



# 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

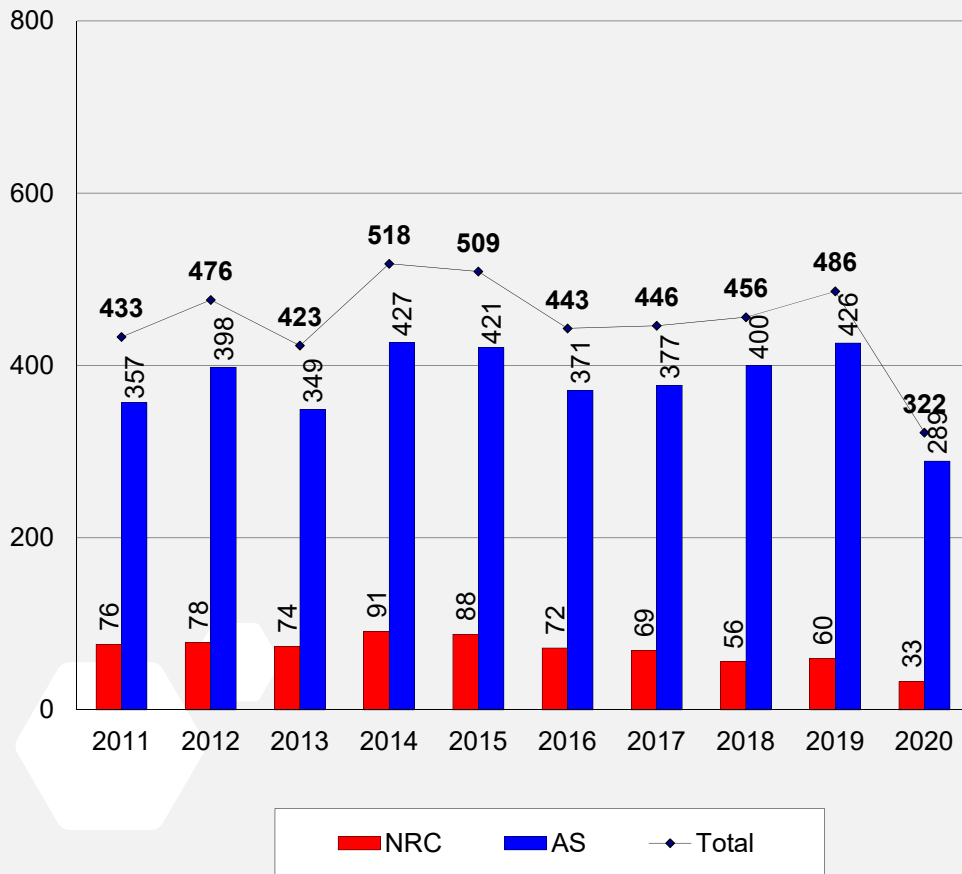
- FY20 Agency performance results were reported in the FY20 Agency Financial Report (AFR)
- Safety Goal
  - 2 occurrences (target  $\leq 3$ )
- Security Goal
  - 0 occurrences (target = 0)



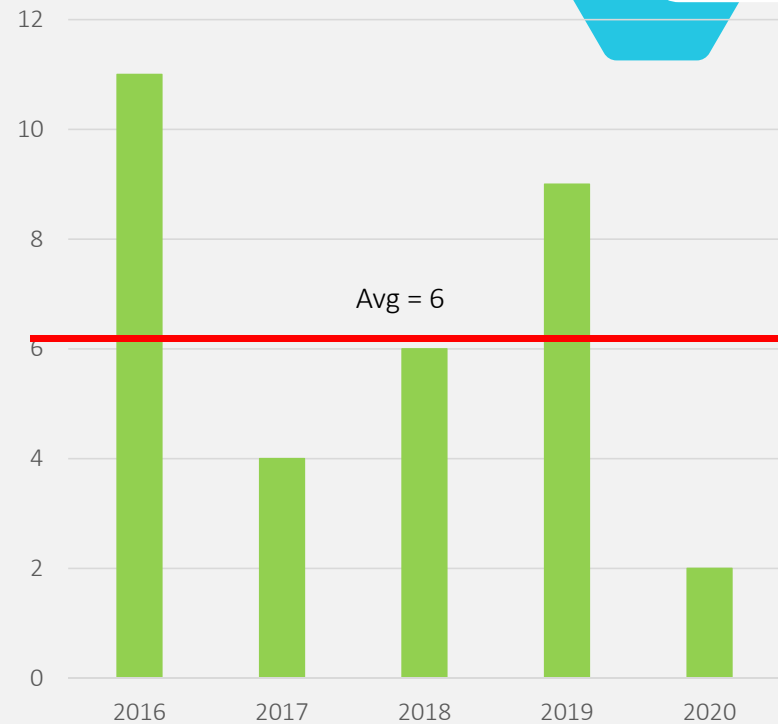


# Trends Analysis

## Materials- Events Per Year



## Fuel Cycle Operating Experience- Events Per Year

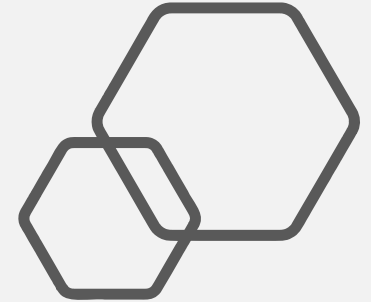


# Escalated Enforcement Actions

- 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

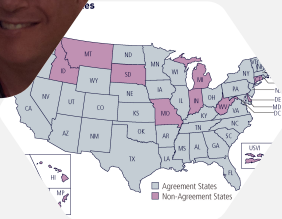
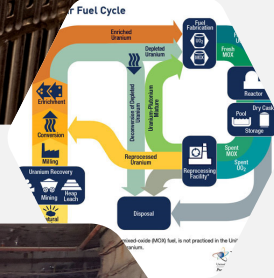
# Nuclear Materials and Waste Safety Program Activities During COVID-19 PHE

- 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

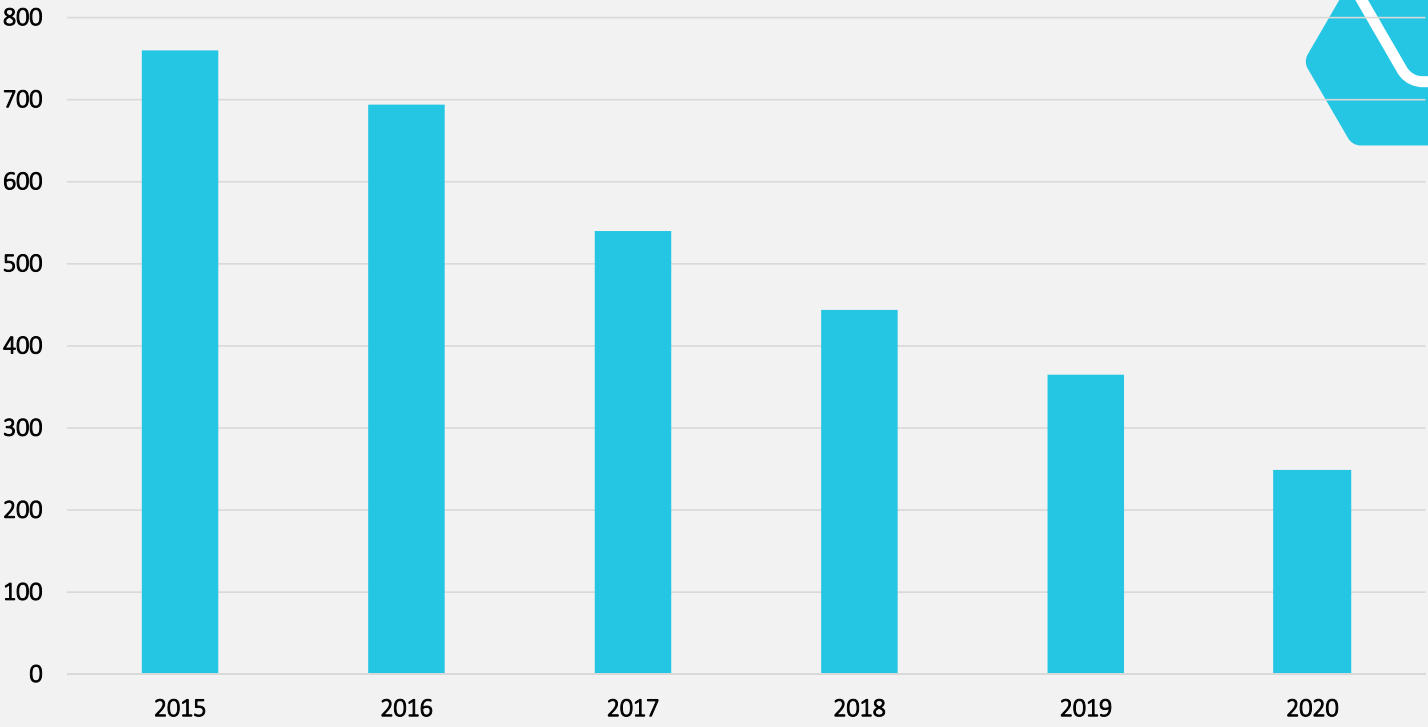
- Effectiveness Reviews (Column 3 of the Action Matrix, VLSSIR Process, ANO 95003 Lessons Learned)
- Lessons Learned Tracker

## 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

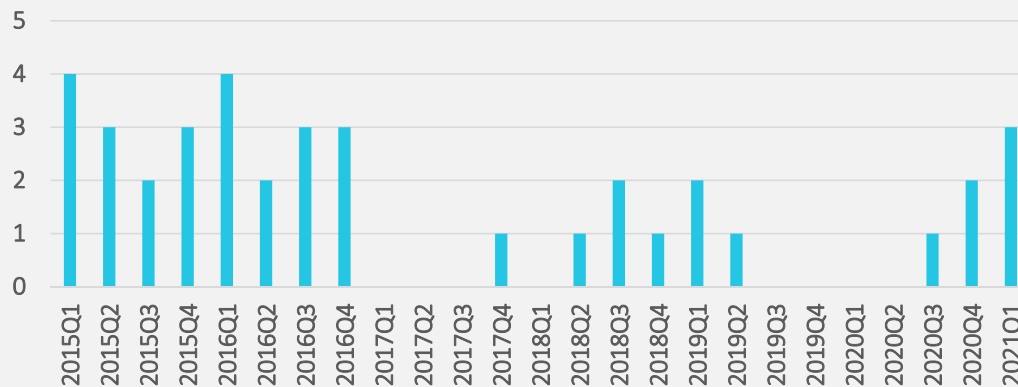
Total Green Findings



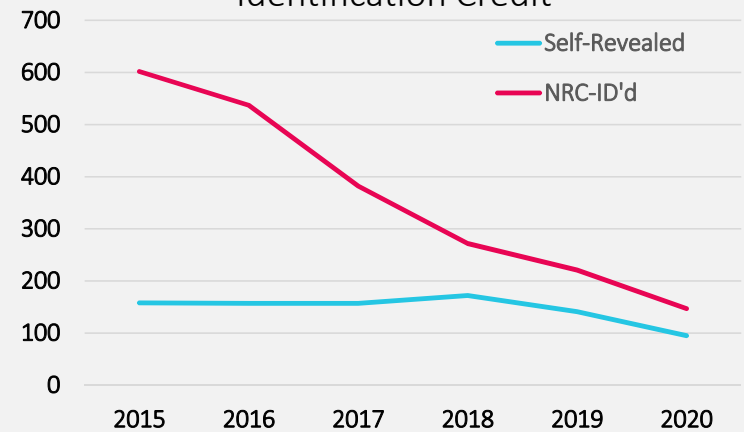
# Oversight Implications of Findings Trend?

- 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

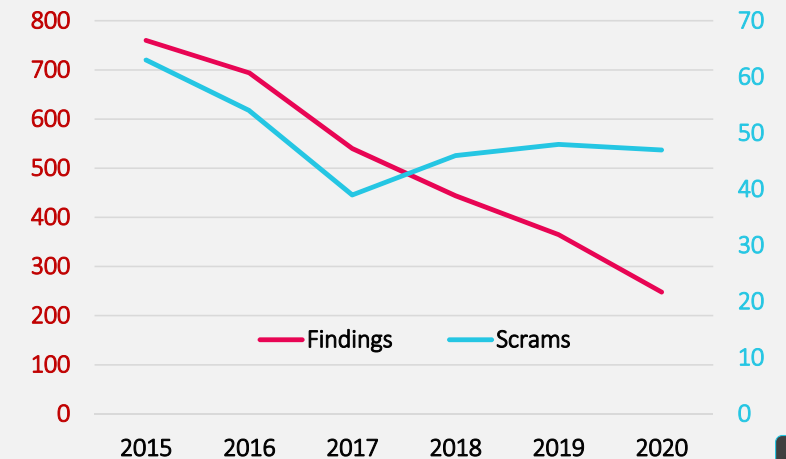
Greater-than-Green Performance Indicators



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



# Construction ROP and Transition to ROP

Greg Bowman, Director

Vogtle Project Office

Office of Nuclear Reactor Regulation

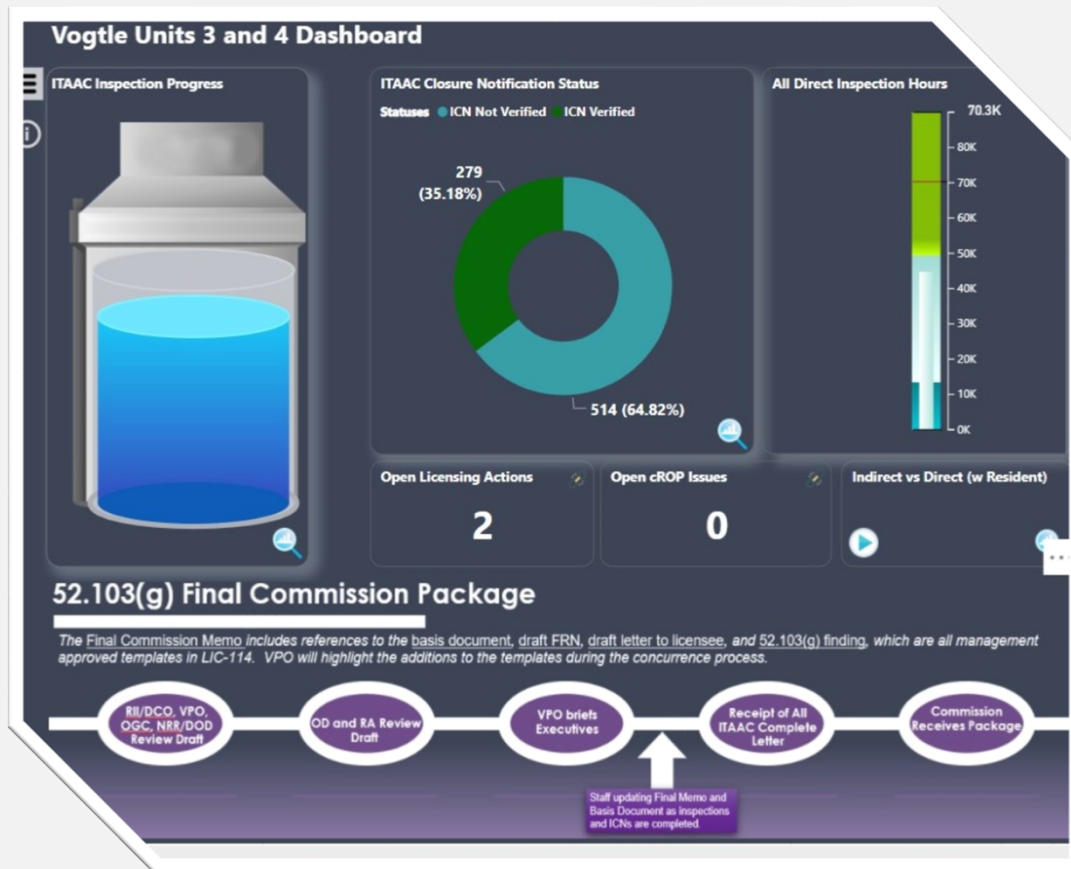
Marissa Bailey, Director

Division of Construction Oversight

Region II



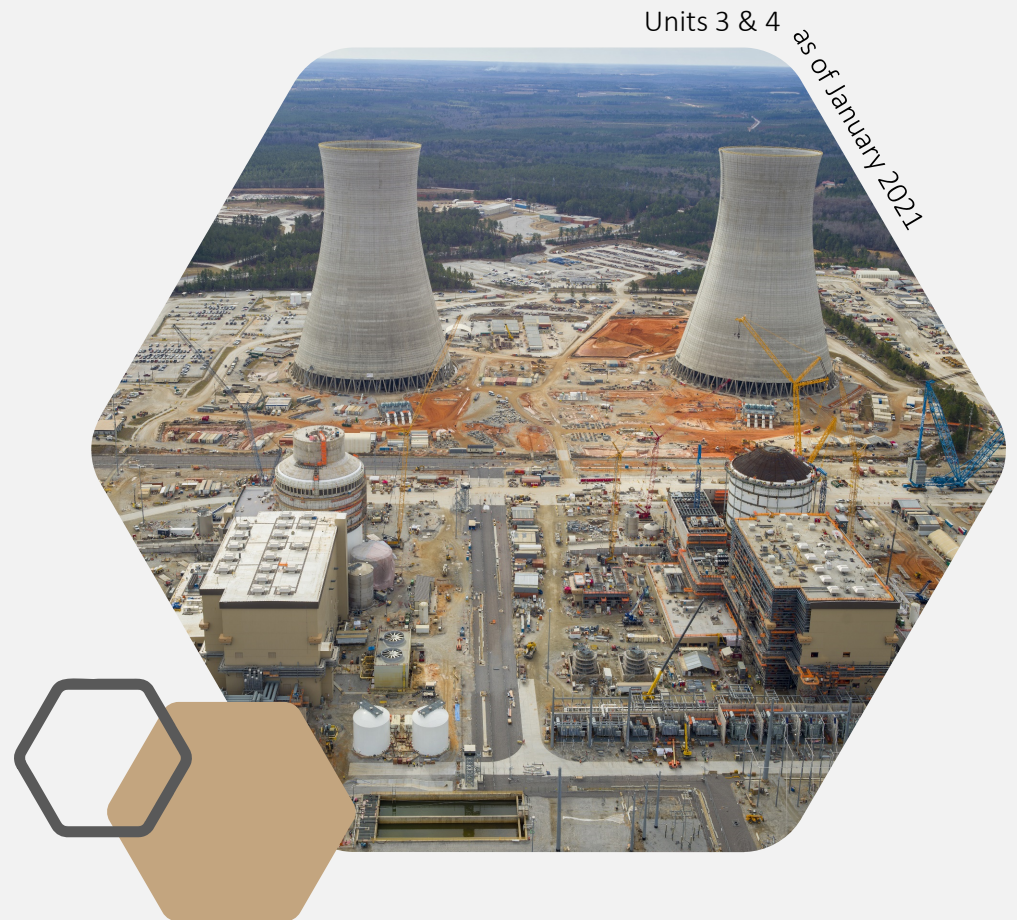
# Ensuring Readiness Through Continuous Improvement



- 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





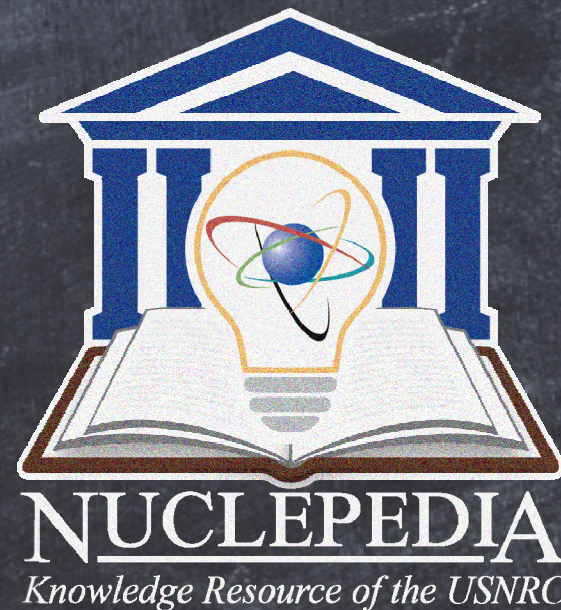
## Agile and Flexible Inspection Program

- 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

