



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

October 20, 2020

INSPECTION DOCUMENT REQUEST

Licensee: Westinghouse Electric Company, LLC

Facility: Columbia Fuel Fabrication Facility (Columbia, SC)

Docket Number: 07001151

License Number: SNM-1107

**Inspection Report
Number:** 2020-004

Enterprise Number: EPID: I-2020-004-0038

Inspection Dates: November 30 – December 4, 2020

**Inspection Procedures
& Lead Inspectors:** IP 88020 – Operational Safety [**Kenneth R. Womack**]
IP 88015 – Nuclear Criticality Safety [**Denise Edwards**]
IP 88070 – Plant Modifications (Annual) [**Joel Rivera-Ortiz**]

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INSPECTION DOCUMENT REQUEST

The following is a broad list of documents the U.S. NRC inspectors are interested in reviewing prior to the on-site inspection visit. The current version of these documents is expected unless specified otherwise. Electronic media is preferred for receiving the information, if readily available (preferably MSWord format or searchable “.pdf” files). The documents provided in response to this request should contain enough information to facilitate the selection of specific inspection samples. Some of the information requested may not apply to the facility. The licensee is not required to provide documents that are already available in ADAMS. If there are any questions or concerns regarding the information requested, please contact the NRC inspection team lead.

INSPECTION PROCEDURE 88020 – OPERATIONAL SAFETY

Documents Requested for In-Office Preparation

- 1) Latest version of the license application
- 2) Latest version of the Integrated Safety Analysis (ISA) Summary (if different from the revision submitted to the NRC in January 2020)
- 3) Procedures governing the implementation of the following management measures, as applicable to items relied on for safety (IROFS) and/or other safety controls credited in the license application:
 - Configuration Management
 - Maintenance
 - Training and Qualifications
 - Procedures Development and Implementation
 - Audits and Assessments
 - Incident Investigations and Corrective Action
 - Records Management
 - Quality Assurance (QA) for IROFS
- 4) The inspectors plan to focus their review on **ISA-16, “Storage of Uranium Bearing Materials,” ISA-18, “Laboratories Systems,” and portions of ISA-19, “Hoods and Containment System.”** For the IROFS listed on the table below, please provide items a through d.

ISA-16	ISA-18	ISA-19
STORAGE-CON-109	PETLAB-110	PELSCR-138
PROCUR-902	PETLAB-111	BAESCRP-138
FLOOR-119	PETLAB-119	IFBASCRP-138
	PETLAB-120	URSSCRP-178

- a. Plant procedures showing the specific operation and implementation of the IROFS. For example, operating procedures showing the implementation of administrative controls or the operation of active engineered controls.
- b. Procedures and recent records of management measures performed to demonstrate availability and reliability of the IROFS. For example, recent records of testing, inspection, calibration, and preventive maintenance performed on the selected IROFS.

- c. Procedures and records showing that training requirements for the selected IROFS have been maintained
 - d. Complete configuration management package for recent changes affecting the selected IROFS
- 5) List of corrective action program documents generated in the last 12 months related to problems with IROFS. Please include a brief description of the problem, if practical.
 - 6) List of changes implemented in the last 12 months that affected IROFS; including modifications of existing controls, elimination of previous controls, and addition of new controls
 - 7) List of changes in the Operations Safety organization in the last 12 months that were subject to the position-specific requirements of the license application
 - 8) List of temporary compensatory measures put in place in the last 12 months to support degraded or failed IROFS. Please include a brief description of the compensatory measure, if practical.
 - 9) Copy of the most recent self-assessment and/or audits report in the area of Operational Safety
 - 10) Contact information for key personnel expected to support the Operation Safety inspection.

Documents/Support Requested for On-site Inspection

- 1) Site support to conduct plant tours and observe ongoing operations in the control room and other production areas
- 2) Site support to coordinate interviews with plant operators
- 3) Site support to attend the “plan of the day” meetings
- 4) Please keep inspectors informed of plant operations on a daily basis
- 5) Please inform the inspectors of any updates to the Operational Safety program that have occurred since this document request was issued

INSPECTION PROCEDURE 88015 – NUCLEAR CRITICALITY SAFETY (NCS)

Documents Requested for In-Office Preparation

- 1) Any new or revised NCS program procedures since the last NCS inspection (if none, please indicate)
- 2) List of corrective action program entries or internal events since the last NCS inspection related to NCS issues, including the criticality accident alarm system (CAAS)
- 3) Criticality safety evaluations (CSEs) for the following systems or processes:
 - ISA-16, Storage of Uranium Bearing Materials
 - ISA-18, Laboratories Systems
 - ISA-19, Hoods and Containment System (pertaining to systems and processes in ISA-16 and ISA-18)
- 4) Any new or revised CSEs since the last NCS inspection (if none, please indicate)
- 5) Procedures related to the following:
 - NCS weekly and internal audits
 - NCS engineer qualification program
 - CSE development
- 6) List of any new qualifying/qualified NCS staff since the last NCS inspection
- 7) Audit(s) and self-assessment(s) of the NCS program since the last NCS inspection
- 8) NCS training materials/exam for personnel who handle special nuclear material (SNM)
- 9) Emergency response procedure and training material for criticality accident scenarios
- 10) Validation report for NCS computer codes (if revised since the last NCS inspection)
- 11) Contact information for key personnel expected to support the Nuclear Criticality Safety inspection.

Documents/Support Requested for On-site Inspection

- 1) Results of NCS inspections (i.e. weekly assessments/walkdowns) since the last NRC inspection in the NCS area
- 2) Qualification and training records for any newly qualified/qualifying NCS engineers (if applicable)
- 3) Maintenance work orders and testing/calibration records of the CAAS for the last 12 months. Please inform the inspectors at the entrance meeting if there will be any CAAS related activities (i.e. testing, maintenance, modifications, etc.) during the inspection week.

- 4) Logistic support to accompany an NCS engineer during a weekly walk-down
- 5) Coordinate an interview with the NCS manager

INSPECTION PROCEDURE 88025 – PLANT MODIFICATIONS (ANNUAL)

Documents Requested for In-Office Preparation

- 1) Procedure(s) for the configuration management system required per 10 CFR 70.72
- 2) Governing procedures for the implementation of management measures for the configuration management system (e.g. post-modification testing, audits, training and qualification, records retention)
- 3) Procedure used to implement changes to the license application
- 4) List of Corrective Action Program entries in the last 12 months related to plant modification issues
- 5) List of corrective action program entries for the last 12 months pertaining to maintenance and surveillance of IROFS
- 6) Copy of latest self-assessment or audit for the configuration management system
- 7) Contact information for key personnel expected to support the Plant Modifications inspection.
- 8) Complete configuration management system packages for the following plant changes identified in configuration control forms (CCFs):

CCF No	Title	Applicable ISA Section
15526	Install New Scrap Uranium Recovery Equipment in Scrap Cage	ISA-11 Scrap Uranium Processing
15580	Integrate Current Model for SOLX V1087 and V1487 Automatic Valve Solenoids	ISA-07 Solvent Extraction
18140	FACTS Loop Circulation Pump Controls Modification	ISA-18 Laboratories
18204	VIPER Internals Drawing for Gosgen 15x15 German Fuel VIPER Test	ISA-18 Laboratories
18207	Install Particle Size Analyzer in the Erbia Lab	ISA-18 Laboratories
18237	Install New Design Pellet Tray Detailing Funnel on Lines 1, 2, 3 and 5	ISA-08 Pelleting
18322	EnCore Accident Tolerant Fuel - Lead Test Rods Program	ISA-18 Laboratories
18356	Muffle Furnace 3 Replacement in the Chem Lab Uranium Room	ISA-18 Laboratories
19071	Substitution Filter for Flanders 16"x20"x2" Pre-filter	ISA-19 Hoods and Containment
19097	Viper Loop Flow Meter Calibration Test Set-up	ISA-18 Laboratories
19098	New Liquid Penetrant Inspection (LPI) Station	ISA-18 Laboratories
19103	Viper Loop Heater Element (HX-5801A) Replacement	ISA-18 Laboratories
19245	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #1 Hood	ISA-19 Hoods and Containment
19246	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #2 Hood	ISA-19 Hoods and Containment
19247	Increase Pipe Diameter on V-03 Drain from 1" to 2"	ISA-09 UF6 Cylinder Wash
19253	Add a Spring Close Actuated Valve on Air Supply to the Blowdowns for S-2A/2B Bag Filters	ISA-01 Plant Ventilation System

Documents/Support Requested for On-site Inspection

- 1) The inspectors may need additional documentation associated with the implementation of the CCFs listed in Item 8 above. Those documents may include engineering calculations, work orders, post-modification testing records, procedure revisions, training records, etc. Please provide such documents upon request.
- 2) The inspectors will need site support to conduct field observations of selected plant modifications and interviews with staff responsible for implementing the configuration management system.
- 3) Please inform the inspectors of any updates to the configuration management system that have occurred since this document request was issued.