



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

April 26, 2021

Mr. Mike Annacone  
Vice President, Columbia Fuel Operations and  
Manager, Columbia Plant  
Westinghouse Electric Company  
5801 Bluff Road  
Hopkins, SC 29061

SUBJECT: WESTINGHOUSE ELECTRIC COMPANY – INTEGRATED INSPECTION  
REPORT 07001151/2021001

Dear Mr. Annacone:

On March 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Westinghouse Electric Company. On February 25, March 25, and April 20, 2021, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

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

Docket No. 07001151  
License No. SNM-1107

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: WESTINGHOUSE ELECTRIC COMPANY – INTEGRATED INSPECTION  
 REPORT 07001151/2021001 dated April 26, 2021

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**U.S. NUCLEAR REGULATORY COMMISSION**

**INSPECTION REPORT**

**REGION II**

Docket Number: 07001151

License Number: SNM-1107

Report Number: 07001151/2021001

Enterprise Identifier: I-2021-001-0114

Licensee: Westinghouse Electric Company

Facility: Columbia Fuel Fabrication Facility

Location: Hopkins, SC

Inspection Dates: February 22, 2021 to April 20, 2021

Inspectors: N. Peterka, Fuel Facility Inspector  
N. Pitoniak, Sr. Fuel Facility Project Inspector  
M. Ruffin, Fuel Facility Inspector  
P. Startz, Fuel Facilities Inspector  
T. Vukovinsky, Sr. Fuel Facility Project Inspector

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

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Westinghouse Electric Company, in accordance with the fuel cycle facility inspection program. This is the NRC's program for overseeing the safe operation of licensed fuel cycle facilities. Refer to <https://www.nrc.gov/materials/fuel-cycle-fac.html> for more information.

### **List of Violations**

No violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## REPORT DETAILS

### PLANT STATUS

The Westinghouse Facility converts uranium hexafluoride (UF<sub>6</sub>) into uranium dioxide using a wet conversion process and fabricated fuel assemblies for use in commercial nuclear power reactors. During the inspection period, normal production activities were ongoing.

### INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Inspections were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

### SAFETY OPERATIONS

#### 88015 - Nuclear Criticality Safety

The inspectors evaluated selected aspects of the licensee's Nuclear Criticality Safety program to verify compliance with selected portions of 10 CFR 70 including 70.24, 70.61, and 70.62; Chapter 6, "Nuclear Criticality Safety Program," of the facility's license application; and applicable licensee procedures.

#### Criticality Analysis (IP Section 02.01)

The inspectors interviewed licensee NCS staff and reviewed criticality safety evaluations (CSEs), and supporting documents, to verify compliance with 10 CFR 70 and applicable sections of the license application. Specifically, the inspectors interviewed licensee NCS engineers and reviewed the following documents related to the Scrap Cage, Pelleting Lines, Pellet Grinder Lines, and other operations:

- CSE-3-E, "Criticality Safety Evaluation for the Conversion Line Decanter System and Associated Vessels," Revision (Rev.) 12, including the review of normal, credible abnormal, and non-credible accident sequences
- CSE-3-M, "Criticality Safety Evaluation for the Conversion Quarantine Tank System," Rev. 8, which was reviewed because it contained a variety of calculation and information supporting the licensee's evaluation of accident sequences and IROFS ADUQFLT-128 for backflow prevention
- CSE-8-C, "Criticality Safety Evaluation for the ADU and Erbia Pellet Sintering Lines," Rev. 11, including the review of what-if analysis, normal, credible abnormal, and non-credible accident sequences
- CSE-8-D, "Criticality Safety Evaluation for the Pellet Grinder Lines," Rev. 22, including the review of accident scenarios 1 and 2 which cover various potential mass accumulation scenarios

### Criticality Implementation (IP Section 02.02)

The inspectors selected engineered and administrative controls from the licensee's integrated safety analysis (ISA) summary and reviewed process and system descriptions, drawings, plant walkdowns, and operator interviews to verify that the controls were implemented in accordance with applicable requirements in the license application. Specifically, the inspectors interviewed licensee staff and reviewing the following controls associated with the CSEs listed above:

- administrative mass control IROFS for the pelleting and pellet grinder lines
- passive engineered geometry control IROFS in the pelleting lines
- active engineered control IROFS for scrap cage operations

### Criticality Operational Oversight (IP Section 02.03)

The inspectors assessed the NCS staff's oversight of plant operators, procedures, and operations of systems involving special nuclear material to verify compliance with 10 CFR 70 and applicable sections of the license application. Specifically, the inspectors performed the following activities:

- observed a licensee NCS engineer conduct a weekly audit of the pelleting line operations and reviewed the resulting audit report
- interviewed licensee operations and maintenance personnel on the maintenance and operation of the criticality accident alarm system
- interviewed licensee pelleting engineer on the setpoints and maintenance of the active engineered controls

### Criticality Programmatic Oversight (IP Section 02.04)

The inspectors reviewed NCS program procedures, and audits to verify compliance with 10 CFR 70 and applicable sections of the license application. Specifically, the inspectors interviewed licensee NCS staff and reviewed the following documents:

- the most recent triennial external audit of the licensee's NCS program which was documented in the EHS Audit for the Nuclear Criticality Safety Program, dated November 12, 2020
- the most recent revision to the licensee's procedure for maintaining and testing their criticality accident alarm system, MCP-202037, "GA-6M Criticality Alarm Calibration and SSC Verification (AC-Plant-1-01)," Rev. 32

### Criticality Incident Response and Corrective Action (IP Section 02.05)

The inspectors reviewed the licensee's criticality accident alarm system (CAAS) and corrective action program (CAP) to verify compliance with 10 CFR 70 and applicable sections of the license application. Specifically, the inspectors reviewed documents, and interviewed licensee staff concerning the following:

- recent NCS events, their associated corrective actions, and the reportability determination documented by licensee NCS staff including IR-2020-1192, IR-2020-9312, IR-2020-13859, IR-2020-13903
- recent CAAS maintenance records and issues including preventative maintenance PM20852a
- recent NCS evacuation drill records and performance for 2020

### 88020 - Operational Safety

The inspectors evaluated selected aspects of the licensee's Operational Safety program to verify compliance with selected portions of 10 CFR 70.24, 70.61, 70.62, and Chapter 3, "Management Measures," of the facility's license application, and applicable licensee procedures.

### Identification of Safety Controls and Related Programs (IP Section 02.01)

The inspectors selected specific process areas for inspection based on the safety basis information of the facility, the risk/safety significance of the process areas, the description of plant changes submitted to the NRC, and past plant performance documentation. For the process areas of interest, the inspectors selected a sample of accident sequences in nuclear criticality safety, radiation safety, fire safety, and/or chemical safety based on the information provided in the integrated safety analysis (ISA) summary. The process areas and accident sequences selected for review are listed below:

- ISA-3, Conversion
- ISA-4, Safe Geometry Dissolver (SGD)
- CSE-4-A, Criticality Safety Evaluation for Safe Geometry Dissolver System
- CSE-4-B, Criticality Safety Evaluation for the URRS Sifting/Cleaning Hood
- CSE-4-D, Criticality Safety Evaluation for the URRS Dirty Dissolver Centrifuge
- CSE-3-D, Criticality Safety Evaluation for the ADU Conversion Hydrolysis Column with Passive Overflow, Nitrate Vessel and Precipitator
- CSE-3-M, Criticality Safety Evaluation for the Conversion Quarantine Tank System
- CSE-3-N, Criticality Safety Evaluation for the UF6 Cylinder Receipt and Handling
- Conversion Area
- Uranium Recovery and Recycling Services (URRS)
- East Lagoon and Cylinder Removal Area

## Review of Safety Controls and Related Programs (IP Section 02.02)

The inspectors reviewed process safety controls or items relied on for safety (IROFS) for the above selected accident sequences, including the identification of the licensee's assumptions and bounding cases as they apply to each of the selected accident sequences, safety controls, or IROFS. This review was performed to verify that the controls or IROFS were available and reliable to perform their intended safety functions and that the design basis assumptions were reflected in the actual conditions in the field.

- CSE-4-A, Criticality Safety Evaluation for Safe Geometry Dissolver System
- CSE-4-B, Criticality Safety Evaluation for the URRS Sifting/Cleaning Hood
- CSE-4-D, Criticality Safety Evaluation for the URRS Dirty Dissolver Centrifuge
- IROFS SGD-114, 122, 123, 124, 125, 126, 127, 141, 142, 143, 117, 150, 121, 128, 129, 144, 118, 119, 120, 155, 161, 162, 163, 164, 165, 130, 147, 131, 158, 159, 160, 113
- DPH-101, 102, 113
- SGDCENT-101, 102, 104, 109, 110
- Cylinder Storage Area
- CSE-3-D, Criticality Safety Evaluation for the ADU Conversion Hydrolysis Column with Passive Overflow, Nitrate Vessel and Precipitator
- CSE-3-M, Criticality Safety Evaluation for the Conversion Quarantine Tank System
- CSE-3-N, Criticality Safety Evaluation for the UF6 Cylinder Receipt and Handling
- Quarantine Tanks System
- IROFS ADUHYD-101, 103,104, 105, 106, 908, 910, 911, 912
- IROFS ADUPCP-101, 901
- IROFS ADUQTNK-103, 107, 108, 114

## Implementation of Safety Controls (IP Section 02.03)

For the selected safety controls listed above, the inspectors reviewed management measures to verify proper implementation in accordance with 10 CFR 70 and Section 3.0 of the license application. This review was performed to verify that selected safety controls or IROFS were present, available, and reliable to perform their safety function and that the design basis assumptions were reflected in the actual conditions in the field. The inspectors conducted the following activities to verify the implementation of selected safety controls:

- Conducted walk-downs to verify implementation of IROFS listed above
- Reviewed passive IROFS design characteristics to verify IROFS were capable to perform their design function
  - Independent Technical Review (ITR) for CCF 14573, "Install Additional Drain Holes in Safe Geometry Dissolver Motor Enclosures"
  - Drawing 301F0EQ02.05. r02
  - IROFS DPH-113 Calculation
  - Product Hold Tanks Passive Overflow Calculation (SGD-130)
  - Passive IROFS Basis Documentation Extent of Condition Review
- Reviewed postings and operator aids associated with the clean and dirty dissolvers



- Reviewed procedures associated with the Safe Geometry Dissolver System (procedures listed in document list)
- East Lagoon Closure Work Plan
  - US Ecology, Inc., East Lagoon Closure Work Plan and Cylinder Cutting Plan (Attachment G)
  - CA-002, Columbia Plant Electronic Training and Procedure System (ETAPS)
  - CSE-9-B, Cylinder Wash
  - CSE-9-C, UF6 Cylinder Recertification
  - CA-134, Columbia Plant Significant Event Response Guidelines
- Reviewed procedures associated with the Hydrolysis Operation
- Reviewed procedures associated with the Quarantine Tanks System
- Conducted walk-downs to verify the field conditions matched the design basis assumptions

#### Safety Control Support Programs (IP Section 02.04)

The inspectors assessed additional management measures and license conditions that support the availability and reliability of the selected safety controls to verify these were implemented in accordance with 10 CFR 70 and License Application Chapter 3, "Management Measures," and Chapter 6, "Nuclear Criticality Safety (NCS) Program." Additionally, the inspectors followed-up on the East Lagoon Closure Plan. Specifically, the inspectors conducted the following:

- Reviewed the following OMs
  - OM81012: Q-Tank Raschig Ring Inspection, Ring Level Check and Volume Check
  - OM81201: ADU Line 1
  - OM81202: ADU Line 2
  - OM81205: ADU Line 5
  - OM81204: ADU Line 4
  - OM81203: ADU Line 3
  - OM81030: Hydrolysis Column Passive Overflow
  - OM81051: Precipitation Column Passive Overflow
- Reviewed the following Work Orders (WO)
  - WO 868687
  - WO 872724
  - WO 884422
  - WO 886104
- Reviewed the following Corrective Action Program (CAP) entries/documents:
  - IRs 2020-10329, 2020-9875, 2020-12844, 2020-13034, 2020-14028, 2020-14081,
  - IRs 2021-135, 2021-1231, 2021-3461
- Reviewed the following audits/self-assessments:
  - RAF-316-1, "Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments" for SOLX Operator
  - RAF-316-1, "Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments" for Conversion - Bulk Blending and Containers
  - RAF-316-1, "Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments" for Conversion - Chief Operator

- RAF-316-1, "Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments" for Conversion - Line Operations
- RAF-316-1, "Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments" for Scrap Cage Operator - Ventilation/Common Containers
- Observed activities associated with operation of the Safe Geometry Dissolver
- Observed activities associated with operation of the Conversion Lines and Quarantine Tanks.
- Interviewed conversion operators regarding their job functions on the Conversion Lines and Quarantine Tanks.

### 88055 - Fire Protection

The inspectors evaluated selected aspects of the licensee's fire protection program to determine whether the operational status, material condition and design of fire protection systems met the applicable requirements of 10 CFR 70, Chapter 8, "Fire Safety Program," of the facility's license application, and applicable licensee procedures.

#### Selection of Inspection Samples (IP Section 02.01)

The inspectors reviewed licensing documents to select a sample of fire protection features in risk-significant areas/processes, including items relied on for safety (IROFS) and their respective management measures (where applicable). The inspectors also selected licensee activities that support the implementation of the fire protection program based on the program description included in the license application. Specifically, the inspectors performed reviews of building construction, select fire safety IROFS, select ventilation systems, fire detection and alarm systems, fire suppression equipment and systems, pre-fire plans, basic firefighting equipment, emergency response team training and qualifications, and audits and assessments of the fire safety program:

- CHEM-407H, UF6FIRE-901, SBG-401, SGB-901, AREAFIRE-901
- EHS-AUDIT-20-8, Regulatory Component Audit for the Fire Protection Program, dated February 11, 2021
- Review of records for Fire Brigade training and qualification proficiency

#### Preventative Controls (IP Section 02.02)

The inspectors interviewed licensee staff, reviewed documentation, and conducted plant walk-downs to verify the licensee's controls for combustibles, ignition sources, and inert atmospheres met the license requirements and applicable requirements in 10 CFR 70. Specifically, the inspectors conducted the inspection activities listed below:

- Conducted walkdowns of established welding areas
- Reviewed records associated with shop hot work permits
- Conducted walkdowns of flammable material cabinets to verify compliance with SYP-207
- Verified Cutting, Welding, and Hot Work permit compliance

- Conducted walkdowns for compliance with housekeeping requirements per SYP-300, Housekeeping, Rev. 28
- Conducted walkdowns, and reviewed hydrogen gas valve test data to verify compliance with SYP-122, Hydrogen and Natural Gas Safety, Rev. 0

#### Fire and Gas Detection and Alarm Systems (IP Section 02.03)

The inspectors reviewed selected fire or gas detection devices to verify that detection and alarm systems were able to detect the minimal fire within the required time and initiate the safety function credited in the license application, fire hazard analysis (FHA-13-001), and the ISA Summary. Specifically, the inspectors conducted the inspection activities listed below:

- Reviewed fire alarm test results and observed site fire alarm test activities
- Reviewed drawing 510F08EL05, Electrical Emergency Panel Schedules, Rev. 83 to verify backup power source to alarms system panels
- Conducted walkdowns, interviewed operators, and reviewed work order 877569 CHEM-407 IROFS H2 Valve annual maintenance activities
- Reviewed CHEM-407 IROFS H2 Valve annual testing to verify compliance with the ISA summary

#### Suppression Systems and Activities (IP Section 02.04)

The inspectors interviewed license staff, reviewed fire protection program documents, and conducted plant walk-downs to verify that suppression systems were capable of performing the safety function credited in the license application and the ISA Summary. Specifically, the inspectors performed the following activities:

- Interviewed the facility sprinkler engineer, mechanical maintenance supervisor, facility systems program engineer, and the vendor suppression system test and maintenance specialist
- Reviewed the sprinkler system inspection and replacement plan; reviewed sprinkler system test data and results
- Selected a sample various fire suppression systems to walkdown and inspect
- Conducted walkdowns of various hose stations and fire extinguishers to verify the adequate locations, accessibility, and test requirements
- Conducted walkdowns to ensure adequate emergency coverage was in accordance with licensee procedures
- Reviewed PM20511/20512/20513, Monthly Emergency Light Test (various) to verify compliance with NFPA 101
- Conducted walkdowns of the fire-water pumps and tanks; reviewed inspection and test data for the fire pumps and tanks
- Reviewed modification packages CCF 16388 and 14414, #1 Fire-water Pump and #2 Fire-water replacement pumps, respectively

### Passive Fire Protection Features (IP Section 02.05)

The inspectors reviewed selected passive fire protection features to verify these were in a proper material condition to perform the safety function credited in the license application, fire hazard analysis and the ISA Summary. Specifically, the inspectors performed the following activities:

- Conducted walkdowns of various areas to verify passive fire wall barriers and fire wall penetrations were maintained
- Conducted walkdown of the hot oil room to review passive fire wall structures were maintained
- Reviewed hot oil room ventilation ductwork features to ensure the required fire rating was maintained
- Conducted interviews to verify that licensee surveillance inspections are being conducted to ensure the functionality of fire walls, fire wall penetrations, fire wall dampers, and fire doors

### Fire Protection Program Elements (IP Section 02.06)

The inspectors reviewed selected fire protection program elements to verify compliance with the license requirements. Specifically, the inspectors completed the following activities:

- Reviewed samples of active and closed fire system impairment log entries to verify compensatory measure per procedure SYP-306, CFFF Fire/Criticality System Impairments, Revision 21
- Reviewed detailed training and qualification records for four fire brigade members and interviewed the on shift fire brigade team leader
- Conducted walkdowns of emergency lights and reviewed monthly and annual emergency light test results to verify compliance with NFPA 101
- Conducted walkdowns of the hot oil room, solvent extraction, and the UF6 pad and reviewed associated pre-fire plans to verify compliance with SYP-311, Pre-Fire Plans, Revision 1

### Identification and Resolution of Problems (IP Section 02.07)

The inspectors reviewed the licensee's identification and resolution of fire protection issues to verify compliance with the license requirements. Specifically, the inspectors reviewed the following corrective action program entries, audits, and self-assessments:

- IR-2020-119, 2020-345, 2020-2734, 2020-7716, 2020-9749, 2020-10498, 2020-10499, 2020-10502, 2020-10503, 2020-11181, 2020-11309, 2020-12934, 2020-13694
- EHS-AUDIT-20-8, Regulatory Component Audit for the Fire Protection Program, dated February 11, 2021

## **INSPECTION RESULTS**

No violations of more than minor significance were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On March 25, 2021, the inspectors presented the integrated inspection results to Mike Annacone and other members of the licensee staff.
- On February 25, 2021, the inspectors presented the Exit Meeting inspection results to Anette Pope and other members of the licensee staff.
- On April 20, 2021, the inspectors presented the Operational Safety inspection results to Annette Pope and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
88015	Engineering Evaluations	RAF-316-1	Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments, Pelleting - Pellet Grinding / D&V Operator	02/02/2021
		RAF-316-1	Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments, Conversion - Conversion Operations and Various Containers	02/03/2021
		RAF-316-1	Nuclear Criticality Safety Checklist for NCS Facility Walkthrough Assessments, IFBA FA1	02/02/2021
	Miscellaneous	TRN-001-2	Radiation Protection Criticality Safety SSCs Safeguards	2020
	Procedures	CN-SB-18-001	Integrated Safety Analysis Handbook	4
		COP-815412	Changing Wet Filters in the Conversion/Scrap Area (CSA)	26
		MCP-202037	Criticality Alarm Calibration and SSC Verification (AC-Plant-1-01)	32
	Self-Assessments	RAF-106-1-00017	NCS Triennial Audit	11/12/2020
	Work Orders	CFFF-Dispatch #25958	26 Weeks PM20852a SI-Safety, Instrument Calibration, STA-6B Nuclear Incident Alarm STA-6B	02/01/2021
		CFFF-Dispatch #26396	26 Weeks PM20852a SI-Safety, Instrument Calibration, STA-12A Nuclear Incident Alarm STA-12A	02/01/2021
88020	Corrective Action Documents	CAP IR 2017-881, Passive IROFS Basis Documentation Extent of Condition Review		12/20/2020
		IR-2021-3461		3/22/2021
	Corrective Action Documents Resulting from Inspection	2021-3688, SGD-142 As-Built Design		3/26/2021
		2021-3713, Passive IROFS Observation		3/26/2021
		2021-3714, Housekeeping Issues		3/26/2021
		2021-3818, Records of		3/30/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		10CFR70.72 review of "Activities of Personnel" on site		
	Engineering Evaluations	PSEDoc-007355, Motor Enclosure and Hood Drain Calculations (SGD-127)		10/2/2020
	Miscellaneous	PM85042, 52 Weeks PM85042 SI-Safety, Water Backflow Prevention Verification		10/20/2020
		WEC1022 Move Report		3/17/2021
	Procedures	CA-002, Columbia Plant Electronic Training and Procedure System (ETAPS)		67
		CA-134, Columbia Plant Significant Event Response Guidelines		2
		CF-20-030, Backflow Device Test Report Form		3
		CF-81-015, Conversion Field Data Checklist for Conversion Line		74
		CF-81-201, Glass Raschig Ring Measurements Conversion Line Q-Tanks		14

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CF-81-941, Conversion Line 5: Safety Significant Interlocks, Alarms & Passive Engineered Controls Functionality Verification Form		60
		COP-801201, Hydrolysis Operation		44
		COP-810093, Chemical Operating Procedure Conversion Area		15
		COP-810705, Glass Volume Check and Inspection of Conversion Line Q- Tanks		26
		COP-811601, Quarantine Tanks System: Operations, Bank Switching, Online Gamma Activity Monitors		46
		COP-811602, Acid Wash of Conversion Line Q-Tanks		29
		COP-816001, Pressure Test of UF6 Supply and Eduction Lines		23
		COP-816022, Chemical Operating Procedure		1



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Conversion Area		
		COP-836025, C-4 Dissolvers - Clean Dissolver Startup and Operation		44
		COP-836027, C-4 Dissolvers - Dirty Dissolver Startup and Operation		39
		COP-836051, Activity Monitors on Chemical Area Cooling Tower Operation		1
		CSE-3-D, Criticality Safety Evaluation for the ADU Conversion Hydrolysis Column with Passive Overflow, Nitrate Vessel and Precipitator		5
		CSE-3-M, Criticality Safety Evaluation for the Conversion Quarantine Tank System		8
		CSE-3-N, Criticality Safety Evaluation for the UF6 Cylinder Receipt and Handling		11
		CSE-4-A, Criticality Safety Evaluation for the Safe Geometry Dissolver		15

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		System		
		CSE-4-B, Criticality Safety Evaluation for the URRS Sifting/Cleaning Hood		5
		CSE-4-D, Criticality Safety Evaluation for the URRS Dirty Dissolver Centrifuge		4
		CSE-9-B, Cylinder Wash		7
		CSE-9-C, UF6 Cylinder Recertification		2
		EHS Letter-21-12, East Lagoon Closure Work Plan		Revision G
		MCP-108241, Backflow Preventers - Inspection and Testing Procedure		2
		MCP-202225, Chemical Cooling Tower 8351A/B Gamma Activity Monitor Calibration and COOL-100 Alarm Verification		3
		MCP-203350, Verification of Instrumented Safety Function ADUHYD-910: V-X02 High Temperature		8
		MCP-203351,		10

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Maintenance and Calibration Operating Procedure Calibration Area		
		MCP-203355, Verification of Instrumented Safety Function ADUHYD-105, ADUHYD-106: V-X02 Recirculation Flow Low		11
		MCP-203356, Verification of Instrumented Safety Function ADUPCP-901: Precipitator V-X05 High Level		12
		MCP-203395, Maintenance and Calibration Operating Procedure Calibration Area		0
		MCP-203676, Verification of Instrumented Safety Functions ADUHYD-913: UF6 Maintenance Mode and ADUHYD-914: UF6 Line Nitrogen Purge Mode		13
		SOI-C-0636, Cutting WEC0996 (UF6 Cylinder) in the URRS Decon		7/12/2013

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Room		
		SOI-U-287, Cylinder Recertification Building Downgrade		11/27/19
		TR-303, Move UF6 Cylinders		0 and 15
		TR-303, US Transport Operations Procedure		15
	Self-Assessments	RAF-316-1, Bulk Blending Operations		8/25/2020
		RAF-316-1, Conversion - Chief Operator		8/25/2020
		RAF-316-1, Conversion Line Operator		8/25/2020
		RAF-316-1, Scrap Cage Operator - Ventilation/Common Containers		8/26/2020
		RAF-316-1, URRS SOLX Operator		12/10/2020
		RAF-316-1, URRS SOLX Operator		3/31/2020
	Work Orders	CF-81-932, Conversion Line 1: Safety Significant Interlocks, Alarms and Passive Engineered Controls Functionality Verification Form		3/2/2021
	88055	Drawings	347F04HV01	Hot Oil Room HVAC

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		510F01EL03	Fire Protection Overall Plan Major Cabinet Locations	17
		510F08EL05	Electrical Emergency Panel Schedules	83
	Fire Plans		Fire Pre-Plan 72: UF6 Bay and Hot Oil Room	
			Fire Pre-Plan 77: URRS SOLX, Incinerator, Dissolver	
	Miscellaneous		Integrated Safety Analysis of the CFFF Site and Structures	15.1
			Site Emergency Plan for the Columbia Fuel Fabrication Facility	21
		CCF 14414	Replace #2 Diesel Fire Pump	08/05/2014
		CFF 16388	Replace # Diesel Driven Fire Pump	06/29/2016
		CHEM-04	Fire Hazard Analysis, Appendix CHEM-04 UF6 Bay	0
		PM20009	Monthly Sprinkler System Preventive Maintenance	
		PM20209	Preventive Maintenance for CHEM-407	
		SNM-1107	License Renewal Application	01/22/2021
	Procedures	SYP-122	Hydrogen and Natural Gas Safety	0
		SYP-207	Cutting, Welding, and Hot Work	38
		SYP-300	Housekeeping	28
		SYP-301	Handling and Storage of Zirconium and Its Alloys	17
		SYP-303	Portable Fire Extinguisher Inspection and Maintenance	12
		SYP-305	Fire Watch Safety	10
		SYP-306	CFFF Fire/Criticality System Impairment	21
		SYP-311	Pre-Fire Plans	1
	Self-Assessments	EHS-AUDIT-20-8	Regulatory Component Audit for the Fire Protection Program	02/11/2021
	Work Orders		WO884609	
		877569	52-Week PM - H2 Valve Replacement	03/04/2020
		CFFF Dispatch 9182	52-Week Sprinkler PM	