

***FUEL CYCLE INDUSTRY  
VIEWS ON AN IMPROVED  
NRC OVERSIGHT  
PROGRAM***

November 1, 2011

Fuel Facility and Nuclear Energy  
Institute Representatives

# ***Presentation Outline***

- ***Overview***
- ***What's Viable Now?***
- ***Path Forward & Reasoning***
- ***How Do We Get There?***

# ***Overview***

- Mutual goals remain relevant
- Industry suggests modest, incremental, improvements & resource efficiencies
- Current program not broken; no safety concerns identified; keep it simple
- Continued dialogue to develop and prioritize improvements

# ***What's Viable Now?***

- General alignment on CAP attributes
- Credit for CAP must support “right-sizing” inspection program:
  - e.g., facility performance + risk profile =  
inspection frequency + type
- Modified enforcement policy for CAP based on facility risk and performance

## ***What's Viable Now? (continued)***

- Better integrate ISA insights into FCOP
- Operations-based cornerstones appropriate
- Support qualitative SDP; more dialogue needed
- Complex ROP-like action matrix not necessary – keep it simple

# ***Path Forward & Reasoning***

- Implement modest, incremental, risk-informed changes based on ISAs
- Prioritize changes; step-wise implementation; keep it simple
- Improve communication with audiences: employees, global partners, public
  - Transparency demands terms audiences understand

# ***Path Forward & Reasoning***

***(continued)***

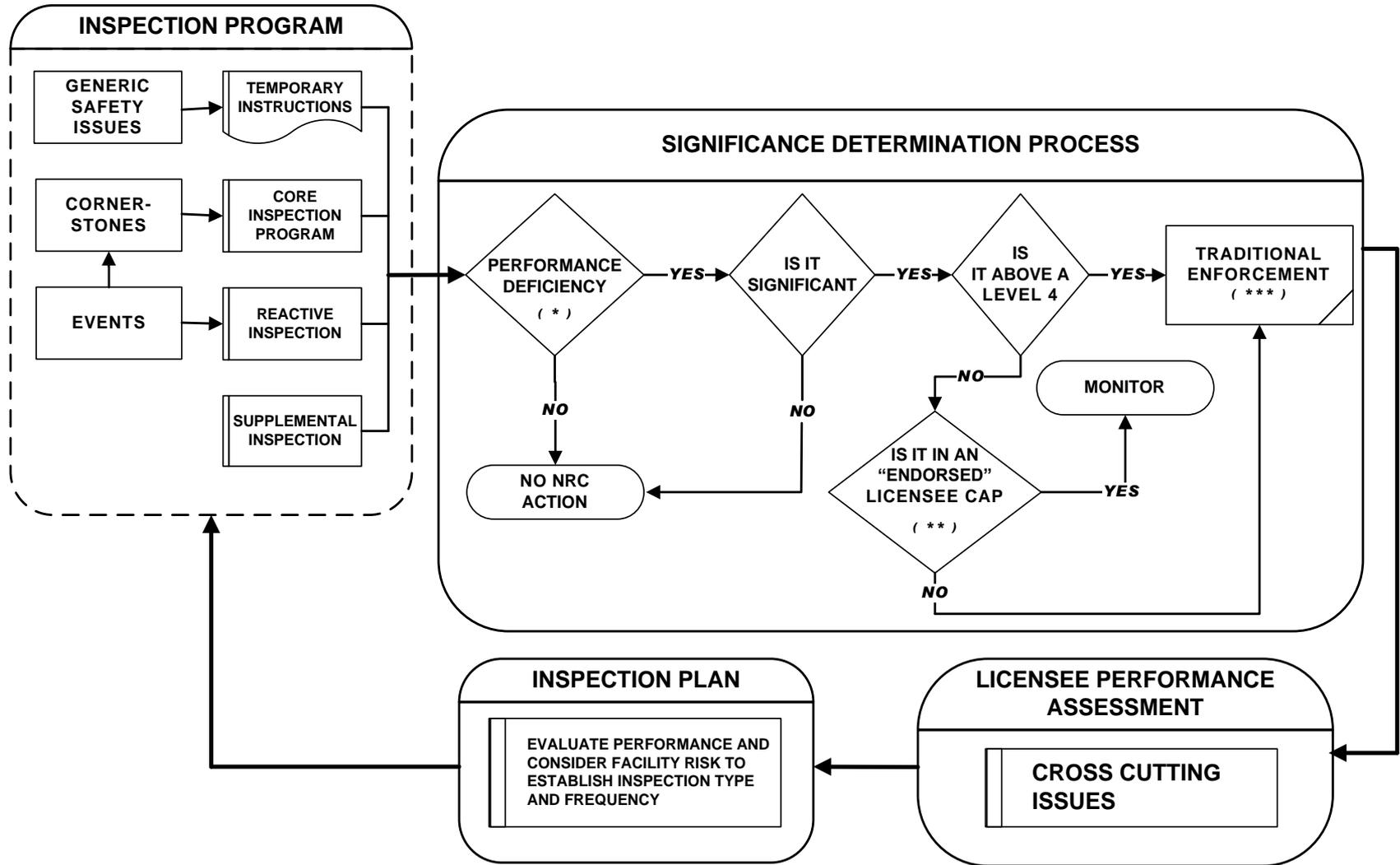
- Risk-informed PD definition and SDP
- Gain Resource Efficiencies:
  - CAP + facility performance + risk information
- Prioritized NRC inspection resources
  - Need to “right size” inspections + modify enforcement
  - Re-evaluate Resident Inspector program

# ***How Do We Get There?***

- Prioritize with other regulatory initiatives
- Resource loaded, NRC project plan developed with and supported by industry
- Proceed with viable improvements consistent with priority
- Develop success criteria at the outset

# ***BACKUP SLIDES***

# DRAFT INDUSTRY FCOP EVOLUTIONARY ALTERNATIVE



( \* ) - Performance deficiency as suggested by industry dated JULY 2009.  
 ( \*\* ) - "Endorsed" Licensee CAP – As evaluated by NRC against criteria on a periodic basis.  
 ( \*\*\* ) - Limited revision of enforcement policy/manual to enable modified FCOP.

# DRAFT CORNERSTONES – EVOLUTIONARY APPROACH

## NRC's MISSION

License and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

## STRATEGIC GOALS

SAFETY

SECURITY

### *ISA Related Modules*

Criticality Safety

Chemical Safety

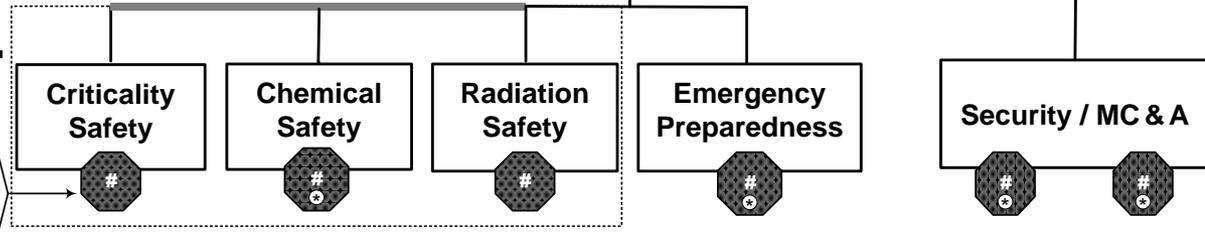
Radiation Safety

Emergency Preparedness

Security / MC & A

## CORNERSTONES

 NOMINAL FREQUENCY (IN MONTHS, E.G. 12-24)



### Cross-Cutting Areas

- CONFIGURATION CONTROL / CHANGE MANAGEMENT
- TRAINING
- PROBLEM IDENTIFICATION & CAP ( \*\* )

} EACH HAVE INSPECTION MODULES  
NOMINAL "X" MONTHS FREQUENCY

- SAFETY CULTURE

 - Nominal Period/Frequency – Adjustment for performance from 0.5 → 1.5 x (Nominal Period)

( ⊕ ) - Adjustment for risk based on scope/profile of plant.

( \*\* ) - If Licensee maintains an NRC endorsed program.

# Current Initiatives Requiring Industry Support (not prioritized, not all inclusive)

FUEL CYCLE OVERSIGHT PROCESS	RULEMAKINGS
Enhance NRC's Fuel Cycle Oversight Process (FCOP)	Proposed Part 40 Rulemaking
Safety Culture Implementation	Potential Part 70 Rulemaking to address PRM 70-8
Revise Enforcement Policy to Reflect CAP	Part 61 Preliminary Depleted Uranium Rule
	Potential Part 61 Rulemaking to risk inform waste classification
	Potential Rulemaking on Prompt Remediation
	Potential Part 21 Rulemaking
	Decommissioning Planning Rule
	Part 20 Radiation Protection Regulations
	Potential 40 CFR Parts 190 & 192 Rulemaking
	DOT Rulemaking to harmonize with TS-R-1
REGULATORY INITIATIVES	SECURITY INITIATIVES/RULEMAKINGS
Temporary Instruction (TI) for mitigative strategies	Cyber security assessments
Part 70.72 DG-3037–Facility Change Process	Part 73 Rulemaking for Enhanced Weapons and Security Event notifications
Soluble Uranium Intake Draft Guidance	Part 74 Preliminary Rule language for Material Control & Accounting
Chemical Dermal Exposure Standards	Part 73 Rulemaking for Fuel Cycle Security
Design features in ISA (versus IROFS)	Potential Rulemaking on Chemical Security
Unplanned contamination events	Update Counterintelligence aspects of NEI 08-11
Onsite medical treatment of contaminated workers	Part 37 Rulemaking on Physical Protection of Category 1 and 2 sources
Changes during Construction (CdC)	Information Security Workshop
DG-8040 HP Surveys at Enrichment & Fuel Fabrication facilities	Potential Part 95 Rulemaking
DG-4018 on Airborne Releases	
DG-7007, Administrative Procedures for RAM shipment/receipt	
DG-7008, Leakage tests of packages for shipments of RAM	

# Diverse Fuel Facilities

<b>Part 70 Facilities</b>		
<b>AREVA NP – Lynchburg</b>	<b>Fuel Fab</b>	<b>Cat III</b>
<b>AREVA NP – Richland</b>	<b>Fuel Fab</b>	<b>Cat III</b>
<b>AREVA – Eagle Rock</b>	<b>Enrichment</b>	
<b>B&amp;W – Lynchburg 1 RI</b>	<b>Fuel</b>	<b>Cat I</b>
<b>GEH – Global Nuclear Fuel</b>	<b>Fuel Fab</b>	<b>Cat III</b>
<b>GEH – Global Laser Enrichment</b>	<b>Enrichment</b>	
<b>LES – National Enrichment Facility</b>	<b>Enrichment</b>	
<b>NFS – Erwin</b>	<b>Fuel Fab</b>	<b>Cat III</b>
<b>NFS – Erwin – 2 RIs</b>	<b>Fuel</b>	<b>Cat I</b>
<b>Shaw, AREVA, MOX Services</b>	<b>Fuel</b>	<b>Cat I</b>
<b>USEC – American Centrifuge</b>	<b>Enrichment</b>	
<b>Westinghouse – Columbia</b>	<b>Fuel Fab</b>	<b>Cat III</b>
<b>Part 76 Facilities</b>		
<b>USEC – Paducah – 2 RIs</b>	<b>Enrichment</b>	
<b>USEC – Portsmouth</b>	<b>Enrichment</b>	
<b>Part 40 Facilities</b>		
<b>Honeywell – Metropolis</b>	<b>UF6 Production</b>	
<b>International Isotopes – Hobbs, NM</b>	<b>De-Conversion</b>	

# ***Acronyms***

- CAP – Corrective Action Program
- ISA – Integrated Safety Analysis
- FCOP – Fuel Cycle Oversight Process
- PD – Performance Deficiency
- NRC – Nuclear Regulatory Commission
- ROP – Reactor Oversight Program
- SDP – Significance Determination Process