U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

Revising the Oversight Process

Fuel Cycle Information Exchange
June 24, 2009

Joseph Shea, Director
Division of Fuel Facility Inspection
Region II

Objective

- Revise the NRC's oversight process for fuel facilities to provide improved:
  - Risk informed basis
  - performance basis
  - transparency
  - predictability

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

Background

- Effort to revise fuel cycle oversight process paralleled NRC effort to revise reactor oversight process in 2000.
- Effort to develop performance indicators for fuel facilities in 2005- 2006
- Continued NRC interest in improving process.

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

Oversight Framework

- Licensee assessment is central element
- Framework developed for reactors may provide useful starting point for fuel cycle process revision
- Assessment process based on predictable and consistent inputs
- "Cornerstone" concept

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

Risk Assessment using ISA Results

- ISA is the best available risk information that NRC has for timely assessments
- NRC response to events informed by ISA risk insights
- NRC response to safety performance issues informed by ISA insights

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

Significance Determination

- Significance Determination is key to an objective and predictable process
- Some significance determination will be on a deterministic basis
- Envision multi-faceted significance tools

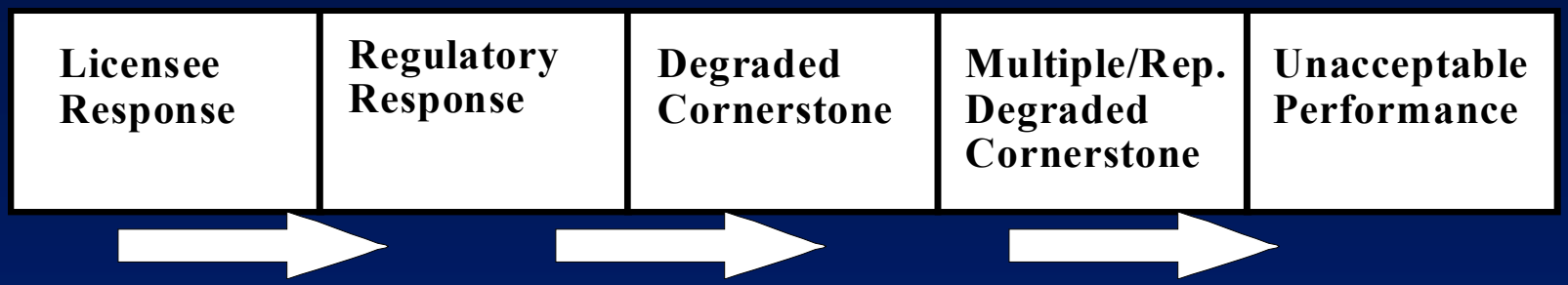
U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Performance Assessment and Regulatory Response

- Current Licensee Performance Review is viewed as too subjective
- Future performance assessment intended to be based on licensee cornerstone performance
  - Assessment results more predictable

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

Assessment and Response Concept



Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions

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

Enforcement Policy and Corrective Action Programs

- Finish risk-informing using ISA insights
- "Credit" for effective corrective action program
- Elements of an effective corrective action program

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

Performance Indicators

- Performance Indicators are a way to complement the inspection program
- Slate is clean now
- Voluntary

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

Safety Culture

- Incorporating safety culture into the oversight process can be a leading indicator of performance
- Licensees' programs incorporate safety culture components to some degree
- Commission draft Policy Statement

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

Path Forward

- What can be accomplished by December 2009?
- Approaches considering limited staffing
- Identify framework
- Develop detailed cornerstone tools
- Develop assessment and safety culture elements
- Feasibility assessment by November 2009

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