

April 5, 2012

Ms. Nicole Holmes
COO and Facility Manager
Global Nuclear Fuel - Americas, LLC
P.O. Box 780
Wilmington, NC 28402

SUBJECT: INSPECTION REPORT NO. 70-1113/2012-201 AND NOTICE OF VIOLATION

Dear Ms. Holmes:

The U.S. Nuclear Regulatory Commission (NRC) conducted a routine, announced nuclear criticality safety (NCS) inspection of your facility in Wilmington, North Carolina, March 5-8, 2012. The purpose of the inspection was to determine whether operations involving Special Nuclear Material were conducted safely and in accordance with regulatory requirements. Inspection observations and findings were discussed with members of your staff and management throughout the inspection. An exit meeting was conducted at the conclusion of the inspection on March 8, 2012.

The inspection, which is described in the enclosure, focused on the most hazardous activities and plant conditions; the most important controls relied on for safety and their analytical basis; and the principal management measures for ensuring controls are available and reliable to perform their functions relied on for safety. The inspection consisted of analytical basis review, selective review of related procedures and records, examinations of relevant NCS-related equipment, interviews with NCS engineers and plant personnel, and facility walkdowns to observe plant conditions and activities related to safety basis assumptions and related NCS controls. Throughout this inspection, observations were discussed with your managers and staff.

Based on the results of this inspection, the NRC has determined that two violations of NRC requirements occurred. The violations were evaluated in accordance with the NRC Enforcement Policy included on the NRC's web site at www.nrc.gov; select What We Do, Enforcement, then Enforcement Policy. The first violation is being cited in the enclosed Notice of Violations (Notice) as a Severity Level IV violation, and the circumstances surrounding it are described in detail in the subject inspection report. The violation is being cited in the Notice because it was identified as the result of events or NRC inspection. The violation being cited as a Severity Level IV violation is the failure to maintain double contingency control for the Gadolinia Rotary Press Valve. The second violation is a licensee-identified violation that is being treated as a Non-Cited Violation (NCV), consistent with Section 2.3.2.b of the Enforcement Policy. The NCV is described in the subject inspection report.

N. Holmes

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In accordance with Title 10 of the *Code of Federal Regulations* 2.390 of NRC's "Rules of Practice," a copy of this letter and the enclosure will be made publicly available in the public electronic reading room of the NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/ADAMS.html>.

If you have any questions concerning this report, please contact Thomas Marenchin, of my staff, at (301) 492-3209.

Sincerely,

/RA/

Thomas G. Hiltz, Chief
Technical Support Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No. 70-1113

Enclosures:

1. Notice of Violation
2. Inspection Report No. 70-1113/2012-201

Attachment:

Supplementary Information

cc: w/enclosures:

Scott Murray
Global Nuclear Fuels - Americas, LLC

cc: w/o enclosures:

Beverly O. Hall
North Carolina Department of Environmental
Health and Natural Resources

N. Holmes

-2-

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NOTICE OF VIOLATION

Global Nuclear Fuel - Americas, LLC
Wilmington, NC

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

During a Nuclear Regulatory Commission (NRC) inspection from March 5 through 8, 2012, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Safety Condition No. S-1 of Special Nuclear Material License No. 1097 requires that material be used in accordance with the statements, representations, and conditions of the application dated April 2, 2007, and November 25, 2008; and supplements thereto.

License application Section 5.1.1, Nuclear Criticality Design Philosophy, states that process designs shall incorporate sufficient margins of safety to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality accident is possible. For each process that has accident sequences that could result in an inadvertent nuclear criticality, a defense of one or more system parameters provided by at least two independent controls is documented in the criticality safety analysis, which is reviewed and enforced.

Contrary to the above, on February 13, 2012, the licensee failed to incorporate sufficient margins of safety into the process design to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality accident is possible. Specifically, the licensee conducted operations of the Gadolinia Rotary Press Valve without a defense of system parameters provided by at least two independent controls. Such operational activities permitted the possibility of a criticality accident with only one change in process conditions.

This is a Severity Level IV Violation (Section 6.2 Fuel Cycle Operations).

Pursuant to the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) 2.201, Global Nuclear Fuel - Americas, LLC is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with copies to the Chief, Technical Support Branch, Division of Fuel Cycle Safety and Safeguards, Nuclear Material Safety and Safeguards, and Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other actions as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time. If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction

Dated this 5th day of April.

**U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS**

Docket No.: 70-1113

License No.: SNM-1097

Report No.: 70-1113/2012-201

Licensee: Global Nuclear Fuel - Americas, LLC

Location: Wilmington, North Carolina

Inspection Dates: March 5-8, 2012

Inspector: Thomas Marenchin, Criticality Safety Inspector
Timothy Sippel, Criticality Safety Inspector
Sheena Whaley, Criticality Safety Inspector

Approved: Thomas G. Hiltz, Chief
Technical Support Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas, LLC, Fuel Fabrication Facility NRC Inspection Report 70-1113/2012-201

Introduction

Staff of the U.S. Nuclear Regulatory Commission (NRC) performed a routine and announced nuclear criticality safety (NCS) inspection at Global Nuclear Fuel - Americas (GNF-A), LLC, fuel fabrication facility in Wilmington, North Carolina, from March 5-8, 2012, which included an onsite review of the licensee's NCS program, NCS analyses, NCS-related audits and investigations, and plant operations. The inspection focused on risk-significant fissile material processing activities, including the dry conversion process, dry scrap recovery, gadolinium scrap recovery, pellet pressing operations, outside storage pads, bundle assembly areas, sintering furnaces, gadolinium processing, waste recovery, and ceramics.

Results

- A Severity Level IV violation and a Non-Cited Violation (NCV) were identified during review of the NCS event review and follow-up.
- No safety concerns were identified during review of the licensee's NCS program and NCS analyses.
- No safety concerns were identified during review of NCS administrative and operating procedures.
- No safety concerns were identified during review of NCS audits.
- No safety concerns were identified regarding NCS training.
- No safety concerns were identified during walkdowns of plant operations.

REPORT DETAILS

1.0 Plant Status

GNF-A, LLC, manufactures uranium dioxide (UO₂) powder, pellets, and light water reactor fuel bundles at its Wilmington, NC facility. During the inspection, the facility was converting uranium hexafluoride UF₆ to UO₂ in dry conversion process (DCP) and performing normal powder, UO₂ and gadolinia pellet and fuel fabrication operations. Waste operations consisted primarily of packaging and storage of dry waste and processing of wet sanitary waste.

2.0 Nuclear Criticality Safety Program (IP 88015 & 88016)

a. Inspection Scope

The inspectors reviewed NCS analyses to determine that criticality safety of risk-significant operations was assured through engineered and administrative controls, with adequate safety margin and preparation and review by qualified staff. The inspectors accompanied NCS and other technical staff on walkdowns of NCS controls in selected plant areas. The inspectors reviewed selected aspects of the following documents:

- CSA 1910.00, "FMO Radwaste Annular Vessels," Revision 3, dated March 3, 2012
- CSA 2200.00, "UO₂ Powder Receipt," Revision 4, dated March 1, 2012
- CSA 2310.01, "Secondary Exhaust HEPA Filter Systems," Revision 3, dated October 26, 2007
- CSA 2310.02, "Recirculation HEPA Filter System," Revision 2, dated December 6, 2011
- CSA "UF₆ Cylinder Storage and UF₆ Heel Cylinder Shipment," Revision 3, dated January 6, 2012
- CSA "Chemet Lab," Revision 9, dated December 2, 2011
- NSI O-15, "HVAC Systems Audits & Inspections," Revision 39, dated February 27, 2012
- NSR/R 05.02.01, "Gadolinia Ground General," Revision 12, dated January 9, 2012
- NSR/R 05.02.35, "Gadolinia Ground Grinder-Feed," Revision 4, dated May 31, 2007
- NFS/R 05.04.06, "Gadolinia Mezz-MRA Dump-Hood," Revision 5, dated November 16, 2005
- NSR/R 05.05.04, "Gadolinia Recycle Furnace," Revision 2, dated May 28, 2010
- NSR/R 05.05.11, "Gadolinia Recycle Utility-Hood," Revision 2, dated February 9, 2010
- TOP-9391, "Weekly Grinder Head Clean Out," Revision 1, dated March 5, 2012
- QRA-207, "Powder Pack/Receipt," Revision 0, dated June 30, 2011
- WI-27-104-01, "Safety and Security Event Communication and Notification," Revision 1, dated October 19, 2011
- WI-27-104-04, "Nuclear Safety Design Criteria," Revision 0, dated July 29, 2011

b. Observations and Findings

The inspectors determined that NCS analyses were performed by qualified NCS engineers, and independent reviews completed for the evaluations by other qualified NCS engineers. The inspectors determined that appropriate NCS controls were identified in NCS analyses and that the controls assured the safety of the operations.

c. Conclusions

No safety concerns were identified during review of the licensee's NCS program and NCS analyses.

3.0 Nuclear Criticality Safety Inspections, Audits, and Investigations (IP 88015)

a. Inspection Scope

The inspectors reviewed the licensee's internal audit procedures, records of previously completed audits of fissile material operations, and records of NCS infractions. The inspectors observed a licensee's audit team conduct an audit of the analytical laboratories. The inspectors reviewed selected aspects of the following documents:

- NSI No. E-2.0 Rev. 49, "Internal Nuclear Safety Audits."
- NCS Audit logbook for 2011 and 2012

b. Observations and Findings

The NRC reviewed the audits performed during the period of October, 2011 to March 6, 2012 using the GNF audit procedure NSI No. E-2.0 Rev. 49, "Internal Nuclear Safety Audits." Audits are performed on a quarterly basis for all areas and all observations, findings and potential non-compliances are documented and tracked until closed. This procedure was revised in response to an internal assessment that determined that two previous audits had missed identification of out of tolerance fissile material containers. The revised procedure includes a checklist for audit preparation such as review of NCS criticality safety analyses (CSA) requirements and records relevant to the audit scope. The inspectors found that NCS audits were conducted according to procedural requirements. The inspectors noted that NCS audits were focused on determining that plant operational requirements conform to those listed in the applicable NCS specification documents. The inspectors observed that licensee staff carried a copy of the applicable NCS requirements; examined NCS postings, labels, and other controls; and identified appropriate NCS-related deficiencies.

The audit program includes a periodic review of audits by NCS management to determine if there are any trends. The NCS engineer was not aware of what was done if trends were found. NRC inspectors interviewed the previous NCS manager who stated that if trends were found, he would discuss these with the responsible Area Manager to determine appropriate corrective actions but that this was done informally and usually not documented. NRC noted that it would be a good practice to formalize this process.

c. Conclusions

No safety concerns were identified during review of NCS audits.

4.0 Nuclear Critically Safety Event Review and Follow-up (IP 88015 & 88016)

a. Inspection Scope

The inspectors reviewed a recent NCS-related event that the licensee had reported to NRC. Also, the inspectors reviewed the licensee's response to internally reported events. The inspectors reviewed the progress of investigations and interviewed licensee staff regarding immediate and long-term corrective actions. The inspectors reviewed selected aspects of the following documents:

- ATS 3622, dated 11/21/11
- CSA 1020.00, "Rotary Press Unit Analysis," Revision 5, dated January 27, 2012
- CSA, "Heterogeneous Storage in 3 or 5-Gallon Cans," Revision 2, dated November 5, 2002
- MC&A Procedure 304, "Material Type Designation and Maintenance," Revision 0, dated December 2, 2011
- NSR/R 04.06.25, "Pad 6," Revision 15, dated February 1, 2012
- NSR/R 04.06.30, "Pad 1," Revision 9, dated February 1, 2012
- NSR/R 05.02.41, "Gadolinia Ground Rotary-Press," Revision 9, dated January, 30, 2012
- TOP-9286, "Supplemental Gadolinia Press, Slugger, and Sward Press Instructions," Revision 0, dated February 13, 2012
- OP 1080.12, "Outside Pad Storage," Revision 32, dated February 1, 2012

b. Observations and Findings

The inspectors accompanied a licensee's NCS engineer during an in-plant review of a current internal event related to a leaking roof and discussed subsequent corrective actions related to the event. The inspectors observed that licensee internally reportable events were investigated in accordance with written procedures and that appropriate corrective actions were assigned and tracked.

Gadolinia Press Rotary Valve Event

On February 13, 2012, the licensee was conducting an enrichment cleanout of the Gadolinia Press Rotary Valve and associated equipment. This operation of the enrichment cleanout is performed frequently (approximately every three days). The Gadolinia Press has a feed hood located in the room above the Gadolinia Press. The operators load powder into the feed hood and the rotary valve below feeds powder into the feed tube leading to the Gadolinia Press. The feed tube has level sensors (low, high, and high-high) on the tube to initiate the rotary valve to feed material (low) or to stop the rotary valve (high). The high level sensor is the sole items relied on for safety (IROFS) for a fire accident sequence resulting in a criticality accident associated with the Gadolinia Press. When the high level sensor activates it stops the rotary valve and thus shuts powder from being loaded into the Gadolinia Press. The high-high sense activates a blue light in the area to notify the operators of a problem but the sensor does not have any associated safety function.

While the licensee was reassembling the rotary valve on the February 13th the valve did not seat properly. Due to this error there was an open pathway for powder from the feed

hood to enter the feed tube. The operator on the morning of February 13th loaded three cans of material (approximately 43 kgs of material) to the feed hood as part of the verification to ensure proper valve installation. Due to the improper seating of the rotary valve the material was able to enter the feed tube. At the time the third can was emptied the operator realized that the material was not staying in the feed hood and the blue light associated with the high-high level sensor came on. The safety function of the high level sensor was to limit the amount of material in the feed tube to less than a safe mass of material (36 kgs).

The licensee had determined that an initiating event probability for a fire event was 3.7×10^{-4} per year and thus almost highly unlikely without any additional controls. Due to the accident scenario not meeting the performance requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 70.61 the licensee choose to use the high level sensor on the feed tube as an IROFS. The initiating event probability and the sole IROFS allowed the licensee to meet the performance requirements of 10 CFR 70.61 using their integrated safety analysis (ISA) methodology and their license commitment of the double contingency principle.

The inspectors determined that due to 43 kgs of material accumulating in the feed tube which is above the limit of 36 kgs that the licensee had lost their mass control on the process. The inspectors do acknowledge the low likelihood that a large fire would occur in addition to the overhead automatic fire suppression system (sprinklers) and the use of dry carbon dioxide (CO₂) fire extinguishers to fight the fire. The licensee had not performed a detailed fire analysis to demonstrate that if a fire occurred the sprinkler system would extinguish the fire before the feed tube melted. Due to the large fire that may occur and lack of available information to demonstrate that a large fire would not cause both the melting of the feed tube and the sprinklers to activate the inspectors determined that the two controls that the licensee was taking credit for had a common failure mode. The moderation control would fail due to a large fire and the activation of the sprinkler system and the mass control would fail due to the large fire melting the feed tube. Based on this information the inspectors determined that it would only take one change in a process condition (a large fire) to achieve a critical configuration. The inspectors determine that that only one process condition remained preventing a nuclear criticality. The inspectors also determined that due to the short duration of the loss of the mass control, the event had low safety significance. The inadequate management measures that had been applied to the mass control on the feed tube was a contributing cause of the failure to maintain double contingency control for the Gadolinia Rotary Press Valve event. A Region II inspection report that covers Operational Safety (Inspection Procedure 88020) will cover other aspects of this event separate from the failure to maintain double contingency discussed above.

Section 5.1.1 of the license application requires that process designs shall incorporate sufficient margins of safety to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality accident is possible. For each significant portion of the process, a defense of one or more system parameters is documented in the CSA, which is reviewed and enforced. The failure to maintain double contingency control for the Gadolinia Rotary Press Valve was considered **Violation (VIO) 70-1113/2012-201-01.**

Event Report 47380

On October 26th, 2011, the licensee identified a deficiency during a routine criticality safety review of a proposed revision to an operating procedure for transporting and storing 3-gallon cans. The licensee had imposed different mass limits for heterogeneous and homogeneous forms of Uranium. However, the lower mass limit had not been incorporated into procedures and NSR/Rs for the outside pad storage. As a result one of the controls needed to meet double contingency was not available to restrict the movement of cans that exceeded the lower mass limit for heterogeneous Uranium.

This resulted in a condition where the mass control documented in the CSA had not been maintained. The second control used to meet double contingency for the outside pad storage was geometry control, which remained in place. The licensee filed 24-hour and 30-day (ML113270323) reports to the NRC reporting this loss of double contingency as per internal procedures.

During the 1999 to 2005, timeframe, cans with more mass than allowed were moved to this storage location, exceeding the mass limit for heterogeneous Uranium. However, at the time of discovery, there were no uranium cans of this particular type in the designated storage locations and no unsafe condition existed. The inspectors determined that due to the high reliability of the remaining control on geometry and the relatively few cans that exceeded the mass limit, the event had low safety significance.

The licensee promptly initiated comprehensive corrective actions which have since been completed. Their immediate corrective action was to suspend movement of cans containing heterogeneous Uranium to the outside storage pads. Later the operating procedures and NSR/Rs were also revised to not permit heterogeneous material to be stored on the outside storage pads. The licensee identified the probable cause of the event was from the lack of procedural control governing different limits on the same parameter for the same material. So the licensee's long term corrective action was to establish procedure controls to setup a separate material type when there are two different limits for the same material type.

The failure to maintain double contingency control for the 3-gallon cans is **Non-cited Violation (NCV) 70-1113/2012-201-02**. This closes EN 47380.

c. Conclusions

A non-cited violation was identified regarding the failure to maintain double contingency control for the 3-gallon cans. A Severity Level IV violation was identified regarding failure to maintain double contingency control for the Gadolinia Rotary Press Valve.

5.0 Plant Operations (IP 88015)

a. Inspection Scope

The inspectors performed plant walkdowns to review activities in progress and to determine whether risk-significant fissile material operations were being conducted safely and in accordance with regulatory requirements. The inspectors interviewed operators, NCS engineers, and process engineers both before and during walkdowns.

b. Observations and Findings

The inspectors performed walkdowns of the DCP, dry scrap recovery, gadolinium scrap recovery, and pellet pressing operations. The inspectors accompanied a licensee NCS engineer during in-plant IROFS verifications. The inspectors observed that the licensee is in the process of posting IROFS identification stickers on equipment in the facility. The inspectors did not identify any safety concerns during facility walkdowns.

c. Conclusions

No safety concerns were identified during walkdowns of plant operations.

6.0 NCS Training and Qualifications (IP 88015)

a. Inspection Scope

Three qualification records were reviewed using GNF's qualification manual, General Electric-Hitachi Criticality Safety Engineer Training and Qualification Manual, Rev. 4, 12/2010 for the following NCS staff records:

NS-01-003, Criticality Safety Engineer qualification record
NS-01-002, Criticality Safety Engineer qualification record
NS-01-001, Senior Criticality Safety Engineer qualification record

The NRC staff also interviewed newly qualified staff and went on a plant tour.

b. Observations and Findings

Since the last NCS inspection, three engineers have become qualified in the NCS discipline at GNF. Two of the licensee staff has no prior experience as NCS engineers. The third engineer has extensive prior experience as an NCS engineer at various U.S. Department of Energy sites. The qualification records indicated that these personnel met the minimum requirements for an engineer within the NCS function. This included becoming familiar with GNF operations and performing NCS criticality safety analyses (CSAs), as well as working through examples in the training manual.

The NRC staff accompanied one of the newly qualified engineers on a walkdown of the dry conversion facility. The NCS engineer was very knowledgeable of the operation. Additionally, the NRC interviewed two engineers regarding the qualification process, including the use of the qualification manual. Both engineers stated that to become qualified, they were required to perform the requirements listed in the training and qualification manual. Finally, the NRC also reviewed and discussed some the NCS CSAs that were listed in their qualification records. Based upon this review, the NRC staff determined that GNF is following its training and qualification program for NCS engineers.

c. Conclusions

No safety concerns were identified with the NCS engineer training and qualification program.

7.0 Exit Meeting

The inspector communicated observations and findings to the licensee's management and staff throughout the week of the inspection and presented the final results to the licensee's management during an exit meeting held on March 8, 2012. The licensee's management acknowledged the results of the inspection and understood the findings presented.

SUPPLEMENTARY INFORMATION

1.0 Items Opened, Closed, and Discussed

Items Opened

(VIO) 70-1113/2012-201-01 The licensee's failure to maintain double contingency control for the Gadolinia Rotary Press Valve

(NCV) 70-1113/2012-201-02 The licensee's failure to maintain double contingency control for 3-gallon can storage

Items Closed

(NCV) 70-1113/2012-201-02 The licensee's failure to maintain double contingency control for 3-gallon can storage

Items Discussed

None

2.0 Event Reports Reviewed

EN 47380 Closed The licensee's failure to maintain double contingency control for 3-gallon can storage

3.0 Inspection Procedures Used

IP 88015 Nuclear Criticality Safety Program
IP 88016 Nuclear Criticality Safety Evaluations and Analyses

4.0 Key Points of Contact

GNF-A

M. Dodds Sr. Criticality Safety Engineer
E. Dunn Criticality Safety Engineer
N. Holmes COO & Facility Manager
U. Latham Licensing and Liabilities
R. Martyn Manager, Material control and Accountability
S. Murray Manager, Licensing
P. Ollis Licensing Engineer
L. Paulson Manager, Nuclear Safety Programs
J. Reeves Manager, ISA
J. Reynolds Manager, Fuels EHS
J. Rohner Manager, Criticality Safety Engineer
C. Savage FMO Maintenance
M. Short Manger, PP & SS
M. Venters Manager, Emergency Preparedness and Site Security
A.Vexler FMO Operations Leader

NRC

T. Marenchin, Criticality Safety Inspector
T. Sippel Criticality Safety Inspector
S. Whaley Criticality Safety Inspector

5.0 List of Acronyms and Abbreviations

ADAMS	Agencywide Documents Access and Management System
CSA	criticality safety analysis
CWS	criticality warning system
DCP	dry conversion process
DSR	dry scrap recovery
EN	event notice
FMO	fuel manufacturing operation
GNF-A	Global Nuclear Fuels - America (licensee)
IP	inspection procedure
IROFS	item relied on for safety
MRA	moderator restricted area
NCS	nuclear criticality safety
NMSS	Office of Nuclear Material Safety and Safeguards
NSR/R	Nuclear Safety Release/Requirements
NSI	Nuclear Safety Instruction
OP	Operational Procedure
UO ₂	uranium dioxide
UF ₆	uranium hexafluoride
TOP	Temporary Operating Procedure
WFSC	Wilmington Field Service Center