

# ***Fuel Fabrication Industry's Response to Westinghouse Scrubber Condition and Use of Operating Experience***

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# Overview

- ***Industry's Response to Westinghouse Scrubber Condition***
  - Timeliness
  - Scope – Acute and Chronic
  - Information Sources
  - Communications
  - Initial Actions
  - Analyses/Inspections/Assessments
  - Findings
- ***Industry's Use of Operating Experience and Continuous Improvement Initiatives***

# Industry's Response - Timeliness

- ***Licenses*** quickly became aware of condition
  - Within day(s) of Westinghouse report to NRC
- ***Westinghouse*** report accessed by licensees via NRC website
- ***Westinghouse*** communicated to NEI's Fuel Operations Committee (FOC) members in timely fashion
  - Enabled licensees to receive additional important and clarifying information
  - Information updated and improved via FOC forum

# Industry's Response - Scope

- **Reviewed** both acute and chronic material buildup potential – scrubbers, ducting, ventilation, equipment, etc.
- **Reviewed** active and legacy systems
- **Applied** questioning attitude regarding methods of detection/inspection
- **Challenged** existing analysis/insights

# Industry's Response – Information Sources

- **Immediate** - Westinghouse was open and timely with information in an ongoing manner
- **Ongoing** - Licensees shared information via NEI FOC forum and bilateral communications
- **NRC** - Useful confirmatory information
  - Via website reports
  - Communications with Project Managers, Inspectors
  - Follow-up augmented inspections and results

# Industry's Response - Communications

- ***Started with*** Westinghouse formal report to NRC and informally with industry via NEI FOC
- ***Licensees initiated*** communications within their own Safety Organization and Management
- ***Licensee continued*** communications driven by their own methods via Corrective Action Program (CAP), Safety Bulletins, Safety Meetings, Analysis/Results of Assessments
  - Management reviews, all employee meetings, targeted reinforcement/improvements of information or methods applicable, procedure/program improvements as appropriate

# Industry's Response - Initial Actions

- ***Immediately considered*** initial information
- ***Reviewed*** their own practices and results
  - Inspections both visual and using NDA methods
  - ISA treatment and accident scenarios/IROFS
- ***Initiated*** additional inspections in some cases
- ***Conducted*** internal communications involving:
  - Safety organization – Criticality Safety, ISA, etc.
  - Management and Operations
- ***Initiated*** Corrective Action Reports

# Industry's Response - Analyses/Inspections/Assessments

## *Reviews of Existing Programs:*

- ***Used*** existing Programs to monitor areas of potential accumulation of material
- ***Used*** Safety Culture attributes of self checking and procedural adherence with questioning attitude
- ***Discussed*** methods with other licensees via NEI FOC
- ***Reviewed*** historical performance and findings of past inspections
- ***Reviewed*** scope of inspections and broadened in some cases



# Industry's Response - Analyses/Inspections/Assessments

- ***Performed*** additional inspections as determined by review of program and condition information
- ***Reviewed*** Integrated Safety Analysis insights
- ***Performed*** self assessments
- ***Continued*** to use CAP to document findings as appropriate
- ***Cooperated*** fully with NRC inspections and inquiries

# Industry's Response - Findings

- ***No additional findings*** of unexpected material buildups
- ***Reinforcement*** of Program and Procedural adherence
- ***Revalidation*** of ISA treatments and results
- ***No major program changes*** warranted

# Industry's Use of Operating Experience

- ***All licensees*** strive to apply Safety Culture attributes to its operation - includes but not limited to:
  - CAPs
  - Self checking
  - Benchmarking
  - Questioning attitude
- ***Open Communications*** – Internal and External
  - Internal employee and management meetings
  - NEI's FOC
  - Fuel Cycle Facility Benchmarking Group
  - NRC and Professional Societies, e.g. ANS, etc.

# Industry's Use of Operating Experience

- *Analyses using established methods and techniques*
  - Integrated Safety Analysis – What if?, HAZOP
  - Self assessments including formal Root Cause Analysis
  - CAP
  - Trending analysis
  - Risk or significance assessments

# In Summary

*Industry's response to the Westinghouse scrubber condition has been thorough; and Industry carefully analyzes, develops and implements lessons-learned from operational events at fuel cycle facilities regardless of where they occur.*

***THANK YOU***

***Questions?***

