



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

January 21, 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 – U. S. NUCLEAR REGULATORY
COMMISSION INTEGRATED INSPECTION REPORT NUMBER 70-1151/2020-004**

Dear Mr. Annacone:

This letter refers to the inspections conducted from October 1, 2020, through December 31, 2020, at the Westinghouse Columbia Fuel Fabrication Facility in Hopkins, SC. During that period, the U. S. Nuclear Regulatory Commission (NRC) completed routine, on-site and remote inspections as permitted by conditions that existed at that time involving the novel coronavirus disease (COVID-19).

The enclosed report presents the results of the inspections, which were conducted through a combination of document reviews, interviews, and on-site observations. The inspectors reviewed activities as they relate to public health and safety, the common defense and security, and compliance with the Commission's rules and regulations, as well as the conditions of your license. The inspections covered the areas of Safety Operations and Facility Support. The findings were discussed with you and members of your staff at an exit meeting held on December 3, 2020.

Based on the results of these modified inspections, no violations of more than minor significance were identified.

Additionally, the inspectors implemented measures during the inspection period to support the determination of reasonable assurance that the public and the environment will be adequately protected from the hazards related to the operation of your facility. These compensatory measures included activities such as supplemental reviews of licensee-submitted reports (e.g. effluent reports, plant modification reports, and changes to the Integrated Safety Analysis Summary) and increased communications with your staff to discuss the status of plant operations. The compensatory measures did not constitute direct inspection and were intended to address the impact of the COVID-19 public health emergency on the agency's routine oversight program, particularly on the continuous engagement with your facility via periodic site visits and in-person interactions. These proactive actions were taken to obtain additional insights into the safe operation of the facility during the COVID-19 public health emergency.

The NRC will continue evaluating the guidelines and recommendations from federal and state authorities, along with the conditions of your facility, to determine how to best conduct inspections until normality can be achieved. In the interim, the NRC will maintain compensatory measures and frequent communications with your staff to discuss regulatory compliance matters and gather information to inform the decisions about future inspections.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter and enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary, information so that it can be made available to the Public without redaction.

Should you have any questions concerning these inspections, please contact Tom Vukovinsky, Senior Project Inspector of my staff at 404-997-4622.

Sincerely,

/RA/

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

Docket No. 70-1151
License No. SNM-1107

Enclosure:
NRC Inspection Report 70-1151/2020-004
w/Supplemental Information

cc:
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SUBJECT: WESTINGHOUSE ELECTRIC COMPANY – U. S. NUCLEAR REGULATORY
COMMISSION INTEGRATED INSPECTION REPORT NUMBER 70-1151/2020-004
dated January 21, 2021

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ACCESSION NUMBER: **ML21022A127** SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DFFI/PB2	RII:DFFI/PB1	RII: DFFI/PB1	RII:DFFI/PB1	RII:DFFI/PB2
NAME	T. Vukovinsky	J. Rivera	K. Womack	D. Edwards	E. Michel
DATE	01/14/2021	01/11/2021	01/11/2021	01/11/2021	1/21/2021

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

INSPECTION REPORT

Docket No.: 70-1151

License No.: SNM-1107

Report No.: 70-1151/2020-004

Enterprise Identifier: I-2020-004-0038

Licensee: Westinghouse Electric Company

Facility: Columbia Fuel Fabrication Facility

Location: Hopkins, SC 29061

Dates: October 1 through December 31, 2020

Inspectors: J. Rivera, Senior Fuel Facility Inspector (Section B.1)
D. Edwards, Fuel Facility Inspector (Section A.2)
K. Womack, Fuel Facility Inspector (Section A.1)

Approved by: E. Michel, Chief
Projects Branch 2
Division of Fuel Facility Inspection

EXECUTIVE SUMMARY

Westinghouse Electric Company
Columbia Fuel Fabrication Facility
U.S. NRC Integrated Inspection Report 70-1151/2020-004
October 1 – December 31, 2020

Regional inspectors from the U.S. Nuclear Regulatory Commission (NRC), Region II Office, conducted inspections at the Westinghouse Columbia Fuel Fabrication Facility in the areas of safety operations and facility support. Due to the coronavirus (COVID-19) disease, the inspectors performed remote examinations of selected licensee activities in conjunction with focused observations of safety significant activities on site via walk-downs of the facility, interviews with licensee personnel, and review of facility records. No violations of more than minor significance were identified.

Safety Operations

- No violations of more than minor significance were identified in the Operational Safety area. (Section A.1)
- No violations of more than minor significance were identified in the Nuclear Criticality Safety (NCS) area. (Section A.2)

Facility Support

- No violations of more than minor significance were identified related to the Permanent Plant Modifications (PPM) area (Section B.1)

Attachment

Supplemental Information

REPORT DETAILS

Summary of Plant Status

The Westinghouse Facility converts uranium hexafluoride (UF₆) 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.

A. Safety Operations

1. Operational Safety (Inspection Procedure 88020)

a. Inspection Scope

The inspectors evaluated the operational safety of the facility in order to verify that the licensee operates the plant safely and in accordance with Title 10 Code of Federal Regulations (CFR) Part 70, the license, and the License Application. The inspectors interviewed area managers, operators, and reviewed records associated with Integrated Safety Analysis (ISA) summary areas 16, 18, and 19 to verify compliance with the License Application. The inspectors reviewed license requirements, quantitative risk assessments, and operating procedures associated with the afore-mentioned areas to verify that the requirements for the process areas were consistent within the licensee's documents. The inspectors evaluated 11 Item Relied On For Safety (IROFS) to verify that they were being implemented as described in the ISA and that the licensee was in compliance with the License Application.

The inspectors performed field walkdowns of multiple process areas with approved procedures to verify the field configurations were maintained in accordance with the conduct of operations requirements of the Chapter 3 of the License Application. The inspectors walked down multiple areas of the plant to confirm the IROFS associated with storage of uranium bearing material (ISA-16), laboratory systems (ISA-18), and hoods and containment systems (ISA-19) were present and capable of performing their intended safety functions as required by 10 CFR 70.62. The inspectors evaluated engineered safety controls to verify they were capable of preventing or mitigating associated accident scenarios. The inspectors interviewed operators and area supervisors to verify that they were knowledgeable of administrative controls and limits associated with IROFS.

The inspectors reviewed procedures associated with 11 IROFS to verify that required actions for IROFS, as identified in the ISA Summary, were correctly transcribed into written operating procedures. The inspectors reviewed completed surveillances and functional test instructions of select IROFS to verify management measures were implemented as required by the Chapter 3, "Operations," of the License Application and the ISA.

The inspectors reviewed a sample of entries from the licensee's corrective action program (CAP) created since the last operational safety inspection to verify that conditions adverse to operational safety were identified, documented, and corrected, as required by Section 3.8 of the License Application.

b. Conclusion

No violations of more than minor significance were identified.

2. Nuclear Criticality Safety (Inspection Procedure 88015)

a. Inspection Scope

Criticality Analysis

The inspectors evaluated selected aspects of the licensee's Nuclear Criticality Safety (NCS) Program to verify compliance with selected portions of 10 CFR 70, including 70.61(d) and 70.62(d), Chapter 6 of the facility's License Application, and applicable procedures.

The inspectors reviewed selected criticality safety evaluations (CSEs), and NCS calculation notes, to verify that they were consistent with the commitments in the License Application. These commitments included the commitment to the Double Contingency Principle, to assure subcriticality under normal and credible abnormal conditions with the use of subcritical margin, and to have properly reviewed and approved CSEs in place prior to conducting new or changed operations. The inspectors reviewed the selected CSEs to determine whether calculations were performed within their validated areas of applicability and consistent with the validation report. The CSEs were selected based on factors such as whether or not they were new and/or revised and the last time they were reviewed by the NRC. The CSEs reviewed are listed in Section 4 of the attachment to this report.

The inspectors reviewed the licensee's generation of accident sequences to determine whether the CSEs systematically identified normal and credible abnormal conditions in accordance with the commitments and methodologies in the License Application for the analysis of process upsets. This included the review of accident sequences that the licensee determined to be not credible to determine whether the bases for incredibility were consistent with the commitments, definitions, and methodologies in the License Application. Additionally, the inspectors reviewed selected accident sequences designated as not credible to determine whether the bases for incredibility relied on any items which should be identified as items relied on for safety (IROFS) as required by 10 CFR Part 70.61. This review was conducted focusing on the areas of ISA-16 Storage of Uranium Bearing Material, ISA-18 Laboratories Systems, and ISA-19 Hoods and Containment Systems.

The inspectors reviewed the validation report to verify that changes made since the last NCS inspection, if any, were consistent with Chapter 6 of the License Application.

Criticality Implementation

The inspectors performed walk-downs of the laboratories listed below to determine whether existing plant configuration and operations were covered by, and consistent with, the process description and safety basis in the selected NCSEs.

- VIPER/Product Engineering (PE) Development Lab
- Analytical Services Laboratory
- Metallurgical Laboratory
- Chemical Development Laboratory

- Health Physics Laboratory
- IFBA Chemical Laboratory
- Chemical Process Engineering Laboratory

The inspectors reviewed NCS engineers and laboratory staff to verify engineered controls were established in NCSEs were included and being implemented as specified. The engineered controls reviewed included mass control, and spacing. The inspectors reviewed operating procedures and postings to verify that selected administrative controls established in the CSEs were also included. The inspectors interviewed laboratory staff, operators and engineers to verify that administrative actions established in the CSEs were understood and implemented as specified.

The inspectors reviewed the integrated safety analysis (ISA) summary and supporting ISA documentation to determine whether the controls identified in the ISA were supported by technical bases in the NCSEs.

Criticality Operational Oversight

The inspectors reviewed records of NCS audits and accompanied a licensee NCS engineer on a walk-down of the conversion scrap cage area to determine whether NCS staff routinely assessed field compliance with established NCS controls, interacted with operators, and promptly entered issues identified during the walkdown into the licensee's corrective action program (CAP) as required by Section 5.1 of RA-316, "NCS Facility Walkthrough Assessments." Additionally, the inspectors interviewed NCS management and reviewed procedures and schedules to verify that the qualified NCS engineers adequately prepared for and performed these walkthroughs such that the complete set of fissile material processing areas were assessed quarterly for higher risk areas and semiannually for lower risk areas in accordance with procedure RA-316, "NCS Facility Walkthrough Assessments," the associated checklist, and Section 6.1.9 of the License Application.

Criticality Programmatic Oversight

The inspectors reviewed the selected NCSEs, listed in Section 4 of the attachment, to verify that they were performed in accordance with NCS program procedures and received appropriate independent review and approval.

The inspectors reviewed document RAF-106-1-00017, "EHS Audit for the Nuclear Criticality Safety Program" and EHS-AUDIT-20-6, Revision 0, dated November 19, 2020; and interviewed the NCS Engineering manager to verify that the audit of the NCS program was conducted at a frequency consistent with Section 6.1.9 of the License Application and with appropriate thoroughness.

Criticality Incident Response and Corrective Action

The inspectors reviewed various aspects of the criticality accident alarm system (CAAS) to determine whether the CAAS features met the applicable regulatory requirements in 10 CFR 70.24, and license commitments in the Section 6.1.8 of the License Application. The documents reviewed included PM20558, SS4582-3-40684, "SI-Safety, Crit Horn Sound Check-52 Week," dated October 22, 2020 and CN-CRI-20-002, "Supplemental CAAS Coverage Calculation for Miscellaneous Plant Activities and Operations," Revision 0, dated May 28, 2020.

The inspectors interviewed the Emergency Preparedness Manager, Nuclear Criticality Safety Engineering Manager, and a NCS engineer to determine whether the licensee maintained NCS related emergency response capability consistent with the emergency plan and procedures. The inspectors conducted interviews to verify that qualified NCS staff was readily available to advise the licensee in an emergency. The inspectors reviewed emergency procedures to determine whether procedures specified personnel evacuate to accountability points in the event of a CAAS alarm, whether evacuation routes and accountability points were designed to minimize the potential for exposing evacuating personnel to radiation, whether NCS-related evacuation drills were conducted consistent with license commitments and SEP-005, "Evacuation, Emergency Shelter, Accountability and General Response," Revision 12.

The inspectors reviewed selected NCS-related CAP entries to verify that conditions adverse to safety were promptly identified and entered into the CAP, that they received the required level of investigation, and that they were closed out consistent with license commitments and procedures. Additionally, the inspectors reviewed the selected CAP entries to assess whether the licensee followed regulatory requirements and procedures with regards to reporting plant conditions to the NRC. The CAP entries reviewed included are listed in Section 4 of the attachment.

b. Conclusion

No violations of more than minor significance were identified.

B. Facility Support

1. Permanent Plant Modifications – Annual Review (Inspection Procedure 88070)

a. Inspection Scope

The inspectors reviewed the licensee's configuration management program to determine whether the licensee established a system to evaluate, implement, and track changes to the facility and activities of personnel in accordance with Title 10 of the Code of Federal Regulations, Section 70.72 (10 CFR 70.72). The inspectors' review included configuration management documents and interviews with licensee supervisors, engineers, and operators to verify the program was implemented in accordance with the applicable regulatory requirements. The inspectors also reviewed whether the licensee had a system in place to maintain records of facility changes in accordance with 10 CFR 70.72(f).

The inspectors selected a sample of plant changes based on interviews with licensee staff and the list of plant changes submitted to the NRC on January 6, 2020 (ADAMS Accession Number ML20006F639). The plant changes selected for review are listed in Section 4 of the Attachment to this inspection report.

For the selected plant changes, the inspectors reviewed configuration control packages and supporting documents to verify these contained the following: the technical basis for the change, the impact of the change on safety and health or on the control of licensed material, modifications to operating procedures and necessary training prior to operations, authorization requirements for the change, the impacts of the change to the ISA or other safety program information developed in accordance with 10 CFR 70.62.

The inspectors also reviewed samples of on-site documents to verify that affected documentation was updated promptly prior to implementing the change as required by 10 CFR 70.72(e). For the selected facility changes that were not submitted to the NRC for approval, the inspectors reviewed configuration control packages to verify these included a written evaluation providing the bases for the determination that the change did not require NRC approval prior to implementation.

The inspectors performed walk-downs of process areas associated with the selected plant changes and interviewed plant staff directly involved with the changes to verify the modifications were consistent with the approved configuration management documents. The inspectors also reviewed a sample of management measures applied to the selected plant changes to verify compliance with the License Application, Chapter 3, "Conduct of Operations" and 10 CFR 70.62. Particularly, the inspectors focused on the management measures for IROFS ADUSCRA-122 through -126 and ADUSCRA-128 associated with configuration control package CCF-19428 in the scrap uranium processing area to verify these IROFS were present as described in the configuration management documents.

The inspectors interviewed licensing staff and reviewed the latest version of the License Application to verify that recent changes to license commitments, if any, were evaluated in accordance with the conditions of the license and that NRC prior approval was requested when necessary.

The plant changes selected for review did not involve new facilities or processes requiring a license amendment, therefore the inspectors' review did not include whether the licensee addressed the baseline design criteria and concept of defense-in-depth stipulated in 10 CFR 70.64.

b. Conclusion

No violations of more than minor significance were identified.

C. Exit Meetings

The inspection scope and results were presented to A. Pope, Organizational Effectiveness Director and other members of the licensee's staff on December 3, 2020. Proprietary information was discussed, but not included in this report.

SUPPLEMENTAL INFORMATION

1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
A. Brown	URRS Senior Engineer
D. Brown	Principle Quality Engineer
M. Brown	URRS Manager
S. Carver	Emergency Preparedness Manager
P. Donnelly	Principle Licensing Engineer
T. Graves	Lead Conversion Engineer
B. Jeffcoat	Principle Engineer
E. Malek	Regulatory Affairs Manager
A. Miller	EH&S Operations Manager
C. Miller	Nuclear Criticality Safety Engineering Manager
A. Penny	Chemical Lab Manager
T. Smith	Technician 2
K. Zayan	Conversion Work Week Manager

2. LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

None

3. INSPECTION PROCEDURES USED

88015	Nuclear Criticality Safety
88020	Operational Safety
88070	Permanent Plant Modifications - Annual

4. DOCUMENTS REVIEWED

Records:

CF-81-999, Scrap Cage: Safety Significant Interlocks Verification Form, August 8, 2019
CN-CRI-20-002, Supplemental CAAS Coverage Calculation for Miscellaneous Plant Activities and Operations, Revision. 0, dated May 28, 2020
DWG No 301F01PI01, Solvent Extraction I, Sheet 3, Rev. 24
DWG No 313F01PI01, Piping Flow Diagram – Scrubbers S-2A & S-2B, Rev. C1
DWG No 333F05PI04, Liquid Waste Storage Columns, Rev. 1
DWG No 333F05PI05, Scrap Uranium Recovery Equipment Instrument Air Distribution, Rev. 1
DWG No 333F05PI07, Vent Pot (V-1037), Rev. 2
EHS-AUDIT-20-1, Regulatory Component Audit for Configuration Management; Maintenance; Procedures, Training and Qualification; Human Performance; Record Keeping and Reporting; QA, dated March 19, 2020
EHS-AUDIT-20-3, Formal Compliance Audit Report, dated April 16, 2020
IR-2019-8716, Conversion Safety Clock Reset: Elevated Airborne Samples at Blu-M Oven While Employee was Working, May 18, 2019
LTR-EHS-20-55, 2020 Regulatory Component Audit Status and Schedule Update, June 19, 2020
OM30010, PE Lab Storage Rack Verification
OM82199, Verification of Oxidation Hood Drainage
OM83236, Verification of Oxidation Hood Drainage
OM85261, Verification of Oxidation Hood Drainage

OM86202, Verification of Oxidation Hood Drainage
OM91007, Chemical Area Floor Inspection
PM20327, Chemical Area Floor Inspection
PM30010, FACTS Loop Pressure Relief Valve PSV5820A
PM30034, Product Engineering Development Lab Piping Inspection
PM30035, Product Engineering Development Lab Roof Inspection
PM81057, Moisture Sampler Sensor Test / Replacement
PSE Doc-00051262, Preliminary Process Hazard Analysis of Accident Tolerant Fuel (ATF) Project, Rev. 13
PSE Doc-0005300, CCF 18322, EnCore Accident Tolerant Fuel - Lead Test Rods Program, Independent Technical Review, Phase 1, Rev. 0
PSE Doc-0005301, CCF 18322, EnCore Accident Tolerant Fuel - Lead Test Rods Program, Independent Technical Review, Phase 2, Rev. 0
PSE Doc-0005302, CCF 18322, EnCore Accident Tolerant Fuel - Lead Test Rods Program, Independent Technical Review, Phase 3, Rev. 0
RAF-314-1, Criticality Safety Evaluation Implementation Plan, CSE for the Scrap Uranium Recovery Equipment, CSE-11-H, CSE Rev. 1
RAF-316-1, (Facility Walkthrough Assessments) various

Procedures:

CF-81-236, Auto-Sampler Safety Significant Control Verification Form, Rev. 7, dated 09-06-18
MCP-202037, Criticality Alarm Calibration and SSC Verification (AC-Plant-1-01), Rev. 32, dated September 25, 2018
MCP-2003445, GA-7M Criticality Alarm Calibration and SSC Verification (AC-Plant-1-01), Rev. 0, dated September 25, 2018
QCI-310905, Inspection of IROFS – Common Containers and Control/Release of UCON, Rev. 20, dated 01/23/20
RA-104, Regulatory Review of Configuration Change Authorization, Rev. 31
RA-106, Regulatory Component Audits at the CFFF, Rev. 40, dated 08-20-20
RA-107, Corrective Action Process for Regulatory Events, Rev. 27, dated March 14, 2019
RA-108, Safety Significant Controls, Rev. 41, dated 11-02-20
RA-312, NCS Calc Note Generation, Format, and Content Requirement, Rev. 8, dated November 19, 2015
RA-313, Criticality Safety Evaluations (CSEs), Rev. 15, dated November 19, 2015
RA-314, Implementation of Criticality Safety Evaluations, Rev. 9, dated November 2, 2020
RA-316, NCS Facility Walkthrough Assessments, Rev. 12, dated October 17, 2019
SEP-005, Evacuation, Emergency Shelter, Accountability and General Response, Rev. 12, dated February 20, 2020
SEPF-009-11, Command Check Sheet- Criticality Alarm Response, Rev. 7, dated March 14, 2019
TA-500, Columbia Manufacturing Plant Configuration Control, Rev. 39, dated 04-02-20

Configuration Control Packages/Forms (CCFs)

CCF-15526, Install New Scrap Uranium Recovery Equipment in Scrap Cage, October 13, 2015
CCF-15580, Integrate Current Model for SOLX V1087 and V1487 Automatic Valve Solenoids, November 9, 2015
CCF-18140, FACTS Loop Circulation Pump Controls Modification, April 16, 2018
CCF-18204, VIPER Internals Drawing for Gosgen 15x15 German Fuel VIPER Test, May 21, 2018

CCF-18237, Install New Design Pellet Tray Detailing Funnel on Lines 1, 2, 3 and 5, June 8, 2018
CCF-18322, EnCore Accident Tolerant Fuel - Lead Test Rods Program, August 7, 2018
CCF-18356, Muffle Furnace 3 Replacement in the Chem Lab Uranium Room, September 12, 2018
CCF-19071, Substitution Filter for Flanders 16"x20"x2" Pre-filter, February 11, 2019
CCF-19097, Viper Loop Flow Meter Calibration Test Set-up, March 6, 2019
CCF-19098, New Liquid Penetrant Inspection (LPI) Station, March 6, 2019
CCF-19103, Viper Loop Heater Element (HX-5801A) Replacement, March 12, 2019
CCF-19245, Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #1 Hood, June 5, 2019
CCF-19246, Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #2 Hood, June 5, 2019
CCF-19247, Increase Pipe Diameter on V-03 Drain from 1" to 2", June 5, 2019
CCF-19253, Add a Spring Close Actuated Valve on Air Supply to the Blowdowns for S-2A/2B Bag Filters, June 12, 2019
CCF-19428, Replacing Perchloroethylene and Kerosene in SOLX with Dodecane, November 13, 2019

Items Relied on For Safety (IROFS) Reviewed:

BAESCRP-138 | FLOOR-119 | IFBASCRP-138 | PELSCR-138 | PETLAB-110 |
PETLAB-111 | PETLAB-119 | PETLAB-120 | PROCUR-902 | STORAGE-CON-109 |
URSSCRP-178

Criticality Safety Evaluations (CSE):

CSE-11-H, Criticality Safety Evaluation (CSE) for the Scrap Uranium Recovery Equipment, Rev. 3
CSE-16-F, Criticality Safety Evaluation for Floor Storage for Special Nuclear Material, Rev. 8
CSE-18-A, Criticality Safety Evaluation for the VIPER/Product Engineering (PE) Development Lab, Rev. 12
CSE-18-B, Criticality Safety Evaluation for the Analytical Services Laboratory, Rev. 21
CSE-18-C, Criticality Safety Evaluation for the Metallurgical Laboratory, Rev. 2
CSE-18-D, Criticality Safety Evaluation for the Chemical Development Laboratory, Rev. 2
CSE-18-E, Criticality Safety Evaluation for the Health Physics Laboratory, Rev. 1
CSE-18-F, Criticality Safety Evaluation for the IFBA Chemical Laboratory, Rev. 6
CSE-18-G, Criticality Safety Evaluation for the QC Lab Polypak Sampling Hood, Rev. 6
CSE-18-I, Criticality Safety Evaluation for the Chemical Process Engineering Laboratory, Rev. 0
CSE-19-A, Criticality Safety Evaluation for Oxidation Ovens and Hoods, Rev. 4

Condition Reports Reviewed

Redbook 75535

IR-2019-14317, IR-2019-17861, IR-2020-124, IR-2020-3300, IR-2020-3637, IR-2020-4521,
IR-2020-4637, IR-2020-12553, IR-2020-12556, IR-2020-12557, IR-2020-12558, IR-2020-
13037, IR-2020-13387

Work Orders:

WO 853122, SI-Safety V1031B and V1031C Passive Overflow Verification, July 30, 2019
WO 853121, SI-Safety V1037 Vacuum Break and Passive Overflow, July 30, 2019

Other Documents:

ISA-16, Storage of Uranium Bearing Materials, Rev. 14, dated 1/22/2020

ISA-18, Laboratories Systems, Rev. 14, dated 1/21/2020

ISA-19, Hoods and Containment System, Rev. 15, dated 01/22/2020

JSA-EHS-0052, Criticality Accident Response, Rev. 1, dated May 21, 2015

LTR-EHS-20-55, 2020 Regulatory Component Audit Status and Schedule Update, dated June 19, 2020,

RAF-106-1-00017, EHS Audit for the Nuclear Criticality Safety Program; EHS-AUDIT-20-6, Rev. 0, dated November 19, 2020

TRN-001-6, Alarms, Emergency Response, Fitness for Duty, Site Security and Threats, Rev. 6

TRN-155, HP Emergency Response Training, dated November 12, 2020

2020 Facility Walkthrough Assessment Schedule

Site Emergency Plan for the Columbia Fuel Fabrication Facility, Rev. 20, dated January 20, 2020