UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 27, 2012

Mr. Joseph G. Henry
President
Nuclear Fuel Services, Inc.
P. O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: NRC INTEGRATED INSPECTION REPORT NO. 70-143/2012-003

Dear Mr. Henry:

This refers to the inspections conducted from April 1, 2012 to June 30, 2012, at the Nuclear Fuel Services (NFS) facility in Erwin, TN. The purpose of these inspections was to determine whether activities authorized under the license were conducted safely and in accordance with NRC requirements. The enclosed report presents the results of these inspections. The findings were discussed with members of your staff at an exit meeting held on July 16, 2012.

During these inspections, the NRC staff examined activities conducted under your license as they related to public health and safety and to confirm compliance with the Commission's rules and regulations, and with the conditions of your license. Areas examined during the inspections are identified in the enclosed report. Within these areas, the inspections consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of these inspections, no cited violations or deviations were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Should you have any questions concerning these inspections, please contact us.

Sincerely,

/RA/

Alan J. Blamey, Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

Docket No. 70-143
License No. SNM-124

Enclosure:
NRC Inspection Report No. 70-143/2012-003
w/Attachment: Supplementary Information

cc w/encl: (See page 3)

Should you have any questions concerning this inspection, please contact us.

Sincerely,

/RA/

Alan J. Blamey, Chief
Fuel Facility Inspection Branch 1
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cc w/encl:
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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No.:	70-143
License No.:	SNM-124
Report No.:	70-143/2012-003
Licensee:	Nuclear Fuel Services, Inc.
Facility:	Erwin Facility
Location:	Erwin, TN 37650
Dates:	April 1, 2012 to June 30, 2012
Inspectors:	G. Smith, Senior Resident Inspector P. Startz, Resident Inspector (Acting) M. Chitty, Resident Inspector L. Pitts, Senior Fuel Facility Inspector R. Prince, Fuel Facility Inspector R. Drehs, Fuel Facility Inspector (In-Training) T. Vukovinsky, Fuel Facility Inspector (In-Training)
Approved by:	A. Blamey, Chief Fuel Facility Inspection Branch 1 Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Nuclear Fuel Services, Inc.
NRC Integrated Inspection Report 70-143/2012-003
April 1 - June 30, 2012

Inspections were conducted by the resident and regional inspectors during normal and off-normal shifts in the areas of safety operations, radiological controls, and facility support. The inspectors performed a selective examination of licensee activities which were accomplished by direct observation of safety-significant activities and equipment, tours of the facility, interviews and discussions with licensee personnel, and a review of facility records.

Safety Operations

- Plant operations were performed safely and in accordance with approved plant procedures. (Paragraph A.1)

- Nuclear criticality safety controls were followed throughout the facility. (Paragraph A.2)

- The licensee adequately implemented its fire protection systems and programs in accordance with site procedures and consistent with license and regulatory requirements. (Paragraph A.3 and A.4)

Radiological Controls

- The licensee adequately implemented the radiation protection program consistent with the license and regulatory requirements. (Paragraph B.1 and B.2)

Facility Support

- The management organization program was implemented in accordance with the license and regulatory requirements. (Paragraph C.1)

- The training program was implemented in accordance with the license application and regulatory requirements. (Paragraph C.2)

- The maintenance and surveillance of safety controls program was implemented in accordance with the license and regulatory requirements. (Paragraph C.3)

- Adverse conditions were adequately identified, evaluated, and entered into the Problem Identification, Resolution, and Correction System (PIRCS). (Paragraph C.4)

Special Topics

- The licensee adequately implemented corrective actions for a previous violation involving configuration control during maintenance. (Paragraph D.1)

Attachment:
Key Points of Contact
List of Items Opened, Closed, and Discussed
Inspection Procedures Used
Documents Reviewed
Acronyms and Initialisms

REPORT DETAILS

Summary of Plant Status

The facility began the inspection period with the following process areas operating: 1) Naval fuel manufacturing facility (FMF); 2) Blended Low Enriched Uranium (BLEU) Preparation Facility (BPF) which included the Uranium (U) -Oxide, U-Metal, U-Aluminum, Solvent Extraction (SX), and the down-blending (DB) lines; and 3) Building 301 Commercial Development (CD) lines which included the Column Dissolvers and the Receipt Calciner.

A. Safety Operations

1. Plant Operations (IP 88135)

a. Inspection Scope and Observations

The inspectors performed routine tours of plant operating areas housing special nuclear materials (SNMs) and determined that equipment and systems were operated safely and in compliance with the license. Daily operational meetings and turnover meetings were observed throughout the period where production status and operational issues were discussed. The inspectors reviewed selected licensee-identified events and corrective actions for previously identified events. The inspectors focused on plant operations, safety related equipment (i.e. valves, sensors, instrumentation, in-line monitors, scales, etc) and items relied on for safety (IROFS).

The routine tours included walk-downs of the BPF, CD line, FMF, storage areas, vaults, and the waste water treatment facility. The inspectors verified that there was adequate staffing and that operators were attentive to their duties and the status of alarms and annunciators. The inspectors observed activities during normal and upset conditions for compliance with procedures and station limits. The inspectors noted that safety controls were in place and functional to ensure proper control of SNM. The inspectors verified the adequacy of communications between supervisors and operators within the operating areas. The inspectors walked down portions of safety-significant operating systems and verified that IROFS were identified and operable. The inspectors reviewed log books, Lockout/Tagout records, and Letters of Authorization (temporary modifications) to obtain information concerning operating trends and activities. The inspectors verified the licensee actively pursued corrective actions for conditions requiring temporary modifications and that compensatory measures were prescribed and implemented as required.

On June 12 and June 22, 2012, NFS experienced minor spills to the operations floor through the overflow line of the ‘A’ train U-Oxide dissolver in Building 333. The quantity spilled was 1 liter and 0.2 liters, respectively. The spills were cleaned up and decontaminated within 24 hours and thus were not reportable. In both situations, NFS formally shut down the system in order to perform an investigation. Following the investigation, the system was restarted after a detailed Operational Decision Making Issue (ODMI) review. ODMI 2012-003 provided the justification for resumption U-Oxide dissolution and established the prerequisites for skull oxide processing. The prerequisites included the reduction of the amount of material processed as well as the performance of enhanced system monitoring. Following the second spill, NFS ceased processing of this particular batch of material (skull oxide) and chose to revert back to

the previously processed material (a 'cleaner' oxide) which did not require filtration by bag filters. NFS noted that the spill only occurred on the 'A' dissolver and only during the bag filtering portion of the operation. NFS speculated that the bag filter piping may have been situated such that some material or mist could be sprayed directly into the overflow line and the slope of the overflow line may have provided a path to the overflow column. NFS noted that the 'B' train dissolver overflow piping was sloped back to the dissolver which would preclude this phenomenon. The inspectors noted that the bag filter is not used when processing the cleaner oxides. NFS will modify the system prior to resuming processing of the skull oxides in the U-Oxide system.

The inspectors performed periodic tours of the outlying facility areas during the inspection period and determined that equipment and systems were operated safely and in compliance with the license. The focus of these tours centered on the evaluation of potential missiles hazards, combustible material storage and fire loading, hazardous chemical storage, storage of compressed gas containers, potential degradation of plant security features, and potential fire hazards. During these tours, the inspectors also verified that required Notices to workers were appropriately and conspicuously posted in accordance with 10 CFR 19.11.

The inspectors attended various plan-of-the-day meetings throughout the inspection period in order to determine the overall status of the plant. The inspectors evaluated the adequacy of the licensee's response to significant plant issues as well as their approach to solving various plant problems.

Safety System Walkdown

During the inspection period, the inspectors performed two walk-downs of safety-significant systems involved with the processing of SNM. As part of the walk-downs, inspectors verified the as-built configuration matched approved plant drawings. The inspectors interviewed operators in order to ensure that plant personnel were familiar with the assumptions and controls associated with these IROFS systems and instrumentation for maintaining plant safety. The inspectors also verified that IROFS assumptions and controls were properly implemented in the field. The inspectors reviewed the related Integrated Safety Analysis (ISA) to verify the systems' ability to perform its functions was not affected by outstanding design issues, temporary modifications, operator workarounds, adverse conditions, or other system-related issues. The inspectors also verified that there were no conditions that degraded plant performance, the operability of IROFS, safety-related devices, or other support systems essential to safety system performance. Systems examined included:

- Receipt Calciner in Building 301
- Column Dissolvers in Building 301

To determine the correct system alignment, the inspectors reviewed the procedures, drawings, related ISAs, and 10 CFR 70.61. During the walk-downs, the inspectors verified the following:

- Criticality safety hazards and controls were maintained;
- Chemical safety hazards and controls were maintained;

- The configuration of metal and glass columns was maintained in accordance with Nuclear Criticality Safety Evaluations;
- Valves were correctly positioned and did not exhibit leakage that would impact the valve's function;
- Electrical power was available as required;
- Major system components were correctly labeled, lubricated, cooled, and ventilated;
- Hangers and supports were correctly installed and functional;
- Tagging clearances were appropriate with breakers and valves correctly positioned and locked as required by the lockout/tagout program;
- Cabinets, cable trays, and conduits were correctly installed and functional;
- Visible cabling was in good material condition;
- Essential support systems were operational; and
- Ancillary equipment or debris did not interfere with system performance.

b. Conclusion

No findings of significance were identified.

2. Criticality Safety (IP 88135)

a. Inspection Scope and Observations

During daily production area tours, the inspectors verified various criticality controls to be in place, that personnel followed criticality station limit cards, and that containers were adequately controlled to minimize potential criticality hazards. The inspectors sampled a number of criticality-related IROFS for operability and for adequate identification in the field as well as on drawings. The inspectors noted that operators were knowledgeable of the requirements associated with IROFS.

b. Conclusion

No findings of significance were identified.

3. Fire Protection Annual (IP 88055)

a. Inspection Scope and Observations

The inspectors reviewed licensee procedures and toured plant areas containing safety controls and IROFS to assess the material condition of fire protection equipment, systems, and features. The inspectors verified that flammable materials were stored in marked cabinets as specified in approved procedures and that housekeeping and the control of combustible materials were adequate and consistent with the approved procedures.

The inspectors reviewed ten work packages for adherence to hot work permits and verified that the cutting, welding, and hot work program was being implemented in accordance with approved procedures.

The inspectors performed a tour of the licensee's designated flammable/combustible liquid storage areas. The inspectors found that the areas were being controlled in accordance with approved plant procedures and located such that they would not affect safe operation of the facility. No housekeeping or transient combustible issues were noted.

The inspectors reviewed surveillance tests, toured plant areas and interviewed licensee personnel to verify that fire dampers, doors, and penetration seals were being inspected and maintained in a condition that would ensure they were available and reliable to perform their safety function.

The inspectors reviewed surveillance tests, toured plant areas and interviewed licensee personnel to verify that the fire water loop, fire detection and gaseous and water based fire suppression systems were being maintained in an adequate state of readiness and had been properly tested to verify their ability to perform their safety function. The inspectors found fire protection systems to be in good physical condition and noted no issues that would interfere with functionality.

The inspectors performed plant tours to verify that fire hoses, hose reels and portable extinguishers were provided at their designated locations and access was unobstructed. The inspectors found that fire hoses and hose reels were properly connected and aligned, allowing for proper operation and complete coverage of their respective area. The inspectors observed the performance of the monthly fire extinguisher inspection in accordance with NFS-HS-B-085, Portable Fire Extinguishers. The inspectors noted no issues with the performance of the surveillance, and found that the technicians performing the test were adequately trained and displayed ownership of the program. The overall material condition of the licensee's firefighting equipment and systems was found to be satisfactory.

The inspectors reviewed the licensee fire protection system out-of-service records and determined that adequate compensatory measures had been put in place for out-of-service, degraded or inoperable fire protection equipment, systems or features.

The inspectors reviewed the licensee corrective action program (CAP) entries for the past 12 months and determined that the licensee had identified safety control or fire system IROFS operability problems at an appropriate threshold and entered them into the corrective action program.

The inspectors reviewed Emergency Response Organization drills for the past year and verified the Emergency Response Team members received training and participated in drills at least an annual basis. The inspectors did not note any issues with the facilities fire brigade response and communication equipment.

b. Conclusion

No findings of significance were identified.

4. Fire Protection Quarterly (IP 88135)

a. Inspection Scope and Observations

During routine plant tours, the inspectors verified that transient combustibles were being adequately controlled and minimized. Fire barriers located between fire areas were being properly maintained.

During the inspection period, the inspectors conducted fire safety tours of two areas. The inspectors walked down various fire suppression components and systems that supplied the areas and verified these systems were properly aligned and operational. The inspectors verified that various aspects of the fire protection/prevention strategies conformed to the applicable nuclear criticality safety evaluation and adequate control of combustible material was maintained.

- Building 301
- Building 303

b. Conclusion

No findings of significance were identified.

B. Radiological Controls

1. Radiation Protection Semiannual Inspection (IP 88030)

a. Inspection Scope and Observations

The inspectors discussed the licensee's organization structure and staffing associated with the radiation protection program areas with the individuals responsible for the program. The inspector noted that organizational changes had been made since the last inspection. These changes included a Radiation Monitoring Manager position vacancy and a newly hired staff Health Physicist. The Radiation Monitoring Manager vacancy was currently filled on an interim basis by a qualified individual. The responsibilities and functions of the radiation protection program were adequately described in approved procedures. Procedures adequately addressed key elements of the radiation protection program.

The inspectors toured the established Material Access Area (MAA) and noted that the area was maintained in accordance with approved procedures. Radiological sign postings were clearly visible and posted in accordance with regulatory requirements. Radiological monitoring equipment was verified to be within current calibration and operational. Housekeeping and cleanliness controls were adequately maintained in production areas.

The inspectors observed modifications made to the MAA access control facilities since the last inspection. The recent modifications improved the effectiveness of personnel contamination monitoring measures and minimized the opportunity for cross contamination when exiting the MAA. The use of automated hand-and-foot monitors as the primary monitoring method was a noted improvement over the use of hand-held

frisker units for personnel contamination monitoring. The inspectors observed individuals on multiple occasions perform proper contamination monitoring techniques upon exit from the MAA.

The inspectors reviewed radiological survey records and determined that the survey results adequately reflected radiological conditions in the field. Safety Work Permits (SWPs) for upcoming work and completed activities were reviewed. The inspectors found that SWPs contained sufficient detail and provisions to provide adequate radiological control measures for a given task.

The inspectors reviewed the contamination control and monitoring program including procedures describing the contamination surveillance program, and recording, trending, and dissemination of contamination survey data. The inspectors noted that various radiological surveys are performed in plant areas on a routine basis. Contamination surveys were designated as routine, investigative, or intensive. The function and purpose of these survey classifications were described in procedure NFS-HS-B-80, Contamination Surveys. Routine surveys were performed in general walkway areas and other plant locations considered accessible to plant personnel.

The inspectors reviewed recent contamination survey trend reports and the process for disseminating this data to management. Interviews with Health Physicists responsible for reviewing and evaluating contamination survey results were conducted. Staff Health Physicists were responsible for reviewing radiological survey data on a routine basis in order to identify adverse trends or areas needing improvement. The inspector noted that several engineering service requests (ESRs) to address radiological safety concerns were generated as a result of the Health Physicists review of radiological survey trend data. Several ESRs were in the planning and scheduling phase for implementation. Recent examples of ESRs initiated to minimize contamination control issues included improved designs for installation of gloves on enclosures and replacement pumps that minimize contamination control issues when performing pump maintenance.

Radiation Technicians (RTs) were observed performing contamination surveys in the field. Individuals followed proper contamination control measures while conducting surveys and were knowledgeable of plant conditions that influence radiological conditions in their assigned work locations.

During tours of production areas and the Building 234 area, the inspectors observed radiological control measures implemented in support of various plant activities, remediation work, and maintenance evolutions. The inspectors noted the proper use of personnel monitoring equipment, protective clothing and respiratory protection equipment. The inspectors observed the preparation of radiological control measures for a maintenance activity. The inspectors noted that during the preparation phase of the task that maintenance personnel and the RT assigned to provide job coverage noted that the SWP did not address all the anticipated conditions that could be encountered during the course of the activity. The decision was made to obtain a new SWP for the task. The inspectors noted the use of conservative decision making on the part of the employees that resulted in the identification of the issue.

The inspectors interviewed personnel responsible for the implementation of the “as low as reasonably achievable (ALARA)” program and the trending and tracking of personnel exposures. The inspectors noted that the Safety and Safeguards Review Council

(SSRC) serves as the ALARA committee. Meetings were held on a routine basis. The SSRC meeting agendas included a review of personnel exposures, and contamination control issues. Exposure goals had been established and approved by the SSRC for 2012. Exposure goals were based on previous ALARA performance and anticipated workloads for the current year and were established at levels well below regulatory exposure limits. The inspectors noted that radiological safety-related trending data presented to the SSRC for review and evaluation was comprehensive and presented in a manner that facilitated the identification of any adverse trends. Key performance metrics related to the radiation protection program were tracked and trended to provide early indication of adverse trends. Based on a review of exposure records and documentation, and interviews with responsible personnel, the inspectors determined that the licensee's ALARA program was implemented in accordance with approved procedures.

The inspectors reviewed the licensee's CAP database pertaining to issues involving radiological safety matters. The threshold for radiological safety-related problem identification was adequate and corrective actions implemented in accordance with the licensee's corrective action program. Based on a review of personnel contamination events and the corrective action database, no adverse trends were identified in the area of radiological safety.

b. Conclusion

No findings of significance were identified.

2. Radiation Protection Quarterly (IP 88135)

a. Inspection Scope and Observations

During tours of the production areas, inspectors observed radiation protection controls and practices implemented during various plant activities including the proper use of personnel monitoring equipment; required protective clothing; and, frisking methods for detecting radioactive contamination on individuals exiting contamination controlled areas.

The inspectors noted that plant workers properly wore dosimetry and used protective clothing in accordance with applicable Radiation Work Permits (RWPs). The inspectors also noted that radiation area postings complied with plant procedures and included radiation maps with up-to-date radiation levels. The inspectors monitored the operation of radiation protection instruments and reviewed the calibration due dates of those instruments. The inspectors reviewed RWPs associated with the following SWPs:

- April 12, 2012, inspectors performed a review of SWP #14824, welding of gussets in area 300. Inspectors verified proper execution of confined space permits 1512 and 1514 which included the stationing of fire brigade responders.

- June 22, 2012, inspectors performed a review of SWP #14919, decontamination of U-Oxide area.

- June 23, 2012, inspectors performed a review of SWP #14920, SRE testing of U-Oxide overflow piping.

The inspectors determined that the reviewed RWPs contained sufficient detail and were adequately implemented in order to ensure personnel exposure was being controlled using ALARA principles.

b. Conclusion

No findings of significance were identified.

C. Facility Support

1. Management Organization and Controls (IP 88005)

a. Inspection Scope and Observations

The inspectors verified the licensee's control of procedures through direct observation of procedure use, procedure reviews and discussions with licensee staff. The inspectors reviewed 13 procedures which were revised in the past year to ensure that they were reviewed and approved in accordance with licensee procedures.

The inspectors reviewed the licensee's problem identification and resolution program to determine if the program was being conducted in accordance with approved procedures and the license application. The inspectors observed a management meeting in which corrective action program items were assessed for safety significance. This meeting also evaluated these items to determine the appropriate type of investigation to ensure the identified issues were adequately resolved. The inspectors reviewed audits of the following programs: SSRC, Management Measures of IROFS, ISA, Emergency Preparedness and Management Measures for Procedures, and Training & Qualifications. The inspectors determined that the audits were conducted at the frequency required by the license. The inspectors reviewed recent incident investigations conducted by the licensee and determined that the licensee is actively identifying process and program improvements.

The inspectors reviewed SSRC meeting minutes and verified that the council was operating per the requirements of the implementing procedures.

The inspectors verified that the licensee's quality assurance program was being implemented in accordance with the license application.

b. Conclusion

No findings of significance were identified.

2. Operator Training (IP 88010)

a. Inspection Scope and Observations

The inspectors reviewed the Operator Training program and evaluated the program against the license application. The inspectors interviewed licensee training staff on changes to the training program and reviewed the applicable lesson plan and procedure revisions. The inspectors determined that the changes made were in accordance with

the license application. The inspectors reviewed NFS-TN-008, NFS Training Procedure and determined that the Operator Training Program was maintained as required by the license application.

The inspectors discussed and observed training with selected staff in a variety of positions. The inspectors observed classroom training for the carbon dioxide (CO_2) Fire Suppression System. The inspectors observed classroom and on-the-job training for the Building 301 Receipt Calciner system. The inspectors interviewed class participants on the content of the training material and determined the training was adequate to allow them to safely perform the evolution. The inspectors interviewed the training instructor on Building 301 Receipt Calciner training and determined that it was in accordance with the license application and approved procedures.

The inspectors reviewed six lesson plans and four examinations. The inspectors verified that key points from the lesson plans were incorporated in the examinations. The inspectors determined that trainee understanding of the learning objectives was evaluated. The inspectors evaluated changes in selected examinations and verified that the examinations adequately tested the skill levels of the staff.

b. Conclusion

No findings of significance were identified.

3. Maintenance and Surveillance of Safety Controls (IP 88025)

a. Inspection Scope and Observations

The inspectors verified that the licensee's work control program had provisions that ensured adequate pre-job planning and preparation of work packages to support maintenance and surveillance activities. The inspectors reviewed the engineering change package for the U-Aluminum process restart. Associated maintenance and surveillance work packages were reviewed for relevance and accuracy to ensure that test packages challenged and verified operability of IROFS and safety controls. The calibration and performance testing program for the Criticality Accident Alarm System (CAAS) was reviewed for compliance with regulatory requirements in 10 CFR 70.24 and applicable standards in ANSI/ANS-8.3-1997.

Inspectors observed maintenance work activities associated with the Building 308 blower repairs and the weekly fire pump preventative maintenance performance tests. Inspectors concluded that work activities had been conducted in accordance with licensee's requirements and approved procedures. Effective corrective actions had been implemented when a safety control failed or had degraded. The inspectors verified that post-maintenance testing and calibrations had been adequately performed as specified by the licensee's requirements prior to restoring equipment to operational status. Completed work packages were adequately reviewed prior to returning equipment to service.

The inspectors reviewed the licensee's problem identification and resolution program to verify that performance issues relating to the maintenance and surveillance of IROFS and safety controls were entered into the CAP and evaluated the adequacy of corrective actions taken.

b. Conclusion

No findings of significance were identified.

4. Corrective Action Program (CAP) Review (IP 88135)

a. Inspection Scope and Observations

The inspectors reviewed NFS's CAP to ensure that items adverse to safety were being identified and tracked to closure. The inspectors also performed frequent screenings of items entered into the CAP to aid in the identification of repetitive equipment failures or specific human performance issues for follow-up

b. Conclusion

No findings of significance were identified.

D. Special Topics

1. Follow-up on Previously Identified Issues

(Closed) VIO 70-143/2011-003-01: Failure to Maintain Configuration Control During Maintenance

The inspectors reviewed licensee corrective actions associated with this violation as documented in PIRCS #29658. The violation involved a work control weaknesses that led to an improperly installed valve actuator and ultimately a spill of SNM within the U-Oxide system. The inspectors noted significant improvements in the work control process that would reduce the probability of occurrence of a similar problem. The inspectors reviewed the corrective actions and the reply to the Notice of Violation, dated August 26, 2011. This item is considered closed.

E. Exit Meeting

The inspection scope and results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized on July 16 to Joseph Henry and staff. No dissenting comments were received from the licensee. Proprietary information was discussed but not included in the report.

SUPPLEMENTARY INFORMATION

1. KEY POINTS OF CONTACT

Name	Title
T. Coates	E&I Engineering Section Manager
R. Dailey	Engineering Director
R. Droke	Senior Regulatory Advisor
M. Elliott	Quality, Safety, & Safeguards Director
J. Henry	President
M. Lee	Licensing Specialist
M. McKinnon	Operations Section Manager
M. Moore	Environmental Protection & Industrial Safety Section Manager
C. Reed	Operations Director
R. Shackelford	Nuclear Safety & Licensing Section Manager
J. Wheeler	Licensing & ISA Manager

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

70-143/2011-003-01 VIO Failure to Maintain Configuration Control During Maintenance

3. INSPECTION PROCEDURES USED

88005	Management Organization and Controls
88010	Operator Training/Retraining
88030	Radiation Protection
88055	Fire Protection Annual
88025	Maintenance and Surveillance of Safety Controls
88135	Resident Inspection Program For Category I Fuel Cycle Facilities

4. DOCUMENTS REVIEWED

Procedures:

NFS-HS-B-49, “Posting Radiological Areas and Inspecting Radiation Warning Signs,” Rev. 7
NFS-HS-B-80, “Contamination Surveys,” Rev. 8
NFS-GH-01, “Contamination Control,” Rev. 32
NFS-GH-03, “Safety Work Permits,” Rev. 15
NFS-GH-07, “Respiratory Protection Program,” Rev. 18
NFS-GH-28, “Personnel Monitoring,” Rev. 9
NFS-GH-79, “Sealed Source Program,” Rev. 0
NFS-GH-925, Revision 2, “Radiation Monitoring Program,” Rev. 2
NFS-HS-A-01, “Plant Action Limits and Investigation for Bioassay Measurements,” Rev. 6
NFS-CAP-008, “Full and Small Team Investigations,” Rev. 0
NFS-CAP-009, “The NFS Corrective Action Program,” Rev. 0
NFS-GH-62, “Control of Combustibles,” Rev. 6
NFS-GH-910, “Fire Protection Program,” Rev. 5
NFS-GH-57, “Fire Brigade Organization and Administration,” Rev. 5
NFS-WM-001, “Control and Execution of Work,” Rev. 3
NFS-HS-E-02, “Emergency Criticality Evacuation,” Rev. 38

NFS-HS-E-04, “Fire Reporting and Response,” Rev. 33
NFS-SOP-409, Section 31, “Size Reduction Station,” Rev. 3
NFS-SOP-409, Section 11, “Caustic and Condensate Discard Transfer to WWTF,” Rev. 13
NFS-SOP-409, Section 69, “Packing Station,” Rev. 4
NFS-SOP-409, Section 27, “Centrifuge Bowl Cleanout Procedure,” Rev. 20
NFS-SOP-409, Section 10, “U-Al Dissolution,” Rev. 36
NFS-SOP-409, Section 10A, “U-Al Accountability Columns,” Rev. 7
NFS-SOP-409, Section 71, “301 Receipt Calciner,” Rev. 9
NFS-SOP-409, Section 51, “Column Dissolver and Filtration Operation,” Rev. 15
NFS-TN-008, “NFS Training Procedure,” Rev. 11
NFS-GH-910, Fire Protection Program, Rev. 5
NFS-GH-003, Safety Work Permits, Rev. 15
NFS-GH-025, Hot Work Procedure, Rev. 7
NFS-GH-062, Control of Combustibles, Rev. 6
NFS-GH-027, Impairments to Fire Protection Systems, Rev. 10
NFS-GH-066, Operation and Maintenance of the Bldg. 302/303 CO2 Fire Suppression System, Rev. 4
NFS-GH-057, Fire Brigade Organization and Administration, Rev. 5
NFS-HS-A-016, Safety Audits and Inspections, Rev. 13
NFS-HS-A-104, Testing/Inspection of Fire Barrier Systems, Rev. 0
NFS-HS-B-011, Inspection of Emergency Lights, Rev. 9
NFS-HS-B-058, Fire Suppression Systems Inspections, Rev. 18
NFS-HS-B-070, Fire Detection, Rev. 6
NFS-HS-B-085, Portable Fire Extinguishers, Rev. 2,
NFS-HS-B-095, Testing/Inspection of Fire Barrier Systems, Rev. 1, 04/27/2012
NFS-HS-B-008, Inspection of Fire Brigade Response Equipment, Rev. 9, 02/07/2012

Service Requests:
SR 153778, Weld New Tips on (25) 801 Vessels
SR 154953, Repair Welded Fitting to Prevent Leak
SR 157390, FACP Zone 9/10
SR 153544, Repair Leak
SR 152972, Repair Oil Leak
SR 157376, Fire Doors D340-D341
SR 152243, New SRE on Tank XX-5A01
SR 153995, Restore Lighting
SR 157925, Repair or Replace Defective Zone 8 Speaker or Cables
SR 156819, Enable/Disable Vesda

PIRCS Review:
All PIRCS #33970 through #35278 (April through June 2012)
PIRCS #24789, Fire Protection Program Assessment
PIRCS #32573, Emergency Preparedness-Quality Assurance Audit QA-11-22 Finding #1
PIRCS #30760, Integrated Safety Analysis-Quality Assurance Audit QA-11-12 Finding #1
PIRCS #30761, Integrated Safety Analysis-Quality Assurance Audit QA-11-12 Finding #2
PIRCS #30762, Integrated Safety Analysis-Quality Assurance Audit QA-11-12 Finding #3
PIRCS #29739, SNM-124 Management Measures: Maintenance of Items Relied On For Safety-Quality Assurance Audit QA-11-05 Finding #1
PIRCS #31710, Safety and Safeguards Review Council-Quality Assurance Audit QA-11-17 Finding #1

PIRCS #33591, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #1
PIRCS #33592, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #2
PIRCS #33594, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #3
PIRCS #33591, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #1
PIRCS #33592, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #2
PIRCS #33594, Management Measures: Procedures, Training and Qualifications-Quality Assurance Audit QA-12-03 Finding #3

Other Documents:
1st Quarter 2012 ALARA Performance Report for Occupational Exposures
NFS Training Department Lesson Plan SA1010-11, General Employee Training
NFS Training Department Lesson Plan SA1016-11, Radiation Safety Re-Qualification
NFS Training Department Lesson Plan OT1006-12, Building 301 Receipt Calciner
NFS Toolbox Training, OPR-TB-APR12-03, Reactivation of the Bag-Filter Enclosure for U-Oxide
NFS Toolbox Training, OPR-TB-JUN11-01, Overview of PIRCS Event #29658
NFS Toolbox Training, OPR-TB-AUG11-02, Hold Points and Equipment Orientation
Safety & safeguards Review Council (SSRC) Meeting Minutes, May 31, 2012
Safety & safeguards Review Council (SSRC) Meeting Minutes, May 17, 2012
Safety & safeguards Review Council (SSRC) Meeting Minutes, May 10, 2012
Safety & safeguards Review Council (SSRC) Meeting Minutes, March 1, 2012
Safety & safeguards Review Council (SSRC) Meeting Minutes, February 9, 2012
Safety & safeguards Review Council (SSRC) Meeting Minutes, December 1, 2011
1st Quarter 2012 ALARA Performance Report for Occupational Exposures
Radiation Protection Program Implementation and Performance Report for Calendar Year 2011
Special SWPs 14679, 14626, 14684, 14689, 14690, 14869, 14872, 14874, 14885, 14896, 14899
Standard Safety Work Permits: 12-32-019, 12-33-003, 12-31-001
Quality Assurance Audit, QA-12-03, Management Measures, Procedures, Training & Qualifications, 3/2/12
Quality Assurance Audit, QA-11-17, Safety and Safeguards Review Council, 9/29/11
Quality Assurance Audit, QA-11-05, SNM-124 Management Measures of Items Relied On For Safety, 4/29/11
Quality Assurance Audit, QA-11-12, Integrated Safety Analysis, 7/22/11
Quality Assurance Audit, QA-11-22, Emergency Preparedness, 12/4/11
Triennial Radiation Protection Program Audit, March 26 through April 13, 2012
Triennial Independent Audit of the Industrial Safety Program at Nuclear Fuel Services, Inc., Conducted January 7 through February 15, 2012
NFS Fire Barrier Program Development Plan, 06/11/2012
List of 2012 Fire System Impairments
Outline of Proposed Fire Protection Summer Outage Work List
NFS Drawing Number 000-C0106-D, Fire Protection Waterlines with Bleu Facility, 05/23/2011
NFS Drawing Number 013-A1000-D, 300 Complex Fire Safety Layout, 11/11/2010
NFS Drawing Number 011-A1001-D, Fire Safety Building Layout, 05/18/2010

ODMI 2012-003
LOA-MISC-06-042, Cs-137 Source Certification as a Calibration Standard
SA-00020, BBC-7 Setpoint Analysis
SA-00064, BUA-27, 28, 29, 30 Setpoint Analysis
SA-00031, BUA-31 Setpoint Analysis
SA-00004, BBC-4 Setpoint Analysis
SA-00063, BUA-26 Setpoint Analysis
WR 201064 Bldg 308 Fan #2 Repair
WR 138638 Fire Pump #1 Weekly Inspection
WR 138639 Fire Pump #2 Weekly Inspection
ECR 20120156, UAL Restart Modification
SWP 14865, Special Work Permit for Bldg 308 Fan Repair
Corrective Action Report 15395,
Corrective Action Report 15400
Commitment Report 15900
Commitment Report 16301

5. ACRONYMS AND INITIALISMS

ADAMS	NRC Document System
ALARA	As Low As Reasonably Achievable
BLEU	Blended Low Enriched Uranium
BPF	BLEU Preparation Facility
CAP	Corrective Action Program
CAAS	Criticality Accident Alarm System
CFR	Code of Federal Regulations
CD	Commercial Development
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
DB	Down-blending
ESR	Engineering Service Request
FMF	Fuel Manufacturing Facility (Naval)
IROFS	Item Relied On For Safety
IP	Inspection Procedure
ISA	Integrated Safety Analysis
MAA	Material Access Area
NFPA	National Fire Protection Association
NFS	Nuclear Fuel Services, Inc.
ODMI	Operational Decision Making Issue
RT	Radiation Technician
RWP	Radiation Work Permit
SNM	Special Nuclear Material
SSRC	Safety and Safeguards Review Council
SWP	Safety Work Permit
U	Uranium