



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 8, 2024

Mr. Paul Garcia
Manager, MS & CI, Quality & Training
Framatome Fuel Fabrication
2101 Horn Rapids Road
Richland, WA 99534

SUBJECT: NUCLEAR REGULATORY COMMISSION VENDOR INSPECTION REPORT OF
FRAMATOME FUEL FABRICATION FACILITY – RICHLAND, WASHINGTON,
NO. 99902083/2024-201.

Dear Mr. Garcia:

On September 16 - 20, 2024, the U.S. Nuclear Regulatory Commission (NRC) staff conducted an inspection at the Framatome Fuel Fabrication (hereafter referred to as Framatome) facility in Richland, WA. The purpose of this limited-scope routine inspection was to assess Framatome's compliance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21, "Reporting of Defects and Noncompliance," and selected portions of Appendix B, "Quality Assurance Program Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

This technically-focused inspection specifically evaluated Framatome's implementation of quality activities associated with 1) design, analysis, and corrective actions associated with burnable poison rod assembly misloading for Oconee; 2) and nonconforming materials, parts, or components. The enclosed report presents the results of the inspection. This NRC inspection report does not constitute NRC endorsement of Framatome's overall quality assurance (QA) or 10 CFR Part 21 programs.

Within the scope of this inspection, no violations or nonconformances were identified

In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Rules of Practice," a copy of this letter, and its enclosure(s), will be made available electronically for public inspection in the NRC Public Document Room and 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>.

Sincerely,

Dong H Park

Park, Dong signing on behalf
of Kavanagh, Kerri
on 11/08/24

Kerri A. Kavanagh, Chief
Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

Docket No.: 99902083

EPID No.: I-2024-201-0020

Enclosure:
Inspection Report No. 99902083/2024-201
and Attachment

SUBJECT: NUCLEAR REGULATORY COMMISSION VENDOR INSPECTION REPORT OF
FRAMATOME FUEL FABRICATION FACILITY – RICHLAND, WASHINGTON,
NO. 99902083/2024-201, DATE: November, 8 2024

DISTRIBUTION:

RFelts, NRR
ABowie, NRR
PMcKenna, NRR
NRR_DRO_IQVB Distribution
Paul.Garcia@framatome.com

ADAMS Accession No.: ML24302A313

NRR-106

OFFICE	NRR/DRO/IQVB	NRR/DRO/IQVB	NRR/DSS/SFNB
NAME	AArmstrong	ABelen-Ojeda	JKaizer
DATE	10/31/2024	11/7/2024	10/31/2024
OFFICE	R-II/DFFI/PB2	NRR/DRO/IQVB	NRR/DRO/IQVB
NAME	MDay	YLaw	KKavanagh (DPark for}
DATE	11/1/2024	10/31/2024	11/8/2024

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
DIVISION OF REACTOR OVERSIGHT
VENDOR INSPECTION REPORT**

Docket No.: 99902083

Report No.: 99902083/2024-201

Vendor: Framatome Fuel Fabrication - Richland
2101 Horn Rapids Road
Richland, WA 99534

Vendor Contact: Mr. Paul Garcia
(509)375-8332
Paul.Garcia@Framatome.com

Nuclear Industry Activity: Framatome Fuel Fabrication's scope of supply includes nuclear fuel design and fabrication, fuel related services, on-site services, and safety-related software for U.S. operating nuclear power plants.

Inspection Dates: September 16 – September 20, 2024

Inspectors: Aaron Armstrong NRR/DRO/IQVB Team Leader
Aixa Belen-Ojeda NRR/DRO/IQVB
Joshua Kaizer NRR/DSS/SFNB
Meg Day R-II/DFFI/PB2
Yiu Law NRR/DRO/IQVB Remote

Approved by: Kerri A. Kavanagh, Chief
Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

FRAMATOME FUEL FABRICATION REPORT NO.99902083/2024-201

The U.S. Nuclear Regulatory Commission (NRC) staff conducted a vendor inspection at the Framatome Fuel Fabrication (hereafter referred to as Framatome) facility in Richland, WA, to verify that it had implemented an adequate quality assurance (QA) program that complies with the requirements of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities" and 10 CFR Part 21, "Reporting of Defects and Noncompliance." The NRC inspection team conducted this inspection on-site on September 16 – 20, 2024. This was the second NRC inspection of Framatome at this facility.

This technically-focused inspection specifically evaluated Framatome's implementation of quality activities associated with 1) design, analysis, and corrective actions associated with burnable poison rod assembly misloading for Oconee; 2) and nonconforming materials, parts, or components for U.S. nuclear power plants. Specific activities observed by the NRC inspection team included:

- A walk down of the Burnable Poison Rod Assembly area
- A walk down of the manufacturing area of the boron pellets
- A walk down of Framatome's shop stores staging area
- A walk down of Framatome's onsite M&TE laboratories

These regulations served as the bases for the NRC inspection:

- Appendix B to 10 CFR Part 50
- 10 CFR Part 21

During this inspection, the NRC inspection team implemented Inspection Procedure (IP) 43002, "Routine Inspections of Nuclear Vendors," dated February 10, 2023; IP 43004, "Inspection of Commercial-Grade Dedication Programs," dated February 10, 2023; and IP 36100, "Inspection of 10 CFR Part 21 and Programs for Reporting Defects and Noncompliance," dated February 10, 2023.

The results of this inspection are summarized below.

Inspection Areas

The NRC inspection team determined that Framatome established its programs for design control, commercial-grade dedication, procurement document control, material traceability, control of measuring and test equipment, nonconformances, and internal audits in accordance with the applicable regulatory requirements of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed and activities observed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with these programs. In addition, the NRC inspection team determined that Framatome is implementing its 10 CFR Part 21 program for evaluating deviations and reporting defects that could create a substantial safety hazard in accordance with the applicable regulatory requirements. No findings of significance were identified in these areas.

REPORT DETAILS

1. 10 CFR Part 21 Program

a. Inspection Scope

The NRC inspection team reviewed the policies and implementing procedures that govern Framatome Fuel Fabrication's (hereafter referred to as Framatome) Title 10 of the Code of Federal Regulations (10 CFR) Part 21, "Reporting of Defects and Noncompliance," program to verify compliance with the regulatory requirements. In addition, the NRC inspection team evaluated the 10 CFR Part 21 postings and a sample of Framatome's purchase orders (POs) for compliance with the requirements of 10 CFR 21.21, "Notification of Failure to Comply or Existence of a Defect and its Evaluation," and 10 CFR 21.31, "Procurement Documents." The NRC inspection team also verified that Framatome's corrective action procedure provides a link to the 10 CFR Part 21 program. Furthermore, for a sample of 10 CFR Part 21 evaluations performed by Framatome, the NRC inspection team verified that Framatome had effectively implemented the requirements for evaluating deviations and failures to comply. The NRC inspection team verified that the notifications were performed in accordance with the requirements of 10 CFR 21.21, as applicable.

The NRC inspection team also discussed the 10 CFR Part 21 program with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

Oconee Burnable Poison Rod Assembly Misload

The NRC inspection team inspected Framatome's corrective actions and root causes of a burnable poison rod assembly (BPRA) misload, identified in a Part 21 report issued on June 22, 2024 (ADAMS Accession No. ML24177A169). The NRC inspection team reviewed the root cause analysis and determined that the analysis adequately investigated the causes of the misload issue. The NRC inspection team also reviewed short and long-term corrective actions for the BPRA misload issue and observed a monthly Lesson's Learned meeting which tracked the status of these corrective actions. The NRC inspection team confirmed that implementation of these actions would prevent such issues in future manufacturing and were adequate with the appropriated defense in-depth in evaluating the misload issue. In addition, the NRC inspection team reviewed the conditions reports, design analysis documents, and engineering information reports associated with the misload event. The NRC inspection team interviewed cognizant process engineers and management associated with the discovery, analysis, and resolution of BPRA misload issue. The NRC inspection team reviewed the data and analysis used to justify that a similar misload could have not occurred in the past and based on that analysis agreed with that conclusion that the data indicates no such misload has previously occurred. No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded Framatome is implementing its 10 CFR Part 21 program in accordance with the regulatory requirements. Based on the limited sample of

documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the 10 CFR Part 21 program. No findings of significance were identified

2. Commercial-Grade Dedication, Procurement Document Control, and Supplier Oversight

a. Inspection Scope

The U.S. Nuclear Regulatory Commission (NRC) inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its commercial-grade dedication (CGD), procurement document control, and supplier oversight programs to verify compliance with the regulatory requirements of Criterion III, "Design Control," Criterion IV, "Procurement Document Control," and Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." The NRC inspection team reviewed a sample of purchase orders (POs), Framatome's Approved Suppliers List (ASL), audit reports, commercial-grade surveys, annual evaluations, technical evaluations, and test reports.

The NRC inspection team reviewed Framatome's program for the dedication of commercial-grade items for use in safety-related applications to verify its compliance with the applicable regulatory requirements. This assessment included a review of the policies and procedures governing the implementation of CGD activities, interviews with Framatome's personnel, and a review of related documentation. Specifically, the NRC inspection team reviewed a sample of POs, technical evaluations, commercial-grade surveys, and test reports for the CGD of the following components and services: gadolinia powder, brazing filler metal, helium gas. The NRC inspection team evaluated the criteria for the identification of item functions, credible failure mechanisms/modes, selection of critical characteristics and acceptance criteria, and the identification of verification methods to verify effective implementation of Framatome's CGD process.

The NRC inspection team discussed the CGD, procurement document control, and supplier oversight programs with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its CGD, procurement document control, and supplier oversight programs in accordance with the regulatory requirements of Criterion III, Criterion IV and Criterion VII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the CGD, procurement document control, and supplier oversight programs. No findings of significance were identified.

3. Design Control

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its design control program to verify compliance with the regulatory requirements of Criterion III of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed Framatome's processes for performing design and configuration control, including design reviews and design changes. The NRC inspection team reviewed a sample of purchase orders, work orders, design analysis documents, engineering information reports associated with the design and manufacturing of Framatome's Fuel assemblies. The NRC inspection team confirmed that Framatome's process for performing design changes included the purpose of each design change, method of conduct, verification, and documentation of the results. The NRC inspection team confirmed that the design review process was conducted in accordance with Framatome's implementing procedures, and the results of design reviews were adequately documented.

The NRC inspection team also discussed the design control program with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its design control program in accordance with the regulatory requirements of Criterion III of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the design control program. No findings of significance were identified.

4. Test Control

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its test control program to verify compliance with the requirements of Criterion XI, "Test Control," of Appendix B to 10 CFR Part 50. There were no safety-related testing activities performed during the week of the inspection. As such, the NRC inspection team reviewed the test documentation associated with the testing of an electromagnetic interference line filter. The NRC inspection team confirmed the test documentation included the applicable Framatome's testing controls, equipment calibration, test performance data and results, and any nonconformances in accordance with Framatome's policies and procedures.

The NRC inspection team also reviewed the training and qualification records of the test technician who performed the test and confirmed that testing personnel had completed

all the required training and had maintained the applicable qualification and certification in accordance with Framatome's policies and procedures.

The NRC inspection team discussed the test control program with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its test control program in accordance with the regulatory requirements of Criterion XI of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the test control program. No findings of significance were identified

5. Material Traceability

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its material traceability program to verify compliance with the regulatory requirements of Criterion VIII, "Identification and Control of Materials, Parts, and Components," of Appendix B to 10 CFR Part 50. The NRC inspection team performed a walk-down of Framatome's nuclear manufacturing and assembly areas. In these areas Framatome performed manufacturing assembly and inspection activities associated with Framatome's nuclear fuel components.

The NRC inspection team confirmed that materials were adequately identified with Framatome's unique identification code, which was traceable to the purchase order, work orders and Certificates of Conformance. The NRC inspection team verified that Framatome personnel appropriately maintained the material identification and traceability markings during various stages of fabrication.

The NRC inspection team discussed the material traceability program with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observation and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its material traceability program in accordance with the regulatory requirements of Criterion VIII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the

NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the material traceability program. No findings of significance were identified.

6. Control of Measuring and Test Equipment (M&TE)

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its M&TE program to verify compliance with the requirements of Criterion XII, "Control of Measuring and Test Equipment," of Appendix B to 10 CFR Part 50.

For a sample of M&TE, the NRC inspection team determined that the M&TE had the appropriate calibration stickers and current calibration dates, including the calibration due date. The NRC inspection team also verified that the M&TE had been calibrated, adjusted, and maintained at prescribed intervals prior to use. In addition, the calibration records reviewed by the NRC inspection team indicated the as-found or as-left conditions, accuracy required, calibration results, calibration dates, and the due date for recalibration.

The NRC inspection team confirmed that when M&TE equipment is found to be out of calibration, an out of tolerance report is initiated, and an evaluation is performed to determine if the M&TE was previously used. The NRC inspection team performed a walk-down of Framatome's M&TE area to observe that M&TE were labeled, handled, and stored in a manner that indicated the calibration status of the instrument and ensured its traceability to calibration test data.

The NRC inspection team discussed the control of M&TE with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its M&TE program in accordance with the regulatory requirements of Criterion XII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the M&TE program. No findings of significance were identified.

7. Nonconforming Materials, Parts, or Components and Corrective Action

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its nonconforming materials, parts, or components and

corrective programs to verify compliance with the requirements of Criterion XV, "Nonconforming Materials, Parts, or Components," and Criterion XVI, "Corrective Action," of Appendix B to 10 CFR Part 50.

The NRC inspection team verified that Framatome's processes and procedures provide for the identification, documentation, segregation, evaluation, and disposition of nonconforming items. These processes apply the principles of repair, rework, or "use as-is." The NRC inspection team observed Framatome's assembly floor operations and verified that nonconforming materials, parts, or components were properly identified, marked, and segregated, when practical, to ensure that they were not reintroduced into the production processes. The NRC inspection team reviewed a sample of nonconformance reports (NCRs) and confirmed that Framatome dispositioned the nonconforming items in accordance with Framatome's applicable procedures and documented an appropriate technical justification for various dispositions. In addition, the NRC inspection team confirmed that the nonconformance process provides a link to Framatome's 10 CFR Part 21 program.

The NRC inspection team reviewed a sample of corrective action documents to verify they contained, as applicable: (1) adequate documentation and description of conditions adverse to quality; (2) an appropriate analysis of the cause of these conditions and the corrective actions taken to prevent recurrence; (3) direction for review and approval by the responsible authority; (4) a description of the current status of the corrective actions; and (5) the actions taken to verify timely and effective implementation of the corrective actions.

The NRC inspection team also discussed the nonconforming materials, parts, or components and corrective action programs with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

The NRC inspection team identified one minor issue associated with Framatome's implementation of its corrective action and internal audit program.

Minor Issue:

The NRC Inspection team noted that Framatome's global manual and procedure differ with respect to audit interval. D02-ARV-01-101-817, Framatome Integrated Management System (IMS) Manual, Rev G, Section 15.4, Applicability of NQA-1 and other Standards, explains that their integrated management system satisfies the requirements of Appendix B to 10 CFR 50, and NQA-1-2015. This section states that the integrated management systems follow the guidance of Regulatory Guide 1.28 with an exemption under Requirement 18. The exemption states: "With respect to the yearly internal audit frequency requirements of Regulatory Guide 1.28 paragraph 4.a.(1), the term "Applicable elements of an organization's QA program should be audited at least once each year or at least once during the life of the activity, whichever is shorter..." is interpreted within the following context. Framatome conducts comprehensive internal audits of each QA program criterion at least once every three years (or more frequently for nonnuclear facilities, as specified in implementing procedures).

However, D02-ARV-01-142-912, Management System Internal Audits, Rev C, Section 5.1.3, consolidate the IMS internal audit program, states that [b]ased on these identified audit needs and IMS criteria, the auditing organization shall (...) combine these audit lists and verify the coverage of the IMS criteria: 1) on 3 rolling years; 2) yearly coverage is required for NQA-1, ASME Section III and 10 CFR 50 Appendix B compliance: with respect to the yearly internal audit frequency requirements of Regulatory Guide 1.28 paragraph 4.a.(1), applicable elements of an organization's QA program should be audited at least once each year or at least once during the life of the activity, whichever is shorter[...]" Nevertheless, Framatome performed internal audits of the applicable requirements on a triennial basis without any annual evaluation, per NQA-1-2015 requirements.

The NRC inspection team discovered that this discrepancy was first identified by Nuclear Procurement Issues Corporation (NUPIC). In 2022, NUPIC conducted a Mega audit at Framatome sites Rugles, Paimboeuf and UGINE, and issued a deficiency towards Framatome's global manual D02-ARV-01-101-817 for its inadequate internal audit frequency. Specifically, Framatome was conducting internal audits triennially instead of annually, as required in ASME Code NQA-1-2015, and conditionally accepted by RG 1.28, Revision 5 as means of meeting the requirements of 10 CFR 50, Appendix B with clarifications and exceptions. In 2024, NUPIC conducted another Mega audit at Framatome, Richland; identified the same deficiency towards D02-ARV-01-101-817; and issued another deficiency for conducting its internal audits triennially instead of annually. The NRC inspection team determined that Framatome failed to implement adequate corrective action for its global quality assurance program to address the 2022 NUPIC deficiency and to correct its internal audit frequency, as a result, NUPIC issued the same finding to Framatome during its 2024 Mega audit.

Due to the results of this inspection, the NRC inspection team determined this issue was not significant enough to be more than minor because it does not impact the product or services provided by Framatome.

c. Conclusion

The NRC inspection team concluded that Framatome is implementing its nonconforming materials, parts, or components and corrective programs in accordance with the regulatory requirements of Criterion XV and Criterion XVI of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome is implementing its policies and procedures associated with the nonconforming materials, parts, or components and corrective action program. No findings of significance were identified.

8. Internal Audits

a. Inspection Scope

The NRC inspection team reviewed Framatome's policies and implementing procedures that govern the implementation of its internal audits program to verify compliance with the requirements of Criterion XVII, "Audits," of Appendix B to 10 CFR Part 50.

For the sample of internal audits reviewed, the NRC inspection team verified that the audit reports included: (1) an audit plan; (2) audit results; (3) adequately documented

objective evidence with the applicable requirements; and (4) a review by Framatome's responsible management. The NRC inspection team verified that the internal audits were performed by qualified auditors who were not auditing their own work and that the internal audits were performed using the appropriate checklists. The NRC inspection team also verified that Framatome adequately initiated corrective actions for any findings identified during the internal audits.

The NRC inspection team also discussed the internal audits program with Framatome's management and technical staff. The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

The NRC inspection team discussed the minor issue above in the corrective action section of this report. No findings of significance were identified

c. Conclusion

The NRC inspection team concluded that Framatome's is implementing its internal audits programs in accordance with the regulatory requirements of Criterion XVII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that Framatome's is implementing its policies and procedures associated with its internal audits program. No findings of significance were identified.

9. Entrance and Exit Meetings

On September 8, 2024, the NRC inspection team discussed the scope of the inspection with Mr. Paul Garcia, Framatome's Manager - MSCI, and other members of Framatome's management and technical staff. On September 20, 2024, the NRC inspection team presented the inspection results and observations during an exit meeting with Mr. Lance Stephens, Vice President North America Fuel & Manufacturing Site Manager, and other members of Framatome's management and technical staff. The attachment to this report lists the attendees of the entrance and exit meetings, as well as those individuals whom the NRC inspection team interviewed.

ATTACHMENT

1. ENTRANCE/EXIT MEETING ATTENDEES

Name	Title	Affiliation	Entrance	Exit	Interviewed
Paul Garcia	Manager MSCI	Framatome	X	X	X
Pat McQuade	Corrective Action Program Manager	Framatome	X	X	X
Andres Alvarez	Quality Specialist	Framatome	X	X	X
Jason Medina	Fuel Reliability Manager	Framatome	X		X
Loris Kim	Rod/Bundles/Cage Manager	Framatome	X		X
Vincent Malagola	Fuel Purchasing Manager	Framatome	X		X
Sandra Douglas-Russell	Training Manager US Fuels	Framatome	X	X	X
Steven Lydinski	Vice President Fuel Engineering Framatome	Framatome	X		X
Lance Stephens	Vice President North America Manufacturing Site Manager Framatome	Framatome	X		X
Karl Schull	UCAR Manager	Framatome			X
Lauren Burns	Training	Framatome			X
Tim Tate	EHS&L Manager	Framatome			X
Juan Becerra	Component Center	Framatome			X
Juan Ibarra	M&TE Technician	Framatome			X
Devin Patterson	Manufacturing	Framatome			X

Name	Title	Affiliation	Entrance	Exit	Interviewed
Aaron Armstrong	Inspection Team Leader	Nuclear Regulatory Commission (NRC)	X	X	
Aixa Belen	Inspector	NRC	X	X	
Jousha Kaizer	Inspector	NRC	X	X	
Meg Day	Inspector	NRC	X	X	
Yiu Law*	Inspector	NRC	X	X	
Kerri Kavanagh	Branch Chief	NRC	X*	X	

*Participated remotely.

2. INSPECTION PROCEDURES USED

- Inspection Procedure (IP) 36100, "Inspection of 10 CFR Part 21 and Programs for Reporting Defects and Noncompliance," dated February 10, 2023
- IP 43002, "Routine Inspections of Nuclear Vendors," dated February 10, 2023
- IP 43004, "Inspection of Commercial-Grade Dedication Programs," dated February 10, 2023

3. DOCUMENTS REVIEWED

Policies and Procedures

- 1707-01, "Implementation of 10 CFR 21," Revision 57, dated October 10, 2022
- 1703-76, "Issue Evaluation and Causal Analysis Procedure," Revision 26, dated June 10, 2020
- 1703-88, "US Fuel Corrective Action Program (Devonway iCAP)," Revision 4, dated December 11, 2023
- 1703-89, "US Fuel Condition Report and Suggestion for Improvement Screening Process," Revision 2, dated April 1, 2022
- 0401, "Evaluation and Reporting per 10 CFR 21," Revision 25, dated July 3, 2018
- QAP-13, "Control of Nonconforming Product and Corrective Action," Revision 14, dated August 1, 2024
- SOP-40206, "In-Process Adjustments, Non-Standard Rework and Standard Rework," Revision 14, dated September 18, 2024
- SOP-40433, "Cage Assembly Standard Rework Procedure," Revision 12, dated September 18, 2024
- SOP-40787, "Pellet Inspection and Standard Rework," Revision 29, dated September 18, 2024
- SOP-40855, "Control of Nonconforming Items," Revision 12, dated September 16, 2024
- D02-ARV-01-102-359, PO-Certification of Management Systems Audit Personnel, Revision B, dated June 19, 2021

- D02-ARV-01-101-817, Framatome Integrated Management System Manual, Rev G, dated February 20, 2024
- D02-ARV-01-142-912, Management System Internal Audits, Rev C, dated December 4, 2023
- 1719-23, Qualification of Quality Assurance Audit Personnel, Revision 030, dated June 14, 2023
- QAP-11, Control of Inspection, Measuring and Test Equipment, Revision 10, dated August 1, 2024

Design Control and Commercial-Grade Dedication

- Approved suppliers List - Fuels, dated September 9, 2024
- FS1-0012171, "Commercial Dedication of Brazing Filler Meta Safety Related," Rev 2,0 dated November 1, 2023
- FS1-0012405, "Commercial Dedication Technical Evaluation of Braze Filler Metal Safety Related," Rev 1.0, dated August 22, 2013
- Document Number 0000854999, Brazing Filler Good Receipt Document, dated January 20, 2023
- Framatome US Fuel Supplier CGS Plan for Survey 22:57, dated July 19-July 21, 2022
- Framatome CGI/Service Checklist Audit No. 22:57, dated July 19 – 21, 2022
- Framatome US Fuel CG Survey Report for Audit No. 22:57, dated August 17, 2022
- FS1-0032096, "Commercial Grade Dedication of Gadolinia Powder, Rev 5.0, dated May 11, 2021
- FS1-0016336, "Commercial Grade Dedication Technical Evaluation of Gadolinia Powder," Rev 5.0, dated May 11, 2021
- Document Number 0000885133, Gadolinia Powder Good Receipt Document, dated July 25, 2023
- Framatome US Fuel Supplier CGS Plan for Survey 23:16, dated May 23 – May 24, 2023
- Framatome CGI/Service Checklist Audit No. 23:16, dated May 23 – 24, 2023
- Framatome US Fuel CG Survey Report for Audit No. 23:16, dated June 21, 2023
- FS1-0004832, "Manufacturing Requirements for High Purity Helium," Rev 1.0, February 9, 2012
- Framatome 51-9175644-000, "Review of Helium Purity Analysis," dated October 18, 2010
- Framatome 51-9172172-001, "Commercial Grade Dedication Technical Evaluation for Helium, October 18, 2010
- Document Number 0000950704, Helium Good Receipt Document, August 23, 2024

Calibration Records and Certificates of Compliance/Conformance

- Calibration Supplier List
- Calibration Records for: 016-0025, 016-0008, 015-0743, 017-0341, 017-0516, 034-0034, 047-0057, 53120-03, 53446-04, 53446-05, 53446-10.

Nonconformance Reports

- CR-2024-0373, CR-2024-0376, CR-2024-0792, CR-2024-1160, CR-2024-1354, CR-2024-1477, CR-2024-1478, CF-2024-1698, CR-2024-1721, CR-2024-1880

Corrective Action Reports

- CR-2022-2005-06, CR-2024-1016-01, CR-2024-1149-05, CR-2024-1303-04, CR2024-1379-02, CR-2024-1382-01, CR-2024-1730-01, CR-2024-1934, CR-2024-1934 – USRICH01P-CR-2024-1382-000, CR-2024-1934 – USRICH01P-CR-2024-1934-000.

Corrective Action Reports Opened During the NRC Inspection

CR-2024-2547

Internal Audit Records

- Internal Audit Package 21:74: Audit Report dated February 9, 2022; Audit Checklist dated February 16, 2022.
- Internal Audit Package 22:62: Audit Report dated September 30, 2022; Audit Checklist dated September 30, 2022.
- Internal Audit Package 23:54 Audit Report dated September 12, 2023; Audit Checklist dated December 11, 2023.
- Internal Audit Package 23:78 Audit Report dated November 3, 2023; Audit Checklist dated February 16, 2024.

Part 21 Evaluation and Reports

- CR-2020-0633, CR-2023-0712-DVDT, CR-2023-2043, CR-2023-2443-DVDT, CR-2024-0267-DVDT, CR-2024-1382-DVDT, CR-2024-1426-DVDT

Training and Qualification Records

- Paul Garcia – Lead Auditor Qualifications
- Juan Ibarra – M&TE

Oconee BPRA misload documentation

- FS1-0066982, Rev 1.0, "Oconee Unit 3 Cycle 33 (OCO3-33) Estimated Reload Batch Size and Planning Notice."
- FS1-0067464, Rev 1.0, "Oconee Cycle 33 Final Energy Requirements (OCO3-33)."
- FS1-0073466, Rev 2.0, "Root Cause Analysis of Oconee 3-33 Non-Conforming Boron Concentration in BRPAs".
- Spreadsheet "BP Pellet Lot Use".
- Burn Poison Rod Assembly Document list.
- FRM-20559 A, Version 6.0, "BP Rod Inspection Plan: FS1-0022519".

- FRM-50105 A, Version 10.0, "Burnable Poison Rod Assembly (MK-B) Form".
- FRM-50127 A, Version 5.0, "Burnable Poison (BP Concentration Cleanout Checklist".
- BPR Inspection Results, BPR FRM -50105A.
- FS1-0018610, Revision 1.0, "EIR – B10/Inch Data for ANO1-26".
- FS1-0028179, Revision 2.0, "B10/Inch Data for OCO1-30".
- FS1-0070396, Revision 2.0, "B10/Inch Data for OCO3-33".
- SWI-40096 C, Version 2.0, "Standard Work Instruction Shop Return Small Components from UO2".
- SWI-40096 C, Version 3.0, "Standard Work Instruction Shop Return Small Components from UO2".
- SWI-50127 A, Version 7.0, "Standard Work Instruction BP Pellet Loader – Rod Loading of BP Pellets".
- SWI-50127 A, Version 8.0, "Standard Work Instruction BP Pellet Loader – Rod Loading of BP Pellets".
- SWI-50131 A, Version 7.0, "Standard Work Instruction Blue M Drying Oven – Burnable Poison Pellet Drying".
- SWI-50132 A, Version 5.0, "Standard Work Instruction Blue M Drying Oven – Burnable Poison Pellet Basket Removal".
- SWI-50132 A, Version 6.0, "Standard Work Instruction Blue M Drying Oven – Burnable Poison Pellet Basket Removal".
- FS1-0060964, Revision 4.0, "CRD – Contract Requirements Document, Duke, Oconee 3, Cycle 33, Framatome Contract No. J01OCO333 (OCO3-33).
- FS1-0064182, Revision 6.0, "CRD – Contract Requirements Document, Duke, Oconee 1, Cycle 34, Framatome Contract No. J01OCO134 (OCO1-34).
- FS1-0067464, Revision 1.0, "Oconee 3 Cycle 33 Final Energy Requirements (OCO3-33)".
- FS1-0073466
- FS1-0002085, Revision 5.0, "Burnable Poison Rod Assembly (Mk-B)".
- Presentation "OCO3-33 non-conforming Burnable Poison Rod Assembly (BPR) [CR-2024-1382]", July 30, 2024.
- ECN-04886, "Modification of ATRIUM 11 UTP Handle Type A Bail"
- ECN-04850, "Revision of CE 15 (PAS) UTP Casting Drawing"
- 02-504939A1-002, "Product Drawing Upper Tie Plate Casting"
- FS1-0070702, Revision 1.0, "Upper Tie Plate Casting"
- FS1-0070874, Revision 1.0, "Data Reduction for ATRIUM 11 Type A Pressure Drop Testing with Cast Transition Piece, Reduced Flow Area Hole Type Frame, and modified ELC Upper Tie Plate Handle"