

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

July 28, 2016

Mr. Adam Hilton FMO Facility Manager Global Nuclear Fuel – Americas, L.L.C. P.O. Box 780, Mail Code J20 Wilmington, NC 28402

SUBJECT: GLOBAL NUCLEAR FUEL – AMERICAS, L.L.C. – U.S. NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 70-1113/2016-003

Dear Mr. Hilton:

The Nuclear Regulatory Commission (NRC) conducted announced inspection during the second quarter of calendar year 2016 (April 1 - June 30, 2016), at the Global Nuclear Fuel – Americas, L.L.C. Facility in Wilmington, NC. The purpose of this inspection was to review the implementation of programs and procedures for operational safety, nuclear criticality safety, and permanent plant modifications. The reviews conducted helped to determine that licensed activities were conducted safely and in accordance with NRC requirements. The enclosed report presents the results of this inspection. At the conclusion of this inspection, the inspectors discussed the results with you and members of your staff at an exit meeting on April 28, 2016.

During the inspection, the staff examined selected activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspection consisted of facility walk-downs; selective examinations of relevant procedures and records; interviews with plant personnel; and plant observations. Throughout the inspection, observations were discussed with your managers and staff.

Based on the results of this inspection, the NRC has determined that a Severity Level IV (SLIV) violation of NRC requirements occurred. This violation is being treated as a Non-Cited Violation (NCV), consistent with Section 2.3.2 of the Enforcement Policy. The NCV is described in the subject inspection report. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region II and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

In accordance with Title 10 of the *Code of Federal Regulations* 2.390 of NRC's "Rules of Practice and Procedure," a copy of this letter and the enclosure will be made available electronically for public inspection in the NRC Public Document Room, or from the NRC's Agency wide Documents Access and Management System (ADAMS); accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

If you have any questions, please contact Tom Vukovinsky of my staff at 404-997-4622.

Sincerely,

/**RA**/

Eric C. Michel, Chief Projects Branch 2 Division of Fuel Facility Inspection

Docket No. 70-1113 License No. SNM-1097

Enclosure: NRC Inspection Report 70-1113/2016-003 w/Supplemental Information

cc: Scott Murray, Manager Facility Licensing Global Nuclear Fuels – Americas, L.L.C. Electronic Mail Distribution

W. Lee Cox, III, Chief North Carolina Department of Health and Human Services Division of Health Service Regulation Radiation Protection Section Electronic Mail Distribution If you have any questions, please contact Tom Vukovinsky of my staff at 404-997-4622.

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U.S. NUCLEAR REGULATORY COMMISSION REGION II

Docket No.:	70-1113
License No.:	SNM-1097
Report No.:	70-1113/2016-003
Licensee:	Global Nuclear Fuel - Americas, LLC
Location:	Wilmington, North Carolina 28402
Dates:	April 1 through June 30, 2016
Inspectors:	 B. Adkins, Senior Fuel Facility Inspector (Section B.1) R. Gibson, Senior Fuel Facility Inspector (Section A.1) P. Glenn, Fuel Facility Inspector (Section A.2) T. Sippel, Fuel Facility Inspector (Section B.1) R. Womack, Fuel Facility Inspector in Training
Approved by:	E. Michel, Chief Projects Branch 2 Division of Fuel Facility Inspection

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas, LLC NRC Integrated Inspection Report Nos. 70-1113/2016-003 April 1 through June 30, 2016

NRC regional inspectors conducted inspections during normal shifts in the areas of Operational Safety, Nuclear Criticality Safety, and Permanent Plant Modifications. During the inspection period, normal production activities were ongoing. These announced, routine inspections consisted of a selective examination of procedures and representative records, observations of activities, walk-downs of items relied on for safety (IROFS), and interviews with licensee personnel. One non-cited violation was identified during these inspections.

Safety Controls

• The operational safety program was implemented in accordance with the license application and regulatory requirements. (Section A.1)

Nuclear Criticality Safety

• The nuclear criticality safety program was implemented in accordance with the license application and regulatory requirements. (Section A.2)

Facility Support

• The licensee adequately implemented a configuration management system to evaluate, implement, and track plant modifications which could affect safety. (Section B.1)

Special Topics

 A non-cited, Severity Level IV violation of NRC requirements was identified for failure to establish adequate management measures to ensure that IROFS 301-18 was available and reliable to perform its intended safety function as required by 10 CFR 70.62(d). (Paragraph C.1)

Attachment

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

REPORT DETAILS

Summary of Plant Status

Global Nuclear Fuel – Americas (GNF-A), LLC manufactures uranium dioxide (UO₂) powder, pellets, and light water reactor fuel bundles at its Wilmington, NC facility. The facility converts uranium hexafluoride (UF₆) to UO₂ using a Dry Conversion Process (DCP) and performs UO₂, gadolinium pellet and fuel fabrication operations. During the inspection period, normal production activities were ongoing.

A. <u>Safety Operations</u>

- 1. Plant Operations (Inspection Procedure (IP) 88020)
 - a. Inspection Scope and Observations

The inspectors interviewed staff and reviewed records associated with the Dry Scrap Recovery (DSR) Furnace Off-gas process with a specific focus on the particulate collection bottle, the Blending process, the Pellet Press process, and the Sintering Furnace process. The inspectors reviewed plant operations to evaluate if items relied on for safety (IROFS) were being implemented as described in the Integrated Safety Analysis (ISA) and if the licensee was operating the facility in compliance with 10 CFR 70.61 and the license application.

The inspectors evaluated the physical presence of selected passive and active engineered safety controls, evaluated the safety controls to determine their capability and operability, and assessed if controls credited with limiting the risk of potential accident scenarios were capable of preventing or mitigating the scenarios. The controls selected included IROFS 301-18, Furnace Offgas Particulate Collection Bottle Inspections; IROFS 206-04, FBS-BPG/AMM Verification of Moderator Fraction; IROFS 401-09, Press Pellet Counter; IROFS 401-10, the Press Hood Level Sensors; IROFS 405-06, Sintering Furnace – Safe Geometry; and IROFS 405-10, Tank Overflow – Additive Furnace Scrubber.

The inspectors reviewed applicable procedures and records, and determined if required actions as identified in the ISA Summary were correctly transcribed into written operating procedures. The inspectors evaluated the contents of operating procedures (listed in Section 4 of the attachment) with respect to operating limits and operator responses for upset conditions to assess if limits and actions needed to assure safety were described in the procedures.

The inspectors interviewed several operators and supervisors to assess if operators and technicians were implementing safety controls in accordance with license requirements. The inspectors observed the operators adding additives to the feed material and verified that they were adhering to applicable safety procedures. The inspectors reviewed selected postings and operator aids applicable to the tasks being observed and verified that the postings and operator aids were current, representative of safety controls, and were followed by the operators.

Through interviews and document reviews, the inspectors evaluated if the licensee conducted periodic surveillance testing as required by the ISA Summary for the selected safety controls.

The inspectors reviewed the licensee's corrective action program (CAP) entries for the past twelve months to assess if any deviations from procedures and unforeseen process changes affecting nuclear criticality, chemical, radiological, or fire safety were documented and investigated promptly. Also, the inspectors evaluated the corrective actions associated with selected condition reports to evaluate if the completed corrective actions were in accordance with license requirements.

b. Conclusion

No violations of significance were identified.

2. Nuclear Criticality Safety (IP 88015)

a. Inspection Scope and Observations

The inspectors evaluated the licensee's Nuclear Criticality Safety (NCS) program and analyses to determine the safety of fissile material operations through compliance with Title 10 Code of Federal Regulations (10 CFR) Part 70 and license requirements. The inspectors reviewed a sample of NCS documents that included criticality safety analysis, procedures, and work instructions to verify that criticality safety of risk-significant operations was assured through engineered and administrative controls with the required safety margin and reviewed by qualified staff. The inspectors reviewed a sample of NCS analysis and aspects of selected NCS-related IROFS in Node Group 401 (Press), 405 (Furnace), and 406 (Grinders). The inspectors reviewed accident sequences associated with Nodes 401, 405, and 406 to evaluate compliance with the performance requirements of 10 CFR 70.61 and to verify that associated NCS analyses demonstrated identification and control of NCS hazards. The inspectors interviewed two criticality safety engineers, two area engineers, two managers, and multiple operators regarding operations, equipment, and controls to verify that administrative controls were implemented.

The inspectors reviewed procedures and license requirements for weekly NCS audits. The inspectors reviewed results of selected NCS audits completed since the last NCS inspection to confirm that safety-related issues were identified and resolved as required. The inspectors also verified that NCS engineers reviewed plant operations for compliance with license requirements, procedures, and postings as required. The inspectors reviewed samples of deficiencies identified during sampled audits or observations to determine if the findings were entered into the licensee's corrective actions program and or resolved as required.

The inspectors evaluated the licensee's process for responding to internal events that did not require NRC reporting as specified in 10 CFR 70 Appendix A. Specifically, the inspectors reviewed a sample of the licensee's responses to recent internally-reported events that occurred between November 2015 and April 2016. The inspectors interviewed licensee staff and reviewed documents that included procedures, investigation reports, associated corrective actions, etc. to verify that the sampled internal events were both investigated and captured in the licensee's corrective action program.

The inspectors performed independent plant walkdowns of the ceramics area including pellet press, furnace, and grinder areas to verify that risk-significant fissile material operations were conducted safely and in accordance with regulatory requirements. The

inspectors interviewed operations staff and NCS engineers in conjunction with the walkdowns; and reviewed NCS controls to determine whether NCS analyses were implemented, maintained, and illustrated double contingency as required.

b. Conclusion

No violations of significance were identified.

B. Facility Support

1. Plant Modifications (IP 88070)

a. Inspection Scope and Observations

The inspectors interviewed three senior managers, two managers, two engineers, and a configuration management center technician to determine if the licensee had established an effective configuration management program in accordance with license requirements to evaluate, implement, and track modifications to the site that could affect safety.

The inspectors reviewed the licensee's work control program to verify that it contained adequate pre-job planning and preparation of permanent plant modification design packages. The inspectors evaluated the configuration management program to determine if provisions ensured that permanent plant modifications did not degrade the capabilities of IROFS or other safety controls that are part of the safety design basis.

The inspectors reviewed a selection of change request packages (listed as Records in Section 4 of the Attachment) completed since the last plant modifications inspection. The inspectors reviewed these packages and interviewed licensee staff to determine if the change packages were prepared, reviewed, and completed by the licensee in accordance with WI-16-106-02, Configuration Management Program – Nuclear Manufacturing Operations, Revision (Rev.) 1.1. Selected change packages (CR 15606, 15611, 15612, 15613, 15614, and 15615) were reviewed to assess if applicable postmaintenance installation and testing requirements were identified and performed prior to implementation of change packages. The inspectors reviewed design information to determine if instrument set points accurately reflected the protection of safety limits taking into account instrument and calibration uncertainties. The inspectors also reviewed the licensee's process for making changes to their functional test instructions used to perform post maintenance testing.

The inspectors evaluated if the licensee had addressed the impacts of both facility changes and document modifications on the ISA, ISA Summary, and other safety program documentation developed in accordance with 10 CFR 70.62. The qualification records of three licensee ISA Reviewers were reviewed to assess if they met the requirements of the license application. The inspectors reviewed samples of documented 10 CFR 70.72 evaluations to determine if the licensee adequately determined whether NRC pre-approval of the change was required.

The inspectors performed walkdowns of selected modifications to determine if they were installed in accordance with approved design documents including drawings and technical reports. The inspectors reviewed calibration records to determine if measuring

and test equipment used to perform functional testing of IROFS was properly calibrated at the time of use. The inspectors reviewed training records to determine if operators received training on modifications to IROFS prior to turnover to operations.

The inspectors reviewed the licensee's CAP to verify that issues related to the preparation of change requests and facility modifications were entered into the CAP and the licensee assigned appropriate corrective actions in accordance with licensee commitments and procedures.

b. Conclusion

No violations of significance were identified.

C. Special Topics

1. Event Follow-up

a. (Closed) Licensee Event Report (LER) 2016-001, "EN 51662, Loss of an IROFS preventing a criticality for a fire sequence."

<u>Introduction</u>: A non-cited, self-revealing, Severity Level IV violation of 10 CFR 70.62(d) was identified for the failure to establish management measures necessary to ensure that IROFS 301-18, Furnace Off-gas Particulate Collection Bottle Inspections, was available and reliable to perform its intended function.

Description: On January 12, 2016, the dry scrap recycle (DSR) process was taken out of operation after HVAC system and component radiation surveys indicated a high volume of uranium oxide powder present in the furnace inlet exhaust. On January 14, following cool down of the system, approximately 1.8 kilograms (kg) of uranium powder was removed from the vent. As the process was preparing for restart on January 18, an operator requested a follow-up radiation survey. This additional survey was not required in Operating Procedure (OP) 1210.00.206, Rev. 0, "DSR Recycle Furnace - Operator Maintenance." The radiation protection (RP) technician conducted a thorough survey of vertical piping in the vicinity of the drop out bottle and discovered that a high volume of uranium powder remained in the system. The operator removed the particulate inspection bottle and observed that the bottle had exceeded its fill limit. In order to clean out the remaining powder from the vertical and horizontal piping, the operator tapped on the piping to loosen the powder, and was able to recover a substantial amount. In total, the operator recovered approximately 42 kg of uranium oxide from both the full particulate inspection bottle and the furnace off-gas piping. The licensee determined IROFS 301-18 to be degraded, as its intended safety function was to ensure that uranium mass in the particulate collection bottle did not exceed the mass limit. This IROFS is implemented by conducting routine inspections of the particulate collection bottle. The licensee analyzed the effect of the degraded IROFS on credited fire accident sequences involving transient combustible fires in the DSR Moderator Controlled Area and determined that the loss of IROFS 301-18 resulted in a failure to meet the performance requirements. The licensee submitted Event Notification (EN) 51662 to the NRC under 10 CFR 70 Appendix A (b)(2) on January 19.

The licensee credited IROFS 301-16, DSR Combustible Control Program; IROFS 301-11, Furnace Off-gas System – Safe Geometry; and IROFS 301-18 for an accident sequence involving a fire in the DSR furnace feed area. The inspectors reviewed Quantitative Risk Assessment-301, Rev. 7, "Dry Scrap Recycle" for the DSR node and noted that the licensee used conservative methods to estimate the initiating event frequency for the accident sequence. Specifically, the licensee used conservative estimates related to fixed combustible and ignition sources, cable loading, fire ignition frequencies, and a fire's zone of influence. Through interviews with licensee staff and walk downs of the area, the inspectors confirmed that assumptions used to estimate the initiating event frequency were conservative in nature and not representative of the actual DSR area configuration. When representative assumptions for the DSR area are used to estimate the initiating event frequency the overall likelihood of the accident sequence remains highly unlikely, and the licensee met the performance requirement.

The sole management measure the licensee applied to IROFS 301-18, an administrative control, was procedures. The inspectors reviewed OP 1210.00, which implemented IROFS 301-18, and interviewed the operator and RP technician on shift during the discovery. The inspectors noted that the particulate collection bottles were not translucent enough to be easily inspected without sufficient backlight, and the procedure did not require additional light to be used during inspections. During the interviews, some of the operators stated that they normally would mechanically agitate the vertical and horizontal piping on top of the bottle to ensure that accumulated powder would fall to the bottle. However, this step was not included in the procedure and was not performed by all operators. Unlike other drop out bottles in the furnace area, the procedure only required the operator to record that the inspection had been conducted; therefore, the licensee had not established the expected buildup rate of material in the bottle to determine whether it was possible for a bottle to become full during a single shift. The procedure depended on an operator observing a visible line indicating the level of material in the bottle, allowing full bottles to pass inspection due to not having any visible indicator. The inspectors determined that procedure OP 1210.00 did not contain sufficient details to ensure that inspections related to IROFS 301-18 would prevent exceeding the uranium mass limit in the particulate collection bottle. The questioning attitude of the operator and the robust radiation survey of the RP technician going above and beyond procedural requirements allowed the licensee to identify the issue.

Analysis: The licensee failed to establish adequate management measures to ensure that IROFS 301-18 was available and reliable to perform its intended safety function as required by 10 CFR 70.62(d). The sole management measure associated with IROFS 301-18 was inadequate, as the procedure associated with the inspection was unable to detect that the particulate collection bottle was full and had exceeded the mass limit. rendering the IROFS ineffective. The noncompliance adversely affected the ability of an IROFS to perform its intended safety function; therefore, this violation screens to Morethan-Minor as it aligns with question 9 of Inspection Manual Chapter 0616, Appendix B. The noncompliance did not result in any actual safety significant outcome as the initiating event for the accident sequence did not occur. The potential safety significance was low due to several conditions the licensee can credit (e.g. low fixed combustibles and ignition sources, low cable loading, lower fire ignition frequencies, and fire's zone of influence) to lower the initiating event frequency of the sequence such that the sequence will be highly unlikely. Therefore, the accident sequence frequency of occurrence remained highly unlikely with sufficient margin for safety. This is a Severity Level IV violation as it aligns with example 6.2.d.1 of the "NRC Enforcement Policy."

<u>Enforcement</u>: 10 CFR 70.62(d) states, in part, that management measures shall ensure that engineered and administrative controls and control systems that are identified as IROFS pursuant to 10 CFR 70.61(e) of this subpart are designed, implemented, and

maintained, as necessary, to ensure they are available and reliable to perform their function when needed. Contrary to the above, on and before January 18, 2016, the licensee failed to establish management measures to ensure that IROFS 301-18 remained available and reliable to perform its intended safety function. The violation resulted in no actual and a low potential safety consequence as the accidence sequence remained highly unlikely. The licensee immediately captured the event as CR 18024 in their corrective action program and initiated a non-conformance analysis report. As an immediate corrective action the licensee issued Temporary Operating Procedure 21705, which required the butterfly valve above the bottle to be closed when the furnace is in use, required the particulate collection bottle to be emptied at the beginning of each shift, diagramed locations in the system to knock down trapped material during the bottle emptying process, and established a log to record the mass of uranium that is collected each shift. No other areas were found to be impacted by the extent of condition, and the licensee conducted an apparent cause analysis. As a long term corrective action, the licensee will replace the polymer bottles with stainless steel containers and update the ISA to reflect the changes. This non-repetitive, non-willful licensee-identified and corrected violation is being treated as a Non-cited Violation, consistent with Section 2.3.2.b of the Enforcement Policy. The violation was captured by licensee's CAP as CR 21403. (NCV 70-1113/2016-003-01, "Loss of an IROFS preventing a criticality for a fire sequence")

The Licensee Event Report 2016-001 and the violation are considered closed.

D. <u>Exit Meeting</u>

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 April 28, 2016, with Adam Hilton, Facility Manager, and other members of the licensee's staff. No dissenting comments were received from the licensee. Proprietary information was discussed but not included in the report.

SUPPLEMENTAL INFORMATION

1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
J. Berger	Manager, Powder Production and Support Shop
M. Dodds	Senior Criticality Safety Engineer
A. Hilton	FMO Facility Manager
A. Humphreys	Manager, Configuration Management
M. Huntley	Nuclear Measurement Engineer
S. Murray	Manager, Facility Licensing
D. Nay	FMO Manufacturing Engineering Manager
P. Ollis	Facility Licensing
J. Reeves	Manager, Integrated Safety Analysis
J. Rohner	Manager, Criticality Safety Program
E. Saito	EHS Manager
K. Smith	DCP Area Engineer

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened & Closed

70-1113/2016-003-01 NCV Loss of an IROFS preventing a criticality for a fire sequence (Paragraph C.1)

3. INSPECTION PROCEDURES USED

88015	Nuclear Criticality Safety
88020	Operational Safety
88070	Permanent Plant Modifications

4. DOCUMENTS REVIEWED

Records:

Operation Training Records (Furnace, Grinder, Press) – IROFS and NCS CALC-900-006, SNM Powder Spill Frequency, Revision (Rev.) 0, dated May 2015 CR 13990, Relocate Line 3 Recycle Moisture Probe Al32400: 13990 CR 14131, Create New CSA for Processing Sintered Pellets: 14131 CR 14256, QRA-701 Sole IROFS Elimination (Decon Controls): 14256 CR 14340, Decon CSA Update: 14340 CR 14420, Update Documents for New Sintered Pellet Safe Mass Limit: 14420 CR 14610, Implement New IROFS for Cold Trap Pressure CR 14611, Implement New IROFS for Cold Trap Pressure CR 15606, Implement New IROFS for Cold Trap Weight CR 15611, FTI for Cold Trap Pressure Interlock CR 15612, FTI for Cold Trap Pressure Interlock CR 15613, FTI for Cold Trap Weight Interlock A CR 15614, FTI for Cold Trap Weight Interlock B CR 15614, FTI for Cold Trap Weight Interlock B CR 15745, Implement Sintered Pellet CSA: 15745

- CR 18000, ISA Calc Powder Spill Frequency OE: 18000
- CR 18012, DSR Hatching Valves: 18012
- CR 18145, Update Alarm Setpoint and Tune Users on Provox: 18145
- CSA 800.01, "General Can Storage," Rev. 1
- CSA 900.01, "Moderation Limits," Rev. 0
- CSA 900.03, "Sintered Pellets," Rev 0
- LS 2310.00.05, "CAAS Horn Test Log," dated March 15, 2016
- LS 2310.006, "Detector Functionality Test Log," dated: May 28, 2015, May 29, 2015, and June 4, 2015
- LS 2310.006, "Detector Trip Test 2 of 3 Functionality Log," dated May 29, 2015 June 3, 2015
- Radworker 1 Nuclear criticality Safety Training, 2015

Radworker 2 Nuclear criticality Safety Training, 2015

Procedures:

CP-06-100, Procedure Control Process, Rev. 15

- CP-06-216, Functional Test Instructions, Rev. 1.0
- CP-17-103, Nuclear Safety Records, Rev. 1
- CP-18-104, EH&S Regulatory Compliance Audit, Rev. 3.0
- CP-20-103, Nuclear Safety Training, Rev. 2
- CP-27-104, Nuclear Safety Assurance, Rev. 1.1

OP 1030.20.100, UO2 Sintering Furnace #2 General Information, Rev. 3

OP 1030.20.203, UO2 Sintering Furnace #2 Normal Operations, Rev. 3

OP 1210.00.100, Dry Scrap Recycle Furnace General Information, Rev. 0

OP 1210.00.206, Dry Scrap Recycle Furnace Operator Maintenance, Rev. 0

OP 1210.00.204, Dry Scrap Recycle Furnace Abnormal Operations, Rev. 0

OP 1210.00.203, Dry Scrap Recycle Furnace Shutdown and Cleanout, Rev. 0

OP 1210.00.300, Dry Scrap Recycle Furnace Process Information, Rev. 0

OP 1210.00.201, Dry Scrap Recycle Furnace Start up, Rev. 0

OP 1341.00.300, DCP Second Floor Additive Make up Process Information, Rev. 0

OP 1341.00.203, DCP Second Floor Additive Make up Basic Operator Maintenance, Rev. 0

OP 1341.00.201, DCP Second Floor Additive Make up Normal Operation, Rev. 1

OP 1340.00.300, DCP First Floor Additive Make up Process Information, Rev 0

- OP 1340.00.203, DCP First Floor Additive Make up Basic Operator Maintenance, Rev. 0
- TOP 20661, CAA Temporary Operating Procedure, Rev. 0
- TOP 21075, CAA Temporary Operating Procedure, Rev. 1

WI-16-106-01, GNF Change Management Process (CMP), Rev. 1.0

WI-18-104-02, Internal Nuclear Safety Audits, Rev. 2

- WI-27-104-03, Nuclear Safety Reviews, Rev. 0
- WI-27-104-04, Nuclear Safety Design Criteria, Rev. 2

WI-27-105-25, HVAC Surveys to Detect Uranium accumulation, Rev. 4

Condition Reports Written as a Result of the Inspection: CR 19211, CR 19237, CR 19238, CR 19239, CR 19239, CR 19240.

Condition Reports Reviewed:

CR 15119, CR 15322, CR 15542, CR 15745, CR 16029, CR 16132, CR 16328, CR 17165, CR 17374, CR 17427, CR 17439, CR 17530, CR 17625, CR 17656, CR 17679, CR 17713, CR 17714, CR 17721, CR 17846, CR 17914, CR 18024, CR 18055, CR 18078, CR 18267, CR 18275, CR 18487, CR 18490, CR 18726, CR 21220

Other Documents:

Equivalency Evaluations for James Reeves, James DeGolyer, and Jonathan Rohner KATS System Data – Training Document 201-13 (CR 14611)

QRA-201, DCP-Vaporization, Rev. 9, dated October 30, 2015

Quantitative Risk Analysis (QRA) Author Qualification Card for Monica Gaul

TD 301-18, Furnace Off-gas Particulate Collection Bottle Inspections

WO 125500, Calibration of PT-21143 Cold Trap Outlet UF6 Pressure, 09-Feb-15

- WO 233234, Quarterly Calibration Inspection DCP Line 2 Cold Trap Non-Accountability Scale, dated February 8, 2016
- WO 238611, Quarterly Calibration Inspection DCP Line 1 Cold Trap Non-Accountability Scale, dated March 5, 2016
- WO 239759, Quarterly Calibration Inspection DCP Line 3 Cold Trap Non-Accountability Scale, dated April 14, 2016