Effect of Operational Relationships on Inspection Focus at NRC Licensed Fuel Cycle Facilities

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Inspection of Criticality Safety at Fuel Cycle Facilities

• NCS required to be administratively independent of production
• Licensees don’t commit to ANS 8.19
• Requirement captured in fuel facility license
• Inspectors required to review NCS program independence
Operational Variables

• Fuel cycle facilities production oriented
  – Competitive environment
  – Operational details may not be shared with other licensees
• Strong personalities
  – Can be good or bad
  – Not always obvious
• Commitment to specific control types
• Limited inspection resources
Indicators of Production Orientation

- Heavy reliance on administrative controls
- Many unusual controls
  - Know ‘em when we see ‘em
- Many weak controls
  - Just don’t seem right
- Changes to weaker control types
- Inability to articulate rationale for changes
Personality Variables

• Licensing, inspection, enforcement not personality based
  – Hire whoever you like

• Known personality issues that may affect inspection planning
  – Bias toward production
  – Bias towards specific controls
  – Conflict leading to communication problems
Reliance on Specific Control Types

• Intentional commitment is usually to strong control type
  – Assure applicability
  – Other controls not discounted

• Licensee may have no choice
  – Failure could have widespread effect
  – Look for weak link
Conclusion

• Many operational factors can affect an otherwise independent NCS program
• These factors play a role in the focus of NRC inspection efforts