

# **ADVANCE Act Section 505 Nuclear Licensing Efficiency**

Jamie Pelton, NRR  
Hipolito Gonzalez, NRR  
Audrey Klett, NRR

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# Meeting Logistics

- Information public meeting with designated question and answer sessions
  - Meeting notice dated January 8, 2025 ([ML25008A153](#))
  - Meeting materials are available at <https://www.nrc.gov/pmns/mtg?do=details&Code=20250012>
  - NRC will host a comment gathering public meeting for Section 505 in the future
- Teams Webinar Operation
  - Attendees' mics & cameras and meeting chat feature are disabled
  - During the Q&A sessions, use Teams' "raise hand" feature, and NRC staff will enable you to unmute your mic
  - In-person attendees must disable/mute their laptop mics & speakers

# Agenda

Time	Topic	Speaker
9:00 AM	Introductions	NRC
9:15 AM	Opening remarks	NRC
9:30 AM	Discussion of NRC's approach for addressing ADVANCE Act Section 505	NRC
10:30 AM	Break	
10:45 AM	Question and Answer Session for the Industry	NRC and Industry
11:15 AM	Question and Answer Session for the Public	NRC and the Public
11:45 AM	Closing remarks and adjourn	NRC

If attendees would like their names listed in the publicly available meeting summary attendance record, please email [Audrey.Klett@nrc.gov](mailto:Audrey.Klett@nrc.gov).

# Opening Remarks – Jamie Pelton

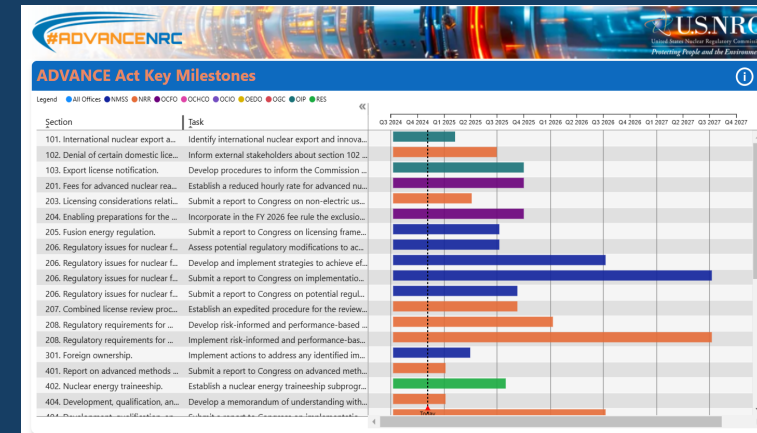
- NRC staff will discuss its approach for addressing ADVANCE Act, Section 505 (“Section 505”) on reactor licensing efficiency
- NRC is developing near term actions and sustainable (long term) actions because Section 505 is a continual requirement
- Safety and security remain NRC’s priority
- Section 505 requires that the NRC implement its mission in an efficient manner



# Opening Remarks – Mike King

- NRC ADVANCE Act Core Team
  - Mike King, Special Assistant for ADVANCE Act
  - Luis Betancourt, Executive Technical Assistant
  - Annie Ramirez, Executive Technical Assistant
  - Aaron McCraw, Sr. Communications Specialist
- ADVANCE Act Section 505 – Nuclear Licensing Efficiency
  - One part of NRC's overall implementation of the ADVANCE Act.
  - NRC's [public website](#) has additional information about our overall implementation of the Act and plans for other upcoming and past public meetings related to the Act (QR codes on next slide)
  - Use the "Contact Us" form on the website for general questions, comments, and ideas on the ADVANCE Act (QR code on next slide)

Stay informed of progress  
and follow NRC's  
ADVANCE Act  
implementation



For upcoming and  
past public meeting  
information on  
ADVANCE Act



Contact us with  
ADVANCE Act  
questions, comments  
and ideas



# ***NRC's Approach for Addressing ADVANCE Act Section 505: Nuclear Licensing Efficiency***

## **Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024 (ADVANCE Act)**

- ADVANCE Act was signed into law in July 2024
- The Act builds on prior initiatives to modernize and streamline the regulatory environment for advanced nuclear technologies, including
  - 1) facilitate American nuclear energy leadership
  - 2) support development and deployment of new nuclear energy technologies
  - 3) preserve existing nuclear energy
  - 4) strengthen America's nuclear energy fuel cycle and supply chain infrastructure
  - 5) improve the Commission's resources and efficiency
- The Act increases emphasis on efficiency



# ADVANCE Act Section 505 Provisions

ADVANCE Act, Section 505 amended the Energy Reorganization Act, Section 203 to state:

(c) Licensing process.—In carrying out the principal licensing and regulation functions under subsection (b)(1), the Director of Nuclear Reactor Regulation shall—

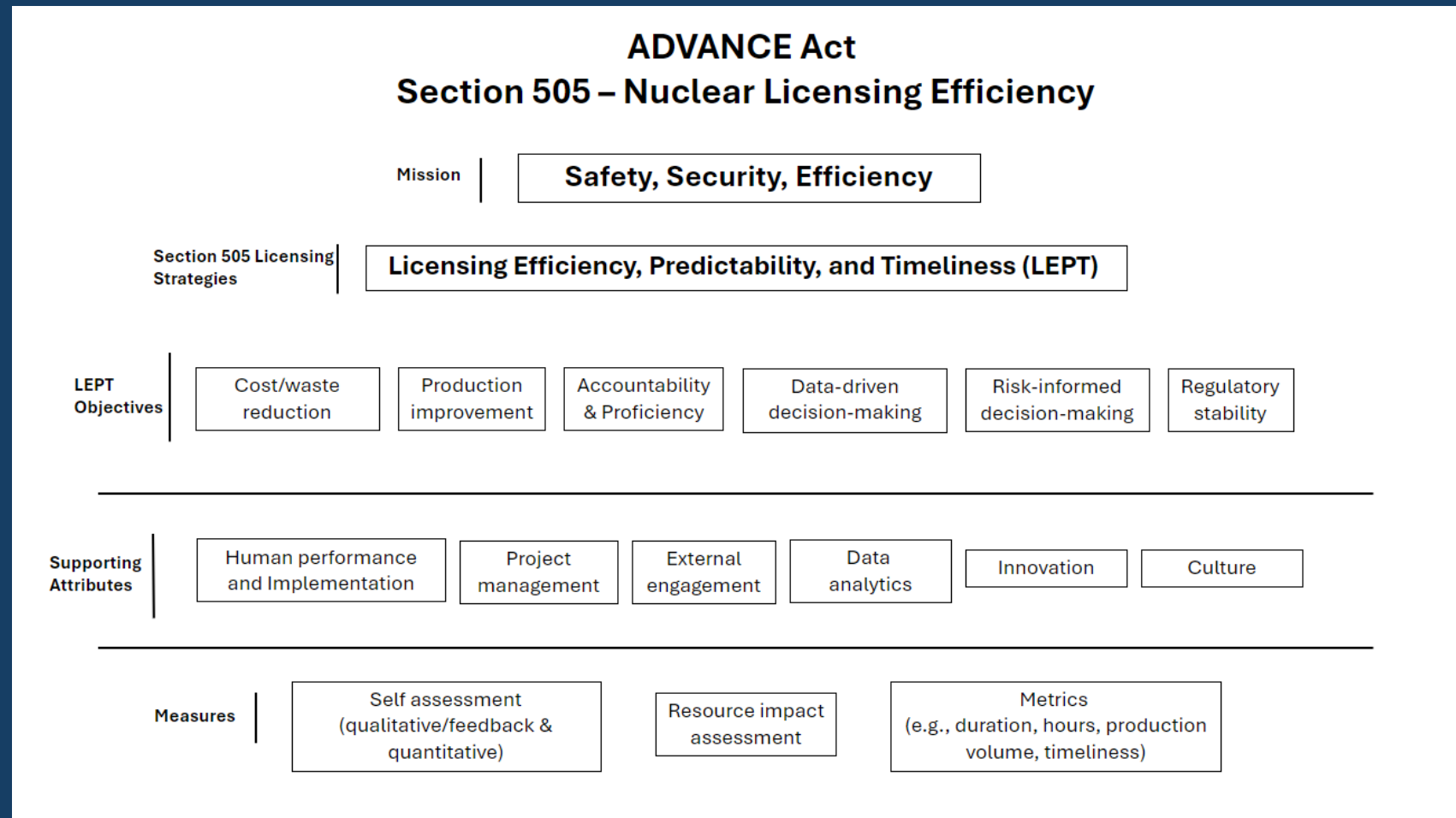
- (1) establish techniques and guidance for evaluating applications for licenses for nuclear reactors to **support efficient, timely, and predictable reviews** of applications for those licenses to enable the safe and secure use of nuclear reactors;
- (2) maintain the techniques and guidance established under paragraph (1) by **periodically assessing** and, if necessary, modifying those techniques and guidance; and
- (3) obtain approval from the Commission if establishment or modification of the techniques and guidance under paragraph (1) or (2) involves policy formulation.



# Approach for Section 505

- Enable the safe and secure use of nuclear reactors
- Establish and implement techniques and guidance that support safety, security, and efficiency in licensing reviews
  - Leveraging and refocusing initiatives and projects that are establishing techniques and guidance that meet Section 505
  - Identifying and implementing changes that optimize resources
  - Developing approaches to identify and address future needs
- Address the periodic assessment requirement of Section 505
  - Quantitative measures (data-driven) – for example, using NRR's workload management and data analysis infrastructure to assess the techniques and guidance
  - Qualitative measures (feedback)
- Consider feedback and recommendations
  - Future meetings to gather comments

# Licensing Efficiency, Predictability, and Timeliness (LEPT) Framework Concept



# LEPT Concept – NRC's Mission

**ADVANCE Act**  
**Section 505 – Nuclear Licensing Efficiency**

Mission

**Safety, Security, Efficiency**

- NRC is revising its mission statement per ADVANCE Act
- LEPT techniques and guidance must enable the safe and secure use of nuclear reactors

# LEPT Concept – Licensing Strategies

Section 505 Licensing  
Strategies

Licensing Efficiency, Predictability, and Timeliness (LEPT)

- Efficiency – the capability of producing desired results in a well-organized and competent way with minimum wasted effort or expense
- Predictability – the estimate—based on observation, experience, and reasoning—that something or a consequence will happen
- Timeliness – the quality of being done promptly and sensibly

# LEPT Concept - Objectives

## LEPT Objectives

Cost/waste reduction

Production improvement

Accountability & Proficiency

Data-driven decision-making

Risk-informed decision-making

Regulatory stability

- Cost/waste reduction – reducing or eliminating activities that are duplicative, not important, slow down processing, add administrative burden, or add unnecessary hours or duration to licensing reviews
- Production Improvement – improving the processing time and quality of licensing reviews
- Accountability and Proficiency – adhering to procedures, processes, and templates (unless otherwise justified); and maintaining high levels of proficiency and competence
- Data-driven decision-making – using data to inform decision-making in licensing, such as establishing realistic estimates and schedules for licensing reviews
- Risk-informed decision-making – using qualitative and quantitative risk to inform the depth of review and safety evaluation of proposed licensing actions
- Regulatory stability – using generic staff positions and precedents; creating clear regulations and expectations; adhering to backfit policy; being consistent when appropriate



# LEPT Concept - Attributes

## Supporting Attributes

Human performance  
and Implementation

Project  
management

External  
engagement

Data  
analytics

Innovation

Culture

- Human performance and Implementation – creating or updating processes and tools; resources are available; change management; training; procedure adherence
- Project management – managing reviews; setting and adhering to realistic milestones; identifying and communicating any project risks or delays; developing tools and workflows that leverage IT and improve PM processes
- External engagement – submitting high quality requests and adequately preparing NRC staff for efficient reviews; communicating schedules and risks; engaging the public in a timely manner
- Data analytics – collecting, organizing, and analyzing information to identify patterns and trends in licensing performance
- Innovation – identifying and making improvements; modernizing
- Culture – empowering and motivating staff to innovate and improve

# LEPT Concept - Measures

Measures

Self assessment  
(qualitative/feedback &  
quantitative)

Resource impact  
assessment

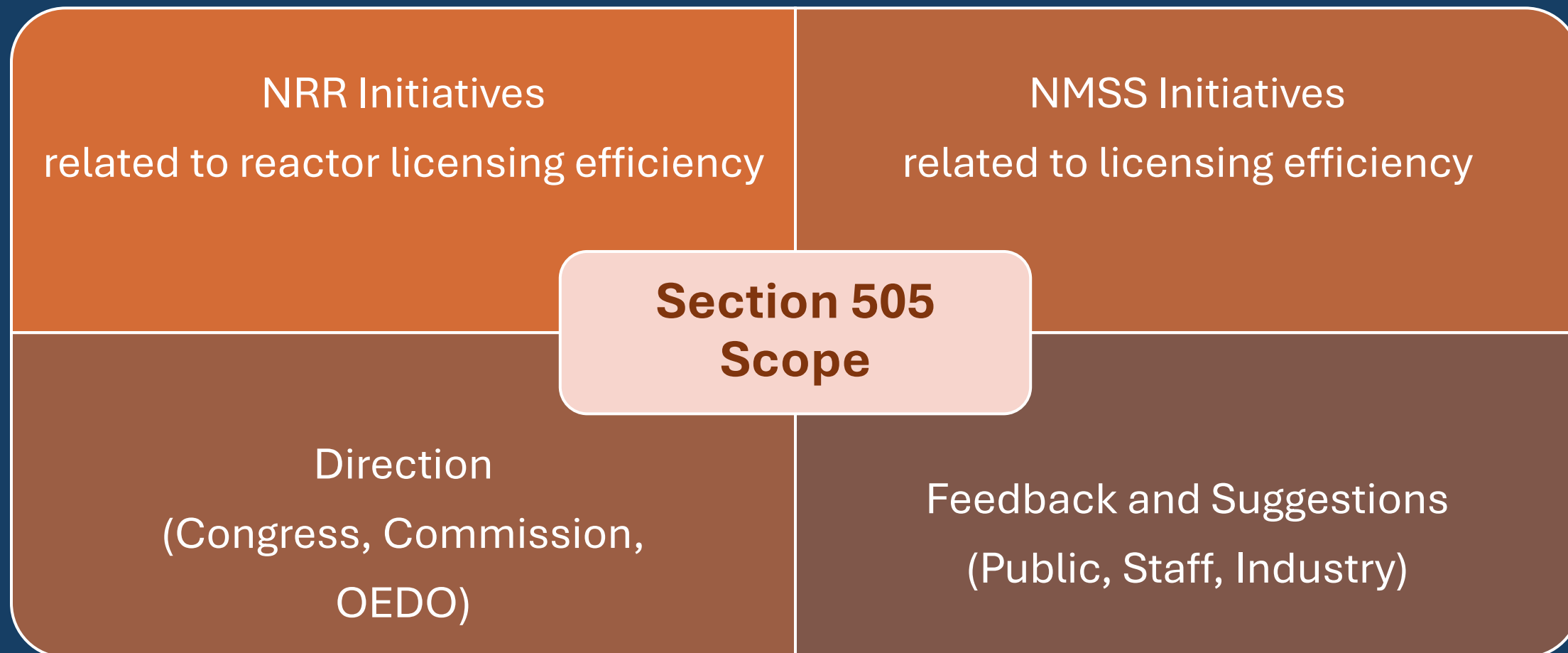
Metrics  
(e.g., duration, hours, production  
volume, timeliness)

- Self assessment – using internal and external qualitative and quantitative feedback to identify successes and areas for improvement
- Resource impact assessment – assessing when to add or shed work, implement changes, perform cost-benefit analyses
- Metrics – assessing and trending duration, hours, production volume, timeliness of licensing actions

# Current and New Initiatives/Projects

- Monitoring licensing-related initiatives
  - Tracking progress and successes
  - Evaluating internal and external feedback
  - Monitoring overlap and other ADVANCE Act sections' work
- Established the R-LEAP (Reactor Licensing Efficiencies And Processes) team
  - Assessing suggestions, feedback, and prioritization
  - Addressing suggestions not covered by current licensing initiatives
- Meetings/Workshops:
  - Public meetings to discuss Section 505 approach and progress
  - Future meeting(s) to collect feedback
  - Initiative working groups will have workshops and public meetings as needed
    - 10 CFR 50.69 knowledge management public workshop on February 11, 2025
    - Subsequent license renewal public meeting re. efficiencies on February 13, 2025

# Integrating Initiatives and Directions





# Examples of Licensing Initiatives & Suggestions





## R-LEAP and M-LEAP Teams

- NRC's Office of Nuclear Reactor Regulation (NRR) leads the Reactor Licensing Efficiencies and Processes (R-LEAP) team
- NRC's Office of Nuclear Material Safety and Safeguards (NMSS) leads the Materials Licensing Efficiencies and Processes (M-LEAP) team
- R-LEAP and M-LEAP will coordinate and lead efforts to enhance the efficiency, predictability, and timeliness of licensing processes and share best practices between offices
- Deliverables will include task-driven products, such as additional guidance on preapplication meetings and job aids
- The LEAP teams will engage with staff and external parties

# Licensing Efficiencies Expectations Memorandum

- NRR management's expectations for implementing near-term actions that align with NRC's commitment to fulfill the ADVANCE Act
- Transparency of organizational structure
- Preapplication engagements
- Disciplined, safety-focused, risk-informed reviews
  - Obtaining supplemental licensee information
  - Development of safety evaluations (draft "SEs with holes")
  - Use risk-informed thinking
- January 21, 2025 (ML24278A002)

# Key Messages and Path Forward

- NRC is committed to meeting the mandate of Section 505 of the ADVANCE Act to meet our safety and security mission in a manner that is efficient, timely, and predictable.
- NRC will use data-driven and risk-informed decision making.
- NRC will improve project management techniques and guidance to:
  - improve production
  - enhance accountability and regulatory stability
  - reduce costs
- Internal and external feedback are critical to NRC's success
  - NRC will hold a Section 505 comment gathering meeting (date TBD)
  - Initiative teams will have public meetings, as needed

# Break





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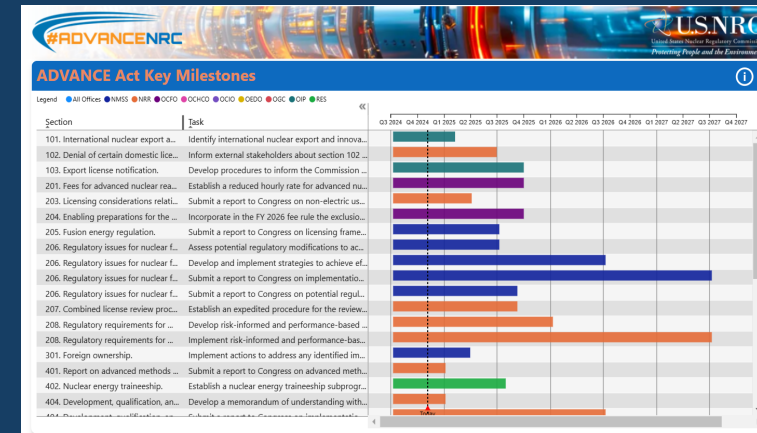


# **Question and Answer Session between NRC and Industry**

# **Question and Answer Session between NRC and the Public**

# Be Engaged!

Stay informed of progress  
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# Closing Remarks