

Report on Lessons Learned from  
Uranium Accumulation in Scrubber/Ventilation System at  
Westinghouse Columbia Fuel Fabrication Facility (WCFFF)

Cumulative Effects of Regulation

March 29, 2017

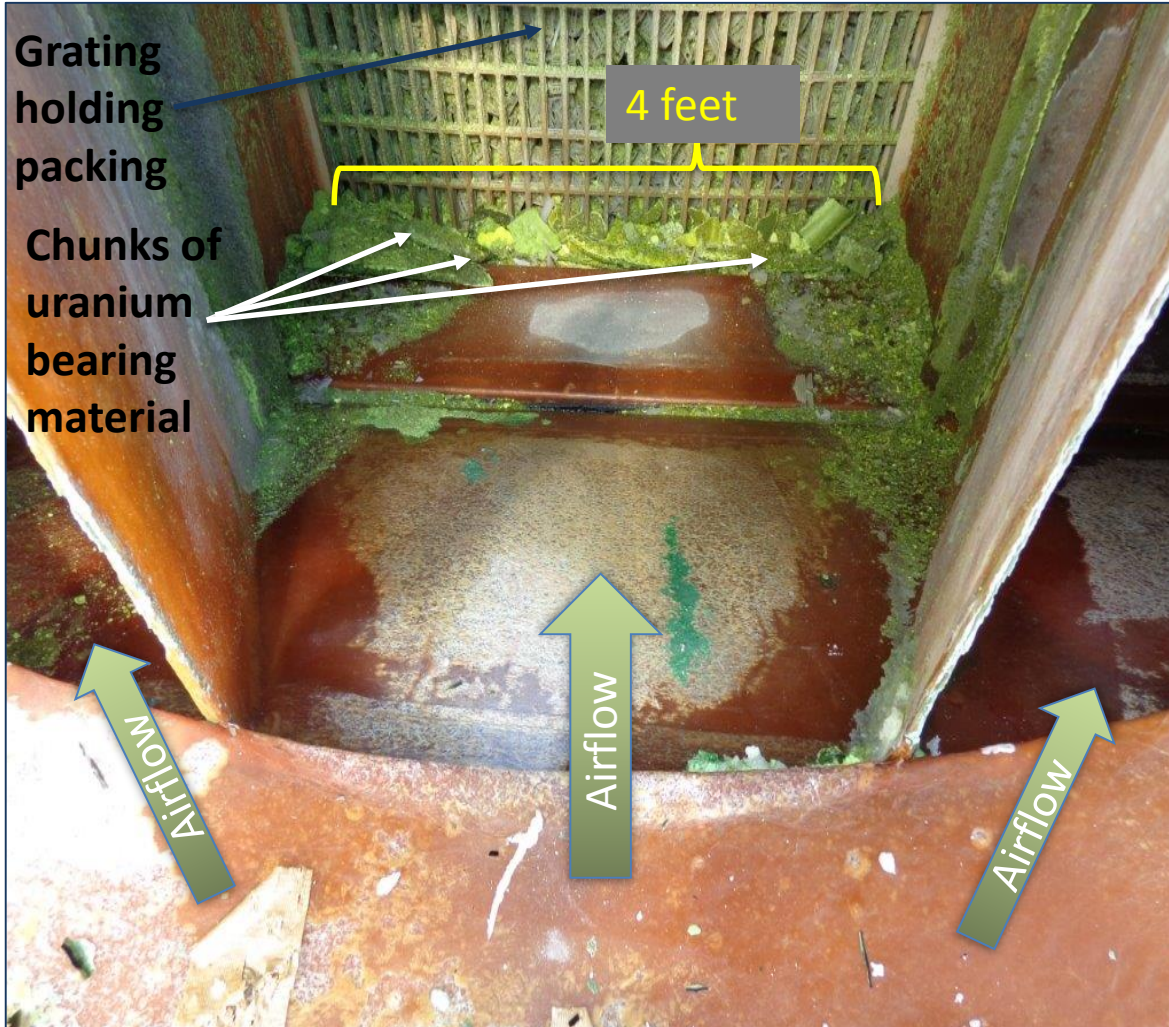
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# Outline

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- Context on Event
- Lessons Learned Charter
- Approach
- Recommended Areas for Further Evaluation
- Next Steps

May 28-29 Westinghouse performs annual inspection/cleanout of scrubber  
Large mass of material identified inside inlet transition section  
Later determined to contain significant concentration of uranium



# Lessons Learned Charter

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- Lessons learned charter established to identify potential opportunities to improve regulatory processes related to the event
- Focus of report is potential improvements to
  - Identifying facility operational issues earlier
  - Preventing events in the future
- Regulatory process areas evaluated:
  - Licensing Process
  - Inspection Program
  - Operating Experience (OpE)
  - Roles & Responsibilities
  - Knowledge Management (KM)

# Lessons Learned Team

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- April Smith
- Donnie Harrison
- Dennis Damon (retired)

# Approach

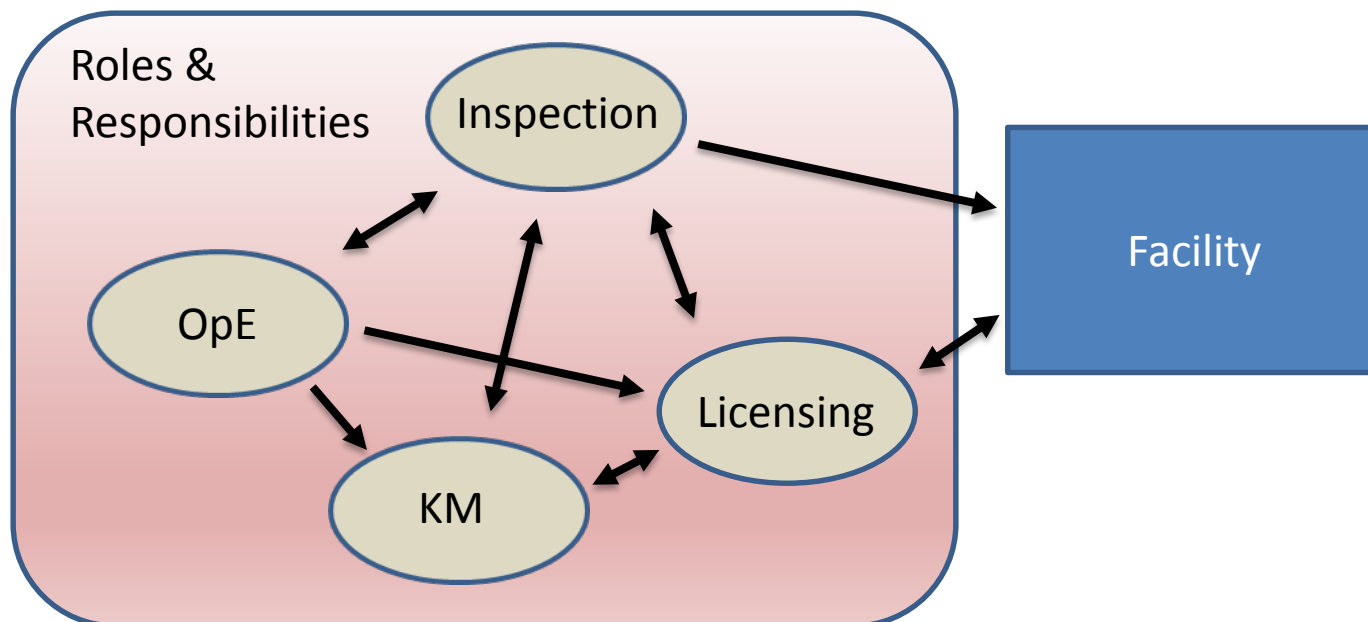
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- Reviewed numerous documents
  - Event-related (AIT, CAL, IN)
  - Inspection-related (IMCs, IPs)
  - Management Directives
  - NUREG-1520 (SRP for Fuel Facility License Reviews)
- Interviews with
  - FCSE project managers, technical staff, management
  - DFFI inspectors, management
  - AIT members
  - Region II Administrator/Deputy Administrator
- Observations collected that are not directly related to the focus of the report have been compiled into a separate report

# Further Evaluation Recommendations

## General

- Potential improvements identified in each topic area for further evaluation
- Most observations apply across topic areas



# Further Evaluation Recommendations

## Licensing

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- Clarify staff review guidance on examining the technical justification for those accident sequences designated as low risk



# Further Evaluation Recommendations

## Inspection

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- Ensure systems/processes of potential intermediate or high consequences, regardless of perceived risk significance, are inspected within some specified time period
- Include safety culture programmatic inspections within the inspection program
- Develop additional guidance for inspectors on use of 10 CFR 70.72 (Facility Changes) and ISA summary annual updates to inform inspection planning, including performing “vertical slice” inspections of ISAs

# Further Evaluation Recommendations

## Operating Experience (OpE)

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- Improve framework/guidance for continuous information flow between OpE program and license review process and inspection program
- Enhance access to the OpE database (and provide associated training)
- Include legacy and international information in OpE database

# Further Evaluation Recommendations

## Roles and Responsibilities

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- Develop guidance on expectations for inspectors and FCSE project managers on 10 CFR 70.72 and ISA summary annual update reviews in support of inspection planning
- Develop guidance on expectations for gaining inspector insights in license review process (e.g., license renewal, license amendments)
- Provide opportunities for FCSE technical staff and DFFI inspectors to better understand counterparts roles and responsibilities

# Further Evaluation Recommendations

## Knowledge Management (KM)

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- Enhance qualification program to reinforce good communication and questioning attitude; specifically in critical thinking, effective communication, and constructive conflict resolution
- Enhance guidance on use of ISA summary updates, developing safety evaluations that support inspections, and performing vertical slice reviews
- Implement continuous KM activities (e.g., regularly scheduled KM seminars, KM newsletter) jointly and/or separately between FCSE and DFFI
- Perform periodic systematic reviews of licensing and inspection programs to identify gaps and support continuous improvement
- Hold technical counterparts meetings between the technical disciplines to discuss recent inspection observations, licensing issues, improvements to guidance, etc.
- During the regional counterparts meeting consider video conferencing with the FCSE technical staff those portions of the meeting related to technical discussions and presentations on fuel cycle topics

# Current Status & Next Steps

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- Report issued 01/30/2017 (**ML16330A642**)
- Currently evaluating observations that go beyond the specific event focus; will develop additional actions, as appropriate
- Develop action plan (FCSE lead with DFFI participation/support) to further evaluate the recommendations from both reports
- Select and implement improvements consistent with agency mission and budget

# Other References

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AIT Report # 70-1151/2016-007: **ML16301A001**

CAL EA-16-173: **ML16224B082**

IN 2016-13: **ML16252A171**

# Acronyms

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- AIT - Augmented Inspection Team
- CAL - Confirmatory Action Letter
- DFFI - Division of Fuel Facility Inspections
- FCSE - Division of Fuel Cycle Safety, Safeguards, and Environmental Review
- IMC - Inspection Manual Chapter
- IN - Information Notice
- IP - Inspection Procedure
- ISA - Integrated Safety Analysis
- KM - Knowledge Management
- OpE - Operating Experience