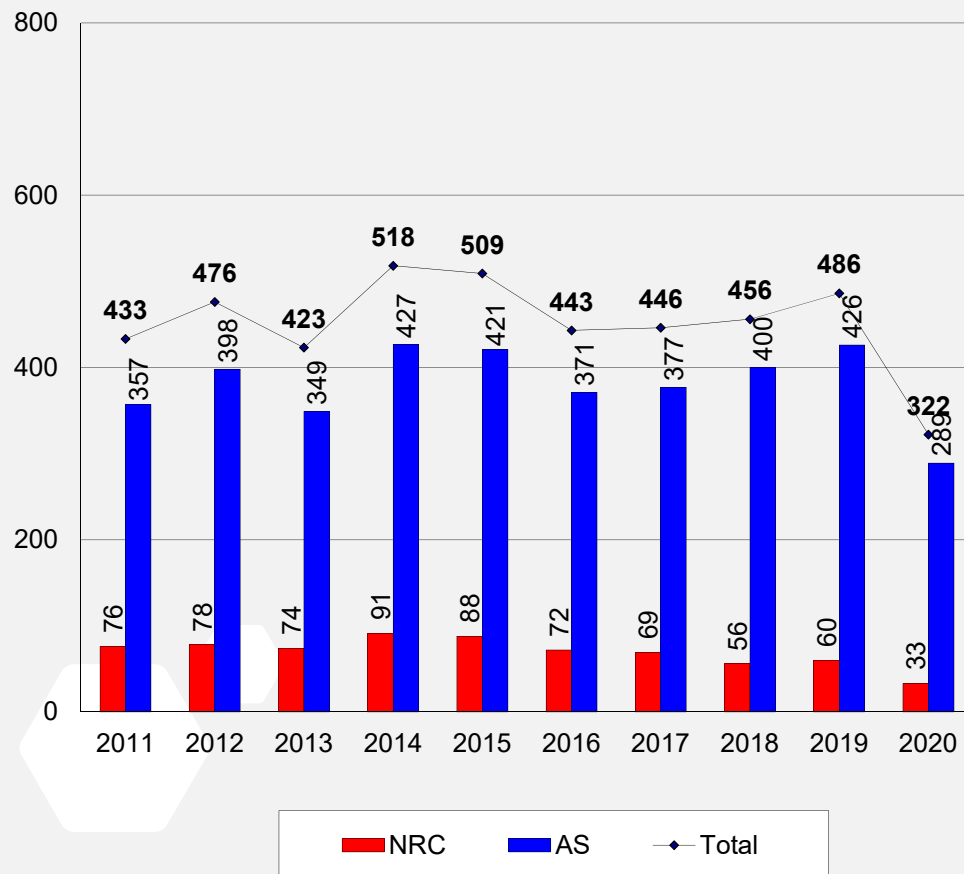
Reviewing and Evaluating Strategic Performance Measures on an Ongoing Basis

- FY20 Agency performance results were reported in the FY20 Agency Financial Report (AFR)
- Safety Goal
 - 2 occurrences (target ≤ 3)
- Security Goal
 - 0 occurrences (target = 0)

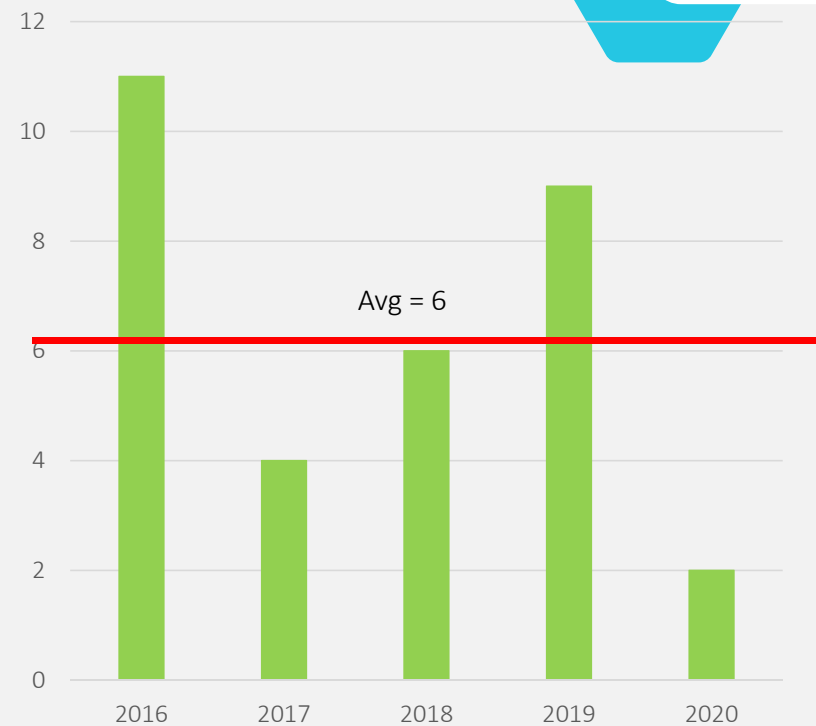


Trends Analysis

Materials- Events Per Year



Fuel Cycle Operating Experience- Events Per Year

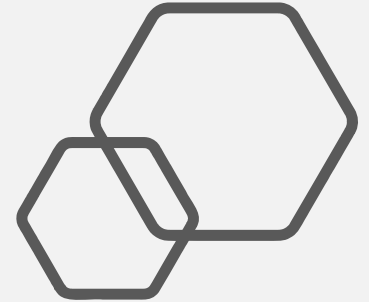


Escalated Enforcement Actions

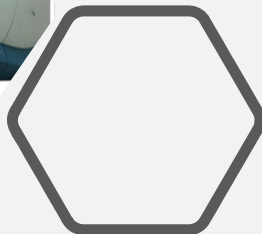
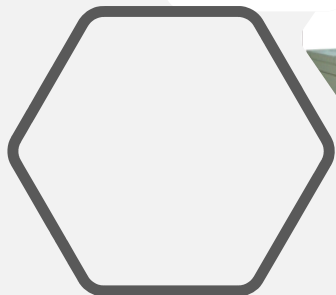
- 26 NRC escalated enforcement actions in FY20
 - Escalated enforcement actions in FY20 decreased by 14 (-35%) from FY19
 - Enforcement policy update is ongoing in FY21



Abnormal Occurrences



- 9 Abnormal Occurrences (AOs) will be reported to Congress for FY20
 - 1 Human Exposure Event
 - 8 Medical Events
- Number of medical AOs is small relative to the millions of activities involving the use of radioactive material



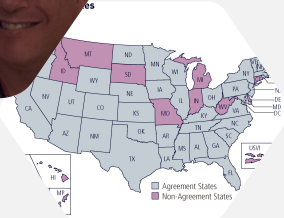
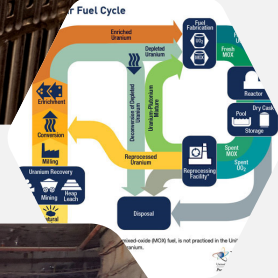
Nuclear Materials and Waste Safety Program Activities During COVID-19 PHE

- Licensing Actions
 - Outreach provided to help guide exemptions and license amendments
- Inspections
 - Focused on staff and licensee safety, and utilized In person, total remote, and hybrid inspection methods
- Oversight Activities Assessment
 - Comprehensive assessment of oversight programs during the PHE (ongoing)



Programmatic Self-Assessments and Improvements


- Fuel Facilities- enforcement self assessment
- Web-Based Licensing Modernization
- Reactor Decommissioning Financial Assurance Working Group (Report issued FY20)
- Decommissioning and Uranium Recovery Oversight Guidance



Summary of Program Performance

- Successfully conducted oversight activities and planning during the COVID-19 PHE, and continuing to improve consistency and guidance across all NMSS business lines.
- Invested in innovation and risk informing across all NMSS program areas
- No significant trending issues in nuclear materials or fuel cycle event data
- NRC met all safety strategic goal performance metrics.





ROP Self-Assessment, COVID-19, and Inspection Findings Trend

Russ Felts, Deputy Director
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

ROP Self-Assessment Activities in CY 2020

- Performance Metrics
- Data Trending
- Program Area Evaluations
- Implementation Audit of Region IV
- Effectiveness Review of Cross-Cutting Issues
- Implementation Review of Very Low Safety Significance Issue Resolution (VLSSIR)
- Lessons Learned Tracker
- Continuous Baseline Inspection Procedure Monitoring



Status of the ROP during COVID-19 in CY 2020

- Accomplished both onsite and remote oversight activities at operating reactors during the ongoing COVID-19 public health emergency, while taking precautions to minimize exposure to COVID-19
- Completed approximately 150000 baseline inspection hours nationwide with a two unit site averaging 2700 hours
- Achieved reasonable assurance of safe plant operation
- Did not complete the baseline inspection program in CY 2020, approximately 1% of inspection procedures were incomplete



Plans for CY 2021 ROP Self-Assessment Activities

Element 1: Measure Regional and Headquarters Program Effectiveness and Uniformity Implementing the ROP

- Performance Metrics
- Data Trending
- Program Area Evaluations

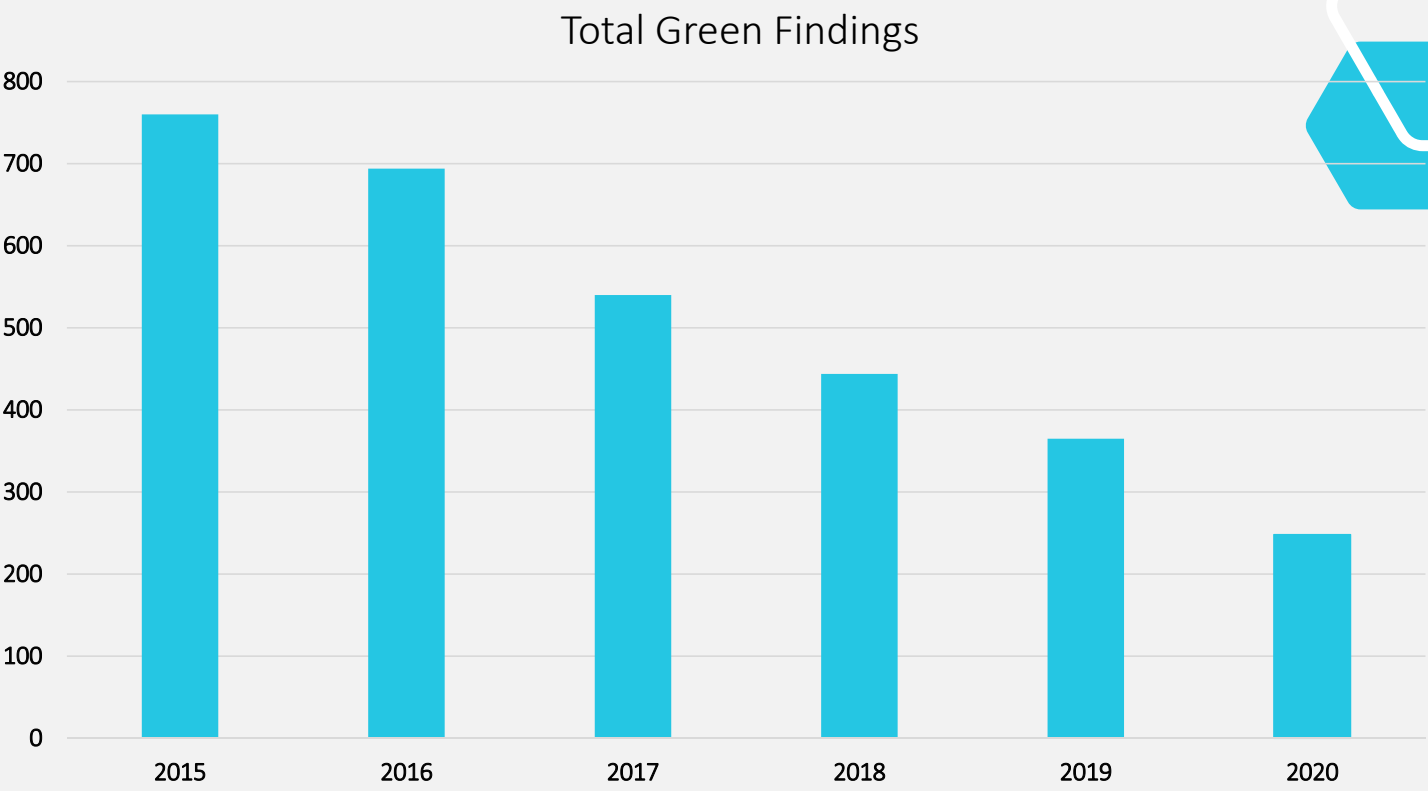
Element 2: Assess Effectiveness of Recent ROP Changes and Evaluate the NRC's Response to Significant Licensee Events or Declining Licensee Performance

- Effectiveness Reviews (Column 3 of the Action Matrix, VLSSIR Process, ANO 95003 Lessons Learned)
- Lessons Learned Tracker

Element 3: Perform Focused Assessments of Specific ROP Program Areas, Including the Baseline Inspection Program

- Comprehensive Baseline Inspection Program Review - focused on recommending program guidance changes to incorporate COVID-19 lessons learned
- Continuous Baseline Inspection Procedure Monitoring

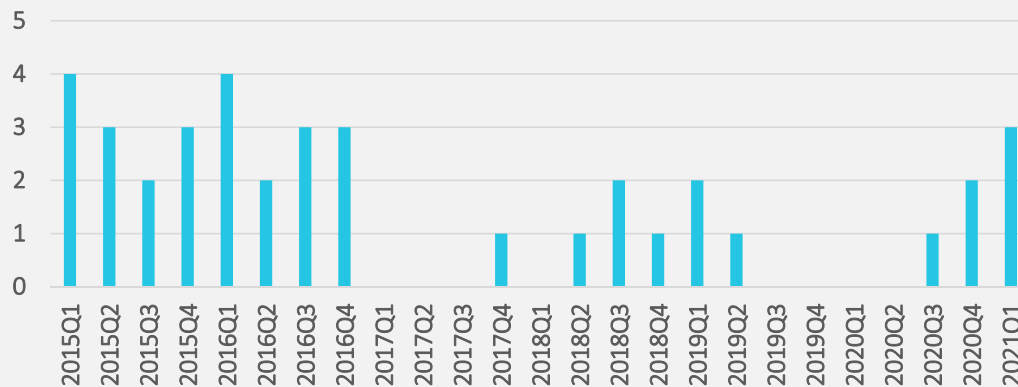
Green Findings Show Decreasing Findings Trend



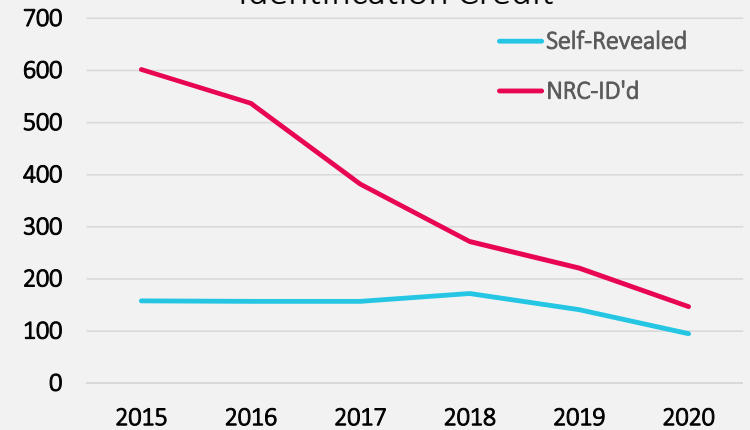
Oversight Implications of Findings Trend?

- The trend in the number of findings reflects a shift in the inspection finding screening process to prioritize issues with risk significance rather than any larger performance trends in the industry since 2015
- Staff tracks multiple indicators to verify safe performance and ensure continued effectiveness of the ROP

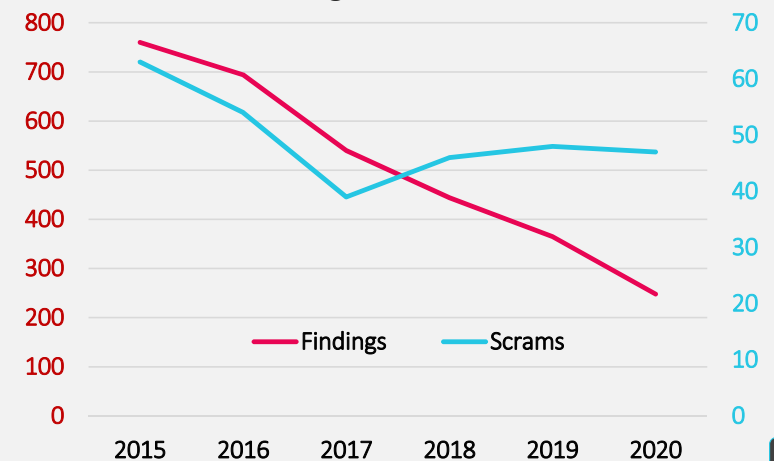
Greater-than-Green Performance Indicators



Identification Credit



Findings and Scrams



CY 2020 ROP Self-Assessment Results

The ROP is an effective and robust program

The ROP is objective, risk-informed, understandable, and predictable

The ROP supports the agency's strategic safety and security goals:
to ensure the safe and secure use of radioactive materials



A collage of construction site photographs arranged in a hexagonal pattern. The photos show various construction activities, including cranes, workers in safety gear, and industrial structures.

Construction ROP and Transition to ROP

Greg Bowman, Director

Vogtle Project Office

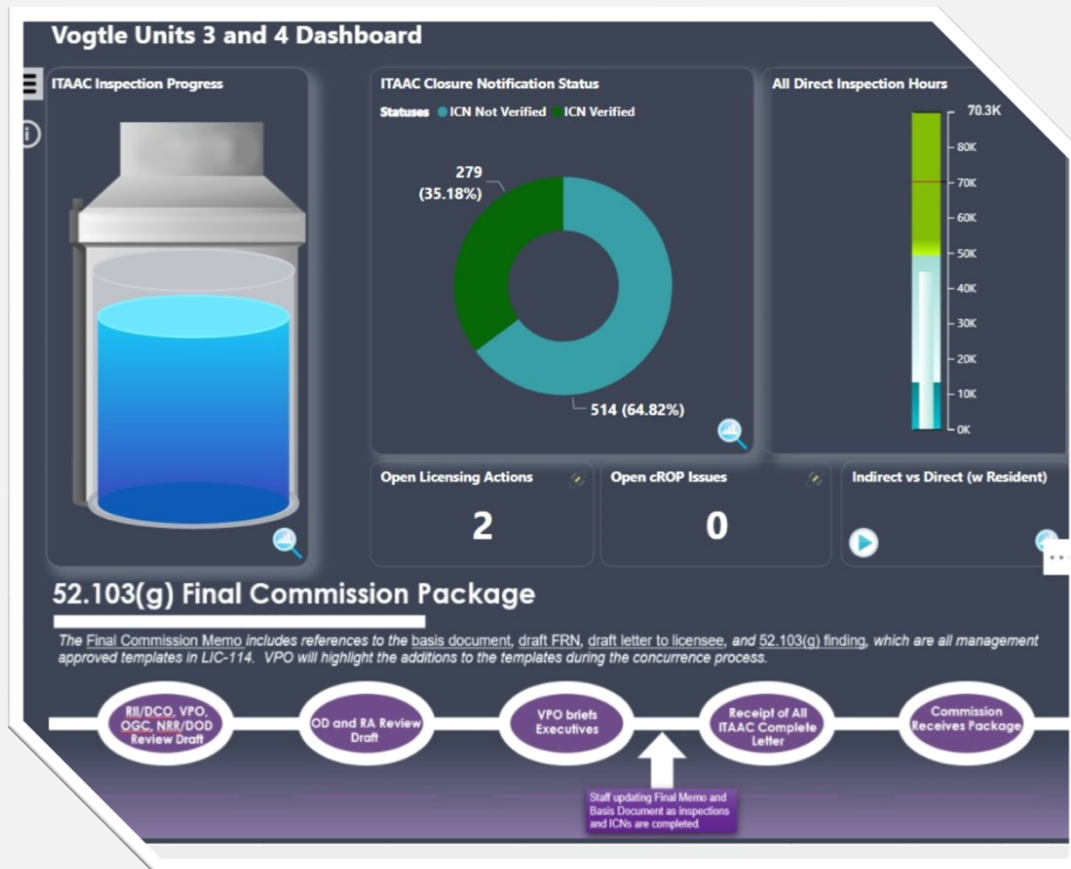
Office of Nuclear Reactor Regulation

Marissa Bailey, Director

Division of Construction Oversight

Region II

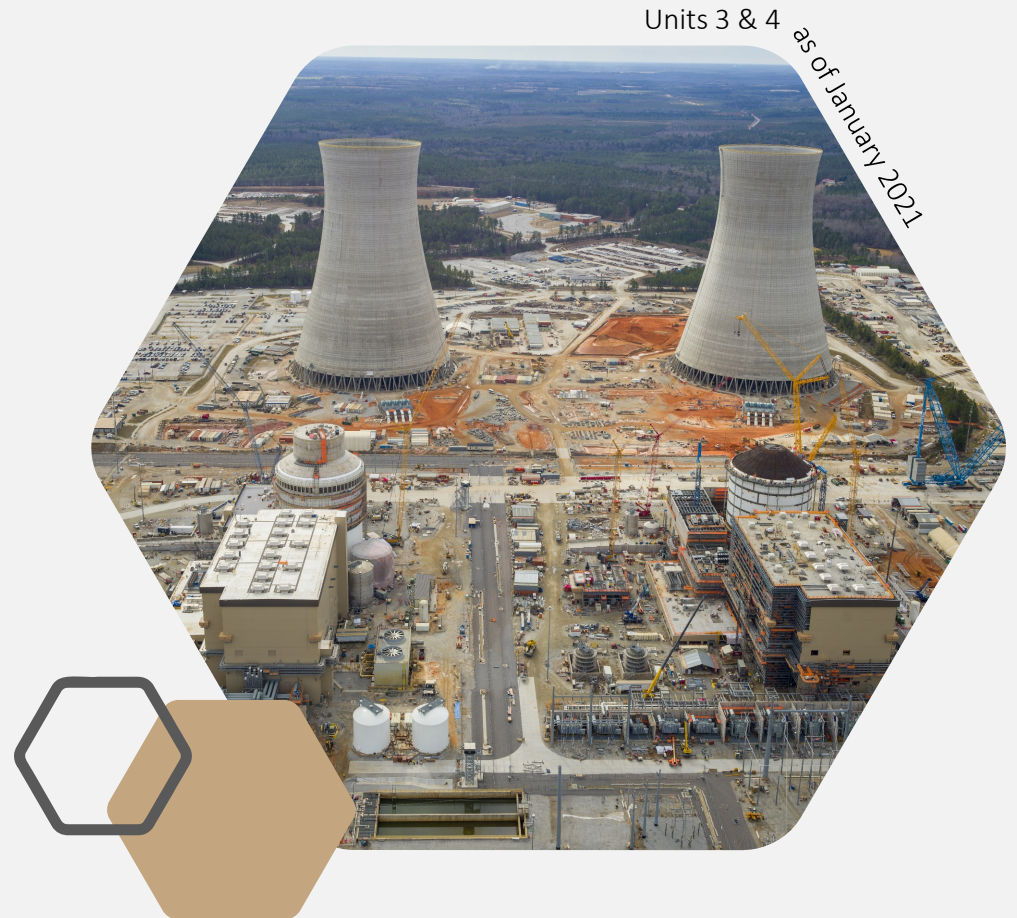
Ensuring Readiness Through Continuous Improvement



- Continued use of data to inform decision making
- Assessed program readiness and monitored effectiveness of previous program changes
- Exercised internal procedures through table-tops in preparation for the 10 CFR 52.103(g) finding
- Updated program attributes focus on risk-significant areas
- Refined ROP for AP1000

Ensuring Public Transparency

- Rigorous communication plan to ensure public transparency
- Enhanced the [public website](#) for increased information sharing
- Increased reporting and examination of monthly resource expenditures
- Routine public engagement



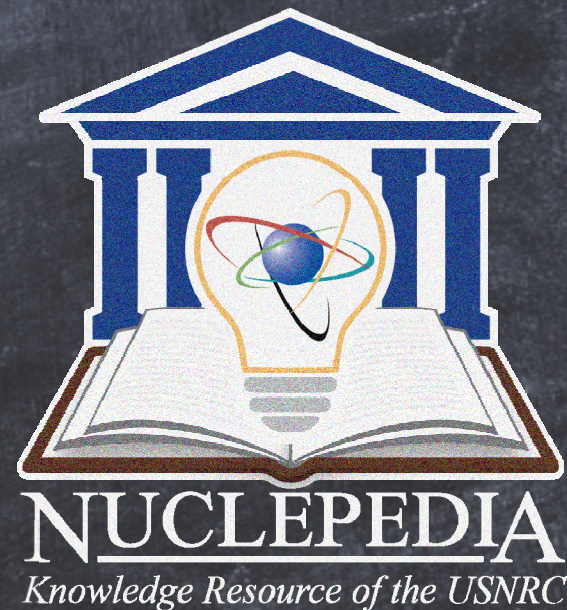
Agile and Flexible Inspection Program

- Adapted the inspection program to contend with COVID-19 PHE and schedule changes
- Enhanced communications with the licensee to ensure schedule awareness
- Preparing for anticipated surge in inspection workload this Summer
- Preparing for the transition to operation



Capturing Lessons Learned and Preparing for the Future

- Started a lessons learned initiative to inform ongoing new reactor licensing activities
- Developing an Advanced Reactor Construction Inspection and Oversight Framework





Conclusion

The NRC staff affirmed the appropriateness of agency actions and the effectiveness of our oversight programs



List of Acronyms

- AARM – Agency Action Review Meeting
- AO – Abnormal Occurrence
- COVID-19 – Coronavirus Disease 2019
- cROP – Construction Reactor Oversight Process
- CY – Calendar Year
- FY – Fiscal Year
- IP – Inspection Procedure
- IMC – Inspection Manual Chapter
- ITAAC – Inspections, Tests, Analyses, and Acceptance Criteria
- MD – Management Directive
- NMSS – Office of Nuclear Material Safety and Safeguards
- NRC – U.S. Nuclear Regulatory Commission
- PHE – Public Health Emergency
- ROP – Reactor Oversight Process
- VLSSIR - Very Low Safety Significance Issue Resolution
- VRG – Vogtle Readiness Group

