



Nuclear Fuel Services, Inc.

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## **Operational Reviews: How Facilities Meet ANSI/ANS-8.1 Section 4.1.6 - Panel**

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# Major Business Lines

- Naval Reactors Fuel
- Naval Reactors Fuel Development
- Downblending
- Decommissioning



# Operational Reviews

- ANSI/ANS-8.1 – 2014
  - 4.1.6: Operations shall be reviewed frequently (at least annually) to ascertain that procedures are being followed and that process conditions have not been altered so as to affect the applicable nuclear criticality safety evaluation. These reviews shall be conducted, in consultation with operating personnel, by individuals who are knowledgeable in nuclear criticality safety and who, to the extent practicable, are not immediately responsible for the operation.

# Operational Reviews

- Methods to Satisfy Yearly review requirement
  - Biennial audits and weekly inspections.
  
- Audits performed by NCS Engineers.
  - Checklist included to help auditor.
  - Operations Supervisors, Operators, and Process Engineers interviewed.
  - NCSE is reviewed (not formal peer review). Process Conditions reviewed to verify compliance with NCSE (if not, operation will be suspended until in compliance with NCSE)
  - Control flowdown reviewed and updated.
  - Postings and procedures are reviewed.
  - Operations are observed when possible.
  - Active engineered controls reviewed.
  - Sampling of passive engineered controls reviewed.
  - Changes in Process Conditions are considered.
  - Previous corrective actions reviewed for closure.
  - Audits documented in formal report.
  - Observations and findings entered into Corrective Action Program
  - NRC NCS Inspectors accompany NCS Engineers on audits and inspections.

# Operational Reviews

- Weekly Inspections
  - NCS Engineers regularly walkdown operations
  
- Preventing Process Drift
  - Changes to fissile operations (physical and procedural) controlled by configuration management program
  - Changes reviewed by NCS for impacts to NCSE, prior to implementation.
  
- Lessons Learned
  - Control flowdown valuable.
  - Frequent field observations keep NCS Engineers in touch with the Operations.
  - NCS Engineers generate NCSEs, including modeling, and oversee implementation