



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 6, 2009

Nuclear Fuel Services, Inc.
ATTN: Mr. David Kudsin
President
P.O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: NRC INSPECTION REPORT NO. 70-143/2009-010

Dear Mr. Kudsin:

This letter refers to the information gathering visit from April 27 – 29, 2009 and the inspection conducted from May 18 - 22, 2009, at the Nuclear Fuel Services (NFS) facility in Erwin, TN. The purpose of the visit and the inspection was to determine whether activities authorized under the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on May 22, 2009, the findings were discussed with yourself and members of your staff.

As part of the February 2007 Confirmatory Order, NFS was required to implement a safety culture improvement plan. Two pieces of a strong safety culture are an effective corrective action program and a safety conscious work environment. This inspection was conducted to assess the effectiveness of NFS's corrective actions program and its safety conscious work environment.

The procedure used for this inspection (71152) applies to facilities which are required to have a corrective action program (CAP) that meets the criteria detailed in 10 CFR Part 50 Appendix B. Currently, NRC does not regulate NFS's safety conscious work environment; however, NFS is required to implement a CAP as detailed in its license. Any findings identified through this inspection were assessed against NFS's licensing basis; the criteria detailed in 10 CFR Part 50 Appendix B was used as a reference point for NFS's corrective action program and does not represent new requirements for the facility.

Based on the results of this inspection, no cited violations or deviations were identified. The inspection consisted of a detailed review of the implementation of the corrective action program for the period May 2007 to April 2009. The inspection results indicate that NFS has made improvement in certain elements of a corrective action program, including the willingness of employees to identify problems as they arise. However, the inspection also indicated that there is room for improvement in the facility's corrective action program with regard to the aspects of "evaluation of issues" (specifically, the application of extent of condition reviews) and "effectiveness of corrective actions" (i.e., implementing corrective actions to successfully prevent reoccurrence). Finally, the results of interviews with employees indicate that NFS has made progress in cultivating a safety conscious work environment among the radiation protection organization.

D. Kudsin

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The NRC intends to conduct an additional PI&R inspection, likely in the first quarter of 2010, to assess NFS's efforts to enhance its corrective action system. The results from this and the 2010 inspections will provide data to the NRC's evaluation of the effectiveness of NFS's safety culture improvement initiative.

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/readingrm/adams.html>.

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

Sincerely,

/RA/

D. Charles Payne, Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

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

Enclosure: NRC Inspection Report No. 70-143/2009-010

cc w/encl:
Timothy Lindstrom
Vice President of Operations
Nuclear Fuel Services, Inc.
Electronic Mail Distribution

B. Marie Moore
Director, Safety and Regulatory Management
Nuclear Fuel Services, Inc.
Electronic Mail Distribution

Lawrence E. Nanney
Director
TN Dept. of Environment & Conservation
Electronic Mail Distribution

William D. Lewis
Mayor
Town of Erwin
211 N. Main Avenue
P.O. Box 59
Erwin, TN 37650

cc w/encl: (Cont'd on page 3)

D. Kudsin

(cc w/encl: cont'd)
Gregg Lynch
Mayor
Unicoi County
P.O. Box 169
Erwin, TN 37650

Johnny Lynch
Mayor
Town of Unicoi
Unicoi, TN 37692

Distribution w/encl:

OE Mail
PUBLIC
M. Tschlitz, NMSS
N. Baker, NMSS
P. Habighorst, NMSS
K. Ramsey, NMSS
C. Payne, RII
S. Vias, RII
M. Crespo, RII
S. Burris, RII
G. Smith, RII
D. Merzke, RII
nmed@inl.gov

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ADAMS: X Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DRS	RII:DFFI	RII:DFFI
SIGNATURE	MC 7/6/09	Via email 7/2/09	Via email 7/1/09	Via email 7/2/09	Via email 7/6/09	Via email 7/2/09
NAME	MCrespo	GSmith	RPrince	DMerzke	LPitts	JPelchat
DATE	7/ /2009	7/ /2009	7/ /2009	7/ /2009	7/ /2009	7/ /2009
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-143

License No.: SNM-124

Report No.: 70-143/2009-010

Licensee: Nuclear Fuel Services, Inc.

Facility: Erwin Facility

Location: Erwin, TN 37650

Dates: April 27 through April 29, 2009 (Information gathering visit)
May 18 through May 22, 2009 (Inspection)

Inspectors: M. Crespo, Senior Fuel Facility Inspector, Team Leader
D. Merzke, Senior Project Inspector
G. Smith, Resident Inspector
R. Prince, Senior Fuel Facility Inspector
J. Pelchat, Senior Fuel Facility Inspector
L. Pitts, Fuel Facility Inspector (In-training)

Accompanying Personnel: S. Vias, Chief, Reactor Projects Branch 7, DRP
J. Shea, Director, Division of Fuel Facility Inspection

Approved by: D. Charles Payne, Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Nuclear Fuel Services, Inc.
NRC Inspection Report 70-143/2009-010

The inspection consisted of reviews of Problem Identification Resolution and Correction System entries, walkdowns of process areas and interviews with plant personnel. The inspection results are outlined below.

Problem Identification and Resolution

- No findings of regulatory significance were identified.
- The licensee was adequately identifying and entering issues into the corrective action program (CAP).
- The licensee's performance in determining and implementing effective corrective actions did not meet the expectation of Inspection Procedure 71152 based on the number of reoccurring issues identified. In addition, the corrective actions tended to focus only on repairing the broken equipment without broadening the scope of the corrective actions to address the reasons why the equipment broke initially.
- The licensee demonstrated inconsistent use of extent of condition evaluations to ensure that root causes from one area were not present in others.
- The licensee was adequately evaluating industry operating experience. The licensee's lessons learned evaluations, which at times had identified effective corrective actions, were not formally evaluated and tracked.
- The licensee was not effectively entering self-assessment items into the corrective action program.
- The expectation that all employees are responsible for reporting safety concerns was being communicated by plant management.

Attachment:

Partial List of Persons Contacted
Inspection Procedures Used
List of Items Opened, Closed and Discussed
List of Documents Reviewed

REPORT DETAILS

1. Summary of Plant Status

Fuel manufacturing, training activities, and scrap recovery processes were operated throughout the inspection period. Blended low enriched uranium (BLEU) Preparation Facility (BPF) activities operated normally during the inspection period.

2. Problem Identification and Resolution

a. Assessment of the Corrective Action Program

(1) Inspection Scope

The inspectors reviewed the licensee's corrective action program (CAP) procedures which described the administrative process for initiating and resolving problems primarily through the use of problem identification, resolution, and correction system (PIRCS) reports. To verify that problems were being properly identified, appropriately characterized, and entered into the CAP, the inspectors reviewed PIRCS entries that had been issued between May 2007 and April 2009. Where possible, the inspectors independently verified that the corrective actions were implemented as intended. To help ensure that samples were reviewed across all plant areas, the team selected a representative number of PIRCS entries that were identified and assigned to the major plant departments, including operations, maintenance, health physics, and security. These PIRCS entries were reviewed to assess each department's threshold for identifying and documenting plant problems, thoroughness of evaluations, and adequacy of corrective actions. The inspectors reviewed selected PIRCS entries, verified corrective actions were implemented, and attended meetings where PIRCS entries were screened for significance to determine whether the licensee was identifying, accurately characterizing, and entering problems into the CAP at an appropriate threshold.

The inspectors conducted plant walkdowns of plant areas to assess the material condition and to observe any deficiencies that had not been previously entered into the CAP. The inspectors reviewed PIRCS entries, maintenance history, and completed work orders (WOs) for various components to verify that problems were being properly identified, appropriately characterized, and entered into the CAP.

The team conducted a detailed review of selected PIRCS entries to assess the adequacy of the root-cause and apparent-cause investigations of the problems identified, when appropriate. The inspectors reviewed these evaluations against the descriptions of the problems described in the PIRCS and the guidance in licensee procedure NFS-GH-918, "Directed Investigation Program," Rev. 6, as well as the PIRCS Investigation Guidelines. The inspectors assessed if the licensee had adequately determined the cause(s) of identified problems, and had adequately addressed reportability, common cause, generic concerns, and extent-of-condition. The review also assessed if the licensee had appropriately identified and prioritized corrective actions to prevent recurrence.

The team reviewed available site trend reports, to determine if the licensee effectively monitored identified issues and initiated appropriate corrective actions when adverse trends were identified.

The inspectors attended various plant meetings to observe management oversight functions associated with the corrective action program. These included the PIRCS Screening meetings, Corrective Action Review Board (CARB) meeting, and the Safety and Safeguards Review Council meeting.

Documents reviewed are listed in the Attachment.

(2) Assessment

Identification of Issues

The team determined that the licensee was generally effective in identifying problems and entering them into the CAP. There was a low threshold for entering issues into the CAP. This conclusion was based on a review of the requirements for initiating PIRCS as described in licensee procedure NFS-GH-65, "Problem Identification," management expectation that employees were encouraged to initiate PIRCS for any reason, and the very few deficiencies that inspectors identified during plant walkdowns not already entered into the CAP. Site management was actively involved in the CAP process and focused appropriate attention on significant plant issues, as evidenced by the number of "management by walking around" (MBWA) observation forms initiated.

The licensee did not have a formal trending program in place for early identification of adverse trends. However, the Quality Assurance (QA) department did identify negative trends through periodic audits. For example, issues regarding control of contractors and Lockout/Tagout (LOTO) compliance. Issues identified by QA were appropriately entered into PIRCS.

Additionally, the team reviewed the monthly self-assessment status report for the corrective action program, and determined this document to be essentially a trend report, tracking performance indicators such as numbers of PIRCS initiated by month, as well as timeliness of problem resolution. The report accurately identified trends and documented areas needing improvement, such as effectiveness of corrective actions. However, the team noted that no PIRCS were initiated as a result of the conclusions in the monthly report.

Based on reviews and walkdowns of the Fuel Manufacturing Facility (FMF), the Oxide Conversion Building (OCB), and the Blended Low Enriched Uranium Preparation Facility (BPF), the inspectors determined that, in general, deficiencies were being identified and placed in the CAP. However, inspectors noted many flanges and fittings which appeared to be leaking a caustic solution that had not been entered into PIRCS. Interviews determined this to be a long-standing problem. A self-assessment observation which stated that "the area appeared in poor shape to the uninitiated" was indicative of a tolerance for this degraded condition. In accordance with the guidance in licensee procedure NFS-GH-65, an example of a qualified problem to be reported in PIRCS is a "Spill, leak or release of radiological or non-radiological liquid, solid, or airborne

contaminants indoors or outdoors.” The failure to initiate PIRCS for this degraded condition was contrary to licensee procedures but was determined to be of minor safety significance as the leaks did not appear to be active.

Prioritization and Evaluation of Issues

Based upon the evaluation of specific PIRCS reviewed by the inspection team during the onsite period, the team concluded that problems were generally prioritized in accordance with the licensee’s CAP guidance as described in approved procedures. Prioritization level for each PIRC written was reviewed at the PIRCS screening meeting, and investigation levels were assigned based on safety significance. Management reviews of PIRCS conducted by the CARB were thorough, and adequate consideration was given to corrective actions for the most significant PIRCS. However, the team determined that investigations assigned to PIRCS were not always consistent with the PIRCS “Investigations Guidelines” for initiation of apparent cause and small team root cause investigations. The team identified several examples where guidelines called for a minimum of a small team root cause investigation for which there was either no investigation assigned, or an apparent cause investigation was assigned instead.

The team noted that seldom was there adequate documentation to support conclusions for apparent cause investigations. PIRCS requiring apparent cause investigations would solely document the apparent causes determined using the TapRoot root cause methodology. The lack of documentation in some cases made it difficult for inspectors to determine the adequacy of the apparent cause investigations to support their conclusions. For example, in PIRCS 10918, initiated due to errors found in checkweigh sheets, the apparent cause was determined to be “A task was performed in a hurry or a shortcut used,” with no amplifying information documented to support that conclusion.

The team also identified that the applicability of extent of condition reviews were not formally evaluated as part of the PIRCS evaluation process. Extent of condition was occasionally considered during evaluation of PIRCS, but the evaluation process was not formalized. The team identified several examples of PIRCS that appeared to warrant an extent of condition review, but one was not performed or limited to the process area in which the failure occurred. The following are some examples: PIRCS 17584, corrective actions for a level switch failure limited to FMF; PIRCS 12186, corrective actions involving the improper troubleshooting of clog limited to the process area where problem occurred; PIRCS 16605, application of extent of condition review limited to FMF; and PIRC 16579, corrective actions regarding improper rigging by contractors limited to the contractor that made the error.

Additional observations by the team are detailed below. The events identified by the team were indicative of ineffective evaluation of issues but did not constitute violations of regulatory requirements.

- PIRCS 9938 was initiated as a result of work stoppage due to contaminated product material. The PIRC problem stated “Suggest investigating initial rework of material to understand why reworked material is still contaminated.” The apparent cause investigation did

not address why the reworked material was still contaminated. The corrective actions focused on reprocessing the material instead of determining the cause of the contamination and initiating corrective actions to prevent recurrence.

- PIRCS 10678 was initiated as a result of a failed bearing on a ventilation fan and was assigned a small team root cause investigation. There was no documentation to verify that similar bearings for other ventilation fans were inspected as part of an extent-of-condition evaluation. Additionally, the licensee was unable to determine the actual failure mechanism, stating that routine preventive maintenance is performed on the fans, and routine checks are made for temperature and vibration. However, there was no indication that the PM records were reviewed, or when the last checks for vibration were made prior to failure. The licensee documented the root cause as "Problem not anticipated," which appeared to be inadequate to determine corrective actions to prevent recurrence.
- PIRCS 16179 was initiated as the result of an NRC violation regarding the failure to perform a required annual inspection of fire dampers. The licensee's review determined that these inspections were not included on the Safety-Related Equipment (SRE) or Preventative Maintenance (PM) programs to assure that they were performed. There was no documentation to verify that the licensee had determined the extent of condition through examining the lists of required inspections to ensure all required inspections were listed.
- PIRCS 15943 was initiated following a failure of IROFS FIRE6-1 during routine testing. The cause of the failure was the malfunction of a SRE air solenoid valve. This valve was fitted with a speed control device equipped with a screw-needle valve to control the rate that air was bled from the valve. The licensee investigation determined that the adjustment screw was fully closed preventing any air from being bled from the valve, therefore preventing the valve from performing its design function. The screw was readjusted which allowed the SRE valve to operate as intended. However, the actual cause of how the adjustment screw became fully closed was not determined. The licensee did not document whether an extent of condition evaluation was performed to assess other similar model valves in this or other comparable IROFS.
- PIRCS 16741 was initiated following a failure of IROFS FIRE6-6 during routine testing. The failure was caused by the malfunction of an SRE air solenoid valve (a model of valve different from the documented finding immediately discussed above). The licensee's corrective action was to replace the valve with a newer model successfully used in another part of the plant. The valve's actual cause of failure was not determined. No documentation existed to support the decision made to change the type of valve nor was there an evaluation performed documenting why the newer valve would

improve performance. In addition, the licensee did not document whether an extent of condition evaluation was performed to assess other similar valves in this or other comparable IROFS.

The team determined that the licensee had generally conducted root cause analyses in compliance with its CAP procedures. The licensee consistently applied the TapRoot causal-analysis methodology to all cause investigations.

The team determined that reportability determinations had been completed consistent with the guidance contained in NFS-HS-A-50, "Guidelines for Government Agency Notification."

Effectiveness of Corrective Actions

Based on a review of corrective action documents, interviews with licensee staff, and verification of completed corrective actions, the team determined that overall, corrective actions were timely, commensurate with the safety significance of the issues, and generally effective in correcting the immediate problem, but not effective at preventing recurrence. The team determined that the licensee appeared to have a "broke-fix" approach that resulted in actions primarily focused on correcting the symptoms to problems and not necessarily focused on the identification of the root or apparent causes. Several repetitive events identified by the team were indicative of ineffective corrective actions, but they were not violations of regulatory requirements:

- PIRCS 10918 was initiated due to errors found in checkweigh sheets. The corrective actions were to fix the errors and reissue the documents. There were no actions implemented to correct the cause of the problem. Five weeks later, PIRC 11293 was initiated as a result of multiple additional checkweigh sheet errors.
- PIRCS 9148 was initiated as a result of a spill following changing of a filter in a glove box. PIRCS 17369 and 18348 were initiated as a result of spills encountered during subsequent change-outs of the same filter. The reoccurrence of the problem led the team to conclude that the true root cause had not been found and therefore the corrective actions were ineffective.
- PIRCS 9786 was initiated due to foreign material being found while processing a product. The cause was attributed to a deteriorating gasket. The same condition occurred approximately five weeks later. Two years later, PIRCS 17712 documented the same condition and cause, finally culminating in the licensee changing vendors and gasket material.
- PIRCS 11611 was initiated as a result of a filter change which resulted in a spill and contamination event. No corrective actions were initiated to prevent recurrence. Two years later, PIRC 17506

was initiated due to a repeat event. Corrective actions included procedure changes, new training requirements, and an equipment modification.

- PIRCS 12815 was initiated after a container of material was discovered in a storage rack not approved for that type of material. The licensee determined root causes of the event to be a failure of configuration control of the storage system and a failure to train personnel to be knowledgeable of the storage requirements. The licensee's investigation specifically indentified the following lessons learned:
 1. "When installing new storage units or equipment in an area, the units/equipment should be designed to meet the current requirements of the area" [configuration control]; and,
 2. "Appropriate personnel were not adequately trained with regards to (storage of) material and associated security requirements."

While the licensee did provide immediate training to personnel working in this area, none of the corrective actions implemented by the licensee addressed configuration control or ongoing employee training or training for new employees, as identified in the lessons learned.

The team determined that effectiveness reviews were initiated for some corrective actions, but there was no formal guidance in assigning those reviews. With the exception of those conducted and tracked by QA, effectiveness reviews were not given unique corrective action numbers for tracking, nor were due dates for completion typically assigned. The team determined that effectiveness reviews were focused primarily on the implementation of the corrective action instead of on how effective the corrective action was in addressing the original problem. The team identified one example where an effectiveness review was not timely. In PIRCS 721, initiated due to a scale not having an SRE tag attached, an effectiveness review was assigned to corrective action 378. The corrective action was to include SRE training in all clerk and supervisor job requirements. The corrective action was completed in June 2003, but the effectiveness review never completed. Upon questioning, it was determined the job requirements subsequently changed, and so the effectiveness review was not performed.

The team noted that the licensee was not consistent in documenting immediate or subsequent corrective actions initiated on the PIRCS. Several PIRCS were closed with no documentation of any corrective actions having been performed. The team identified the following additional examples of ineffective corrective actions:

- PIRCS 14405 was initiated as a result of a nitric acid pump being replaced with an incorrect pump. The small team root cause investigation documented five root causes. However, there were no associated corrective actions associated with two of those root

causes: inadequate pre-job briefs and lack of supervision. The inspectors determined that the overall corrective actions were adequate because the corrective actions associated with the other identified root causes were sufficient to prevent recurrence.

- PIRCS 12194 was initiated to perform a common cause analysis due to violations identified by NRC inspectors. As part of the investigation, several areas for improvement were identified and communicated separately to the Director, Safety and Regulatory Management, none of which were documented in the corrective action program.
- PIRCS 14537 was initiated on July 22, 2008, and its apparent cause evaluation had three corrective actions associated with it. However, the corrective actions were never implemented due to a software glitch that caused a PIRCS entry to be effectively “lost” within the computerized system. The manager assigned to approve the apparent cause corrective actions did not exist. The three corrective actions assigned were given initial completion dates of February 28, 2009. However, as of the date of the inspectors’ review, no activity associated with the corrective actions had commenced. The inspectors noted that no PIRCS audit function was able to uncover this anomaly. The inspectors brought this issue to attention of licensee management.

The licensee generated PIRCS report number 18828 to document, evaluate, and, if necessary, implement corrective actions for the items identified during this inspection.

(3) Conclusions

No findings of regulatory significance were identified. The licensee was adequately identifying and entering issues into the CAP. However, the licensee’s performance in determining and implementing effective corrective actions for issues indicated room for improvement. In addition, the licensee demonstrated inconsistent use of extent of condition evaluations for issues.

b. Assessment of the Use of Operating Experience (OE)

(1) Inspection Scope

The team examined the licensee’s program for reviewing industry operating experience and interviewed the OE Coordinator to assess the effectiveness of how external and internal operating experience data was handled at the plant. In addition, the team selected operating experience documents (e.g., NRC generic communications, 10 CFR Part 21 reports, vendor notifications, and plant lessons learned), which had been issued since May 1, 2007, to verify whether the licensee had appropriately evaluated each notification for applicability to the NFS plant, and whether issues identified through these reviews were entered into the CAP. Documents reviewed are listed in the Attachment.

(2) Assessment

Despite the lack of a formal operating experience program at NFS, the team determined the licensee was evaluating external operating experience in the form of NRC generic communications and vendor bulletins. For NRC generic communications, the Safety and Safeguards Review Council (SSRC) reviewed Information Notices and Regulatory Issue Summaries for applicability to the site. Licensee staff proactively search the communications located on the NRC public website for issues potentially applicable to NFS. The operating experience coordinator indicated that Part 21 issues were being evaluated at the site; however, the team could not find any documentation to confirm that such evaluations were being performed. The Part 21 issues sampled by the team were not applicable to the plant. The team reviewed PIRCS initiated as a result of vendor bulletins and notifications, and verified that appropriate corrective actions were implemented where necessary.

The team determined that lessons learned identified as a result of PIRCS investigations were not being formally tracked, nor were they being communicated to the licensee staff. This resulted in recommendations not being implemented in a timely manner and problem recurrence. Capturing these lessons learned as internal operating experience and communicating these lessons to all staff would increase the probability of preventing recurring problems.

The team identified the following examples where the lack of corrective actions associated with lessons learned resulted in recurring problems. These issues did not constitute violations of regulatory requirements:

- PIRCS 9786 was initiated due to foreign material being found while processing a product. The lesson learned was that gasket material on the vessel in question requires periodic replacement. The same condition occurred approximately five weeks later. The licensee changed vendors and initiated use of a new gasket material nearly two years after identification of the lesson learned following a reoccurrence of the issue. The inadequate initial corrective actions stemmed from the licensee's apparent cause investigation which determined this issue to be a "tolerable failure."
- PIRCS 10918 was initiated due to errors found in checkweigh sheets. The lesson learned from the apparent cause investigation was that checksheets should be issued one at a time, but there was no corrective action associated with that conclusion. Five weeks later, PIRCS 11293 was initiated as a result of multiple checksheets being issued that still contained errors. The conclusion of the PIRCS screener was "Lessons learned is not intended to be a procedure." The PIRCS was closed out without any subsequent corrective actions. Subsequently, Quality Control's normal practice was modified to issue checksheets one at a time, which incorporated the lesson learned.

(3) Conclusions

No findings of regulatory significance were identified. The licensee was adequately evaluating industry operating experience. The licensee's lessons learned evaluations, which at times had identified effective corrective actions to prevent reoccurrence, were not formally evaluated and tracked.

c. Assessment of Self-Assessments and Audits

(1) Inspection Scope

The team reviewed licensee QA audits, department self-assessments, including those which focused on problem identification and resolution, and MBWA observation forms, to verify that findings identified through the licensee self-assessment program were entered into the CAP. The team also reviewed procedure NFS-GH-945, "Self Assessment Program," Rev. 1, to verify self-assessment activities were being performed consistent with the licensee's procedure.

(2) Assessment

The team determined that QA audits were thorough, critical, and effective in identifying issues and directing attention to areas that needed improvement. Licensee weaknesses and issues identified in these audits were entered into the CAP. The team verified that corrective actions associated with the licensee's findings were appropriate and were implemented in accordance with the licensee's corrective action procedures.

The team also reviewed a number of MBWA observation forms. The licensee credits MBWA observations as part of their self-assessment program. The forms documented management observations in areas of safety, facilities condition, personnel work practices, maintenance, radiological protection, security, and conduct of operations. Many of the observation forms reviewed identified issues that needed improvement or were determined to be unacceptable in several areas, but there was no amplifying information provided. Some forms documented areas needing improvement for which an entry into PIRCS was required by procedure, such as pipes, vessels, and roofs leaks, but no entries in the CAP could be found. Additionally, many forms identified recommendations for improvement, but the team found no mechanism for translating these recommendations into actions, such as a PIRCS entry.

The team also determined that functional area managers, such as those for the CAP and configuration management, were unaware of the requirement to maintain self-assessment action lists for long term corrective actions, as described in NFS-GH-945. The team determined this to be contrary to the procedure in that long term corrective actions from self-assessments were being tracked through other means.

(3) Conclusions

No findings of regulatory significance were identified. The licensee was not effectively entering self-assessment items into the CAP.

d. Safety Conscious Work Environment

(1) Inspection Scope

The team randomly interviewed on-site workers regarding their knowledge of the corrective action program and their willingness to write PIRCS or raise safety concerns. During technical discussions with members of the plant staff, the inspectors conducted interviews to develop a general perspective of the safety-conscious work environment at the site. The interviews were also conducted to determine if any conditions existed that would cause employees to be reluctant to raise safety concerns. The inspectors reviewed the licensee's Employee Concerns Program (ECP) and interviewed the ECP coordinator.

(2) Assessment

Based on the interviews conducted and the PIRCS reviewed, the team determined that licensee management emphasized the need for all employees to identify and report problems using the appropriate methods established within the administrative programs, including the CAP and ECP. These methods were readily accessible to all employees. Based on discussions conducted with a sample of plant employees from various departments, the inspectors determined that employees felt free to raise issues, and that management encouraged employees to place issues into the CAP for resolution. The inspectors did not identify any reluctance on the part of the licensee staff to report safety concerns.

The inspectors reviewed ongoing efforts within the Radiation Protection (RP) department related to the establishment of an environment supportive of raising safety concerns. Based on discussions with RP managers, the inspector found that individuals were aware of the need to continually emphasize to their staff the importance of raising safety issues and management's support of the program. Every individual interviewed within the RP organization by the inspectors, stated that they would not hesitate to raise a safety concern and noted that management had established an environment supportive of raising concerns. The inspectors reviewed the lesson plan that addressed "stop-work" authority for Radiation Protection personnel. The inspector noted that as part of the RP group's implementation of human performance initiatives that stop-work authority has been included as a human performance tool.

(3) Conclusions

No findings of regulatory significance were identified. The expectation that all employees are responsible for reporting safety concerns was being communicated by facility management.

3. Exit Meeting

The inspection results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized with yourself and members of your staff on May 22, 2008. Proprietary information was discussed but not included in the report.

ATTACHMENT

1. PERSONS CONTACTED

Partial List of Licensee's Persons Contacted

D. Kudsin, President
T. Lindstrom, Vice President
M. Moore, Director, Safety & Regulatory
R. Crowe, PIRCS Manager
J. Pugh, Director Operational Support
R. Bond, Senior Project Director, HEU Operations
R. Droke, Licensing Director
R. Shackelford, Nuclear Criticality Safety Manager
M. Tester, Sr. Manager, Radiation Control
K. Weir, Security Director

2. INSPECTION PROCEDURE USED

IP 71152 Identification and Resolution of Problems

3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

4. LIST OF DOCUMENTS REVIEWED

Procedures

SOP 392, "Work Request Procedure," Rev. 19
SOP 409 Section 1, "General Requirements for BLEU Preparations and Assoc. Facilities," Rev. 23
SOP 409, Section 8, "U-Metal Oxidation and U-Oxide Dissolution," Rev. 28
SOP 409 Section 10, "U-Al Dissolution," Rev. 23
NFS-CAP-Effect-Eval, Assigning and Performing Effectiveness Evaluations, Rev. 0
NFS-ECP-001, Overview of Employee Concerns Program Services and Methods, Rev. 0
NFS-HS-E-02, "Emergency Criticality Evacuation," Rev. 35
NFS-GH-56, "Management Measures Identification and Implementation for IROFS," Rev. 5
NFS-GH-01, "Contamination Control," Rev. 28
NFS-GH-65, "Problem Identification," Rev. 4
NFS-GH-72, "Accident Precursor Identification and Evaluation," Rev. 1
NFS-GH-918, "Directed Investigation Program," Rev. 6
NFS-GH-922, "The NFS Problem Identification, Resolution, and Correction System," Rev. 8
NFS-GH-945, "Self-Assessment Program"

Procedures (cont.)

NFS-MGT-04-006, "NFS Safety and Compliance Conscious Work Environment Policy," Rev. 2
OPR-TB-May09-03, "Operations Support of Maintenance Work"
PIRCS Investigation Guidelines, Rev. 2
PIRCS Risks Definitions Table, Rev. 3
LOA-2062-027-2, "Initiating and Observing U-Oxide Dissolver and U-Aluminum Transfers"

Work Requests

WR 113033

Self-Assessments

2008 Annual Self-Assessment Report
Monthly Self-Assessment Status Report, Corrective Action Program, April 2009
NFS Configuration Management Program Self-Assessment, May 2009
QA-07-09, Quality Assurance Audit Review of the Incident Investigations Management Measure
QA-08-05, Quality Assurance Audit of the Lockout/Tagout Program
QA-08-21, Quality Assurance Audit Report of the NFS Configuration Management Program
QA-09-05, Quality Assurance Audit Report of SNM-124 Management Measure: Maintenance of Items Relied On For Safety

Other Documents

MPB-008-017, Non-Conformance Trend Analysis Report for the Third Quarter of 2008
MPB-009-001, Non-Conformance Trend Analysis Report for the Fourth Quarter of 2008
Nonconformance Trend Analysis Report for the Fourth Quarter of 2008, January 21, 2009
RT-PRACT-RAD-WORK-CTRL, "Radiological Work Coverage," November 2006

PIRCS

7837	11611	14308	15021	16748
9148	11690	14335	15054	16892
9786	11711	14339	15134	16893
9788	11872	14342	15136	16896
9816	12084	14382	15197	16898
9841	12186	14405	15258	16908
9938	12194	14432	15258	16937
10124	12527	14484	15269	16939
10151	12815	14537	15270	16947
10252	13086	14663	15285	16963
10317	13087	14754	15322	16998
10454	13261	14766	15590	17000
10458	13492	14774	15943	17179
10519	13903	14790	16179	17221
10678	14106	14825	16188	17281
10738	14131	14873	16211	17369
10918	14134	14886	16220	17506
11288	14161	14893	16271	17584
11293	14207	14912	16452	17678
11393	14278	14915	16579	17712
11466	14281	14942	16605	18191
11552	14287	14964	16664	18348
11608	14292	14987	16741	18828