



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

January 26, 2017

Mr. Adam Hilton
FMO Facility Manager
Global Nuclear Fuel-Americas, L.L.C.
P.O. Box 708, Mail Code J20
Wilmington, NC 28402

**SUBJECT: GLOBAL NUCLEAR FUEL- AMERICAS,L.L.C – NRC INTEGRATED INSPECTION
REPORT 70-1113/2016-005 AND NOTICE OF VIOLATION**

Dear Mr. Hilton:

This letter refers to the inspections conducted on October 17- 20, 2017 and December 6-8, 2016, at your Global Nuclear Fuel Americas (GNF-A), L.L.C. and Global Laser Enrichment (GLE) facilities. The purpose of the inspections was to determine whether activities authorized under the license and the implementation of programs and procedures for Fire Protection and Emergency Preparedness at the GNF-A facility and Operational Safety and Plant Modifications at the GLE facility were conducted safely and in accordance with Nuclear Regulatory Commission (NRC) requirements. The enclosed report presents the results of these inspections. At the conclusion of these inspections, the inspectors discussed the findings concerning GNF-A with you and members of your staff at an exit meeting held on October 20, 2016, and discussed the findings concerning GLE with R. Crate and members of his staff at an exit meeting held on December 8, 2016.

These inspections examined activities conducted under your license as they relate to public health and safety, and to confirm compliance with the Commission's rules and regulations, and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred.

The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at (<http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>). The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report. The violation is being cited in the Notice because it was NRC-identified and the NRC has not determined that an adequate corrective action program has been implemented, and therefore the criteria for a Non-Cited Violation in NRC Enforcement Policy Section 2.3.2 was not met.

The NRC has concluded that information regarding: (1) the reason for the violation; (2) the corrective actions that have been taken and the results achieved; and (3) the date when full compliance was achieved is already adequately addressed on the docket in "NRC Inspection Report 70-1113/2016-005." Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice and Procedures," a copy of this letter, its enclosures, and your response, if you choose to provide one, 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.

If you have any questions, please contact Tom Vukovinsky of my staff at 404-997-4622.

Sincerely,

/RA/

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

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

Enclosures:

1. Notices of Violation
2. NRC Inspection Report 70-1113/2016-005
w/ Supplementary Information

cc: (See page 3)

The NRC has concluded that information regarding: (1) the reason for the violation; (2) the corrective actions that have been taken and the results achieved; and (3) the date when full compliance was achieved is already adequately addressed on the docket in "NRC Inspection Report 07001113/2016-005." Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

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Sincerely,
/RA/
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 Division of Fuel Facility Inspection

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

Enclosures:

1. Notice of Violation
2. NRC Inspection Report 70-1113/2016-005
 w/Attachment: Supplementary Information

cc: (see page 3)

DISTRIBUTION:

R. Johnson, NMSS
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 ADAMS: Yes ACCESSION NUMBER:ML17026A341 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI
SIGNATURE	/RA/	TVukovinsky for	/RA/	TVukovinsky for	/RA/	/RA/	/RA/
NAME	TVukovinsky	NPitroniak	LPitts	PGlenn	KKirchbaum	CRivera	PStartz
DATE	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/25/2017
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

cc:

Scott Murray, Manager
Facility Licensing
Global Nuclear Fuels – Americas, L.L.C.
Electronic Mail Distribution

W. Lee Cox, III, Chief
North Carolina Department of Health and Human Services
Division of Health Service Regulation
Radiation Protection Section
Electronic Mail Distribution

NOTICE OF VIOLATION

Global Nuclear Fuel- Americas
Wilmington, NC

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

During an NRC inspection conducted on October 17 through 21, 2016, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Safety Condition S-1 of Special Nuclear Material (SNM) License SNM-1097 requires, in part, that the license be used "in accordance with statements, representations, and conditions of application and supplements."

Chapter 8 of the License Application for License SNM-1097 states, in part, that "the requirements of the Radiological Contingency and Emergency Plan are implemented through approved documented procedures maintained by GNF-A."

WI-20-108-01, Revision (Rev.) 2.2, Emergency Organization Initial Qualification and Requalification Training, Attachment 3, Emergency Organization Position Requalification Requirements, states, in part, that the emergency director/interim emergency director and the licensing advisor are required to complete the "Biennial Requalification Drill."

WI-20-108-01, Rev. 2.2, Emergency Organization Initial Qualification and Requalification Training, Section 4.2.9, states, in part, that "upon notification of the annual requalification training and drill/exercise schedule, the Emergency Organization (EO) position holder shall undertake the requalification requirements as follows: For those positions where a biennial drill is required to participate in (or fill a role of a controller/evaluator) a minimum of one drill (or actual qualifying event) that permits demonstration evaluation of the major responsibilities for the position within a two year period."

Contrary to the above, on or before October 20, 2016, the licensee failed to ensure the requirements of the Radiological Contingency and Emergency Plan were implemented through approved documented procedures. Specifically, three EO position holders failed to participate in (or fill the role of a Controller/Evaluator) a minimum of one drill (or actual qualifying event) that permitted demonstration and evaluation of the major responsibilities for the position within a two year period, thus not completing their biennial requalification drill as required in WI-20-108-01, Rev. 2.2.

This is a Severity Level IV violation (Section 6.2.d.7 of the Enforcement Policy).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved, are already adequately addressed on the docket in "Inspection Report No. 70-1113/2016-005." However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, (70-1113/2016-005-01)," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or in 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>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 26th day of January, 2017

U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No.: 70-1113

License No.: SNM-1097

Report No.: 70-1113/2016-005

Licensee: Global Nuclear Fuel - Americas, LLC

Location: Wilmington, North Carolina 28402

Dates: October 1, 2016 to December 31, 2016

Inspectors: N. Pitoniak, Senior Fuel Facility Inspector (Paragraph A.1)
L. Pitts, Senior Fuel Facility Inspector (Paragraph C.1, C.2)
P. Glenn, Fuel Facility Inspector (Paragraph A.1)
K. Kirchbaum, Fuel Facility Inspector (Paragraph C.1, C.2)
C. Rivera, Fuel Facility Inspector (Paragraph B.1)
P. Starz, Fuel Facility Inspector (Paragraph A.1)
M. Ruffin, Fuel Facility Inspector (Paragraph B.1)

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

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas, LLC
NRC Integrated Inspection Report 70-1113/2016-005
October 1 – December 31, 2016

NRC regional inspectors conducted inspections during normal shifts in the areas of Safety Operations and Facility Support. During the inspection period, normal production activities were ongoing. These announced, routine inspections consisted of a selective examination of licensee activities accomplished by direct observation of safety-significant activities and equipment, walk-downs of the facility, interviews and discussions with licensee personnel, and a review of facility records and procedures. One violation of NRC requirements was identified during these inspections.

Safety Operations

- In the area of Fire Protection, no violations were identified. (Paragraph A.1)

Facility Support

- In the area of Emergency Preparedness, one Severity Level IV violation of NRC requirements was identified for failure to maintain Emergency Organization qualifications. (Paragraph B.1)

Special Topics

- A Plant Operations and Permanent Plant Modification inspection was conducted at the Global Laser Enrichment site, also in Wilmington, NC. In the areas of Operational Safety and Plant Modifications, no violations were identified. (Paragraphs C.1 & C.2)

Attachment

Key Points of Contact
List of Items Opened, Closed, and Discussed
Inspection Procedures Used
Documents Reviewed

REPORT DETAILS

Summary of Plant Status

Global Nuclear Fuel- Americas (GNF-A), LLC manufactures uranium dioxide (UO₂) powder, pellets, and light water reactor fuel bundles at its Wilmington, NC facility. The facility converts uranium hexafluoride (UF₆) to UO₂ using a Dry Conversion Process (DCP) and performs UO₂, gadolinium pellet and fuel fabrication operations. During the inspection period, normal production activities at the facility were ongoing.

Global Laser Enrichment tests, develops, and utilizes laser isotope separation process technology at its test loop facility in Wilmington, NC to enrich uranium by increasing the concentration of ²³⁵U than exists in natural uranium ore ²³⁸U. During the inspection period, normal activities at the facility were ongoing.

A. Safety Operations

1. Fire Protection Triennial and Annual (Inspection Procedures 88054 and 88055)

a. Inspection Scope and Observations

The inspectors reviewed licensee procedures and toured plant areas containing fire-safety related controls and items relied on for safety (IROFS) to assess the material condition of fire protection equipment, systems, and features to evaluate compliance with Chapter 7.0 of the License Application SNM-1097 and subordinate procedures. The inspectors evaluated whether flammable materials were stored in marked cabinets and if housekeeping and the control of combustible materials were adequate and consistent with the approved procedures. The inspectors evaluated whether the cutting, welding, and hot work program was implemented in accordance with approved procedures.

The inspectors reviewed the Fire Hazard Analysis (FHA) for the Balance of Plant, Dry Conversion Process, and the Fuel Fabrication Operating areas, Pre-Fire Plans, and fire protection records to determine compliance with Chapter 7.2 of the License Application. Inspectors evaluated the compliance of fire doors, fire dampers, fire detection and alarm systems, hydrogen detection systems, fire suppression equipment, and fire protection water systems with Chapters 7.5, 7.7, 7.8 and 7.9 of the License Application. Also, the inspectors confirmed that fire hoses and portable extinguishers were provided at their designated locations and access was unobstructed. The inspectors conducted walk-downs of site facilities and operating areas as well as reviewed associated records to determine if building construction features including fire walls and fire wall penetration seals were being maintained in a condition that would ensure they were available and reliable to perform their safety function in accordance with Chapter 7.4 of the License Application.

The inspectors reviewed records and performed walk-downs to determine compliance with the administrative control IROFS in accordance with CP-27-108, Combustible Control Program, for various areas of the plant.

The inspectors observed the weekly test of the diesel fire pump and the monthly test of the electric/diesel fire pump to evaluate compliance with WI-27-110-02, Rev. 3.0.

The inspectors reviewed samples of surveillance and test records, assessments and audits, to determine that fire protection equipment, systems, and activities were conducted in accordance with Chapters 11.2.5, 11.3.1, 11.3.2, and 11.3.4 of the License Application.

The inspectors reviewed samples of the licensee's fire protection system impairment records to determine if adequate compensatory measures had been put in place for out-of-service, degraded, or inoperable fire protection equipment, systems or features in accordance with Chapter 11.2, Configuration Management, of the License Application.

The inspectors reviewed samples of the licensee's corrective action program entries for the past 12 months to determine if the licensee was identifying issues with safety control or IROFS related to fire protection operability at an appropriate threshold and entering them into the corrective action program (CAP) in accordance with Chapter 11.7 of the License Application.

b. Conclusion

No violations were identified.

B. Facility Support

1. Emergency Preparedness (Inspection Procedure 88050)

a. Inspection Scope and Observations

The inspectors interviewed staff, reviewed records and any changes made to the Emergency Plan or within the facility to evaluate compliance with Chapter 8.0 of the License Application SNM-1097 and subordinate procedures. The inspectors reviewed procedures with significant revisions since the last emergency preparedness inspection to verify the changes were in compliance with the Emergency Plan. The inspectors discussed the licensee emergency call list to verify the list was current.

The inspectors reviewed the written agreements with the off-site agencies to verify that the organizations required by the Emergency Plan had up-to-date agreements. The inspectors interviewed representatives from the New Hanover Regional Medical Center, New Hanover Regional Emergency Medical Services, New Hanover County Department of Emergency Management, and the New Hanover Fire and Rescue to assess their knowledge and understanding of the written agreements. The inspectors interviewed off-site personnel and reviewed records to verify that the licensee invited offsite organizations for training as required by the Emergency Plan and that the training given was appropriate. The inspectors reviewed records to verify that the licensee performed a quarterly communication check with the off-site organizations as required by the Emergency Plan.

The inspectors observed the storage of emergency equipment in the Emergency Operations Center (EOC), Alternate EOC, Medical Facility, and the Wilmington Field Service Center (WFSC) to verify that the inventory levels were maintained as required

by the Emergency Plan. The inspectors toured the EOC and the alternate EOC to determine if the areas were readily assessable and maintained with the appropriate amount of communication-related equipment. The inspectors reviewed the personnel accountability procedure and surveyed the accountability meeting areas to verify they were accessible and equipped with functional equipment in accordance with licensee procedures.

The inspectors reviewed documentation of past events, since the last emergency preparedness (EP) inspection, which required the implementation of the Emergency Plan to verify that any problems or deficiencies associated with the Emergency Plan or implementing procedures were corrected in a timely manner. The inspectors reviewed self-assessments generated since the last inspection to verify that a system was in place for tracking and resolving self-assessment findings.

The inspectors reviewed training provided to emergency response personnel covering their roles and responsibilities and use of emergency equipment as required by the Emergency Plan to verify that the individuals responsible for utilizing the equipment were qualified. The inspectors reviewed the licensee provided training for hypothetical emergency situations to verify the training was effective and consistent with the frequency and performance objectives required in the Emergency Plan. The inspectors reviewed training records and interviewed licensee staff regarding emergency preparedness training in the past year and identified the following violation (VIO) of NRC requirements:

Introduction: An NRC-identified Severity Level (SL) IV cited VIO was identified for failure to ensure the requirements of the Radiological Contingency and Emergency Plan were implemented through approved documented procedures. GNF-A failed to follow the procedural requirement that Emergency Organization (EO) members have to participate in (or fill the role of a controller/evaluator) a minimum of one emergency drill (or actual qualifying event) within a two year period that permits demonstration and evaluation of the major responsibilities for their specific position, as outlined in Work Instruction (WI) WI-20-108-01.

Description: During an inspection conducted the week of October 17, 2016, the inspectors conducted interviews and reviews of the licensee's EO initial and requalification training records. Procedure WI-20-108-01, Emergency Organization Initial Qualification and Requalification Training, Rev. 2.2, Attachment 3, requires that these EO members perform a "Biennial Requalification Drill." Section 4.2.9 of WI-20-108-01, states in part, "positions where a biennial drill is required, participate in (or fill the role of a Controller/Evaluator) a minimum of one drill (or actual qualifying event) that permits demonstration and evaluation of the major responsibilities for the position within a two year period." The inspectors identified that three members of the EO who were qualified for the Emergency Director, Interim Emergency Director, and Licensing Advisor positions had not completed a biennial requalification drill. Specifically, the EO members in question had participated in a drill within the past two years, but not in a capacity which demonstrated the major responsibilities for the position in which they were qualified.

The licensee entered the issue into their CAP as CR #22034. The licensee's immediate actions were to review the drills/event reports from the past two years. The review revealed that these three individuals had not meet their biennial drill requirement. The

individuals were then removed from the EP positions in which they had not met their proficiency requirements. In addition, the licensee updated their Emergency Notification System (ENS) database to include fields that denote drill participation for each position required biennially.

Analysis: The licensee failed to ensure the requirements of the Radiological Contingency and Emergency Plan were implemented through approved documented procedures. Specifically, the licensee failed to complete biennial drill requalification requirements. This is a VIO of Section 4.2.9 of WI-20-108-01, which requires, in part, “positions where a biennial drill is required, [to] participate in (or fill the role of a Controller/Evaluator) a minimum of one drill (or actual qualifying event) that permits demonstration and evaluation of the major responsibilities for the position within a two year period.”

The VIO was determined to be more than minor because it aligned with Inspection Manual Chapter (IMC) 0616, “Fuel Cycle Safety and Safeguards Inspection Reports,” Appendix B, “Examples of Minor Issues,” Section 8, “Emergency Preparedness,” Example “d,” which states, in part, “This example is not minor if the individual(s) that performed the specific role in the emergency organization did not have current training qualifications and the position involved risk significant activities or decision-making.” As previously discussed three EO members did not have current training qualifications for positions in which they were considered qualified that involved risk significant activities or decision-making, particularly the position of Emergency Director.

The inspectors determined that there was no actual safety significance because the individuals involved did not respond to an actual emergency in those positions during the time their qualification had lapsed.

In accordance with the NRC Enforcement Policy section 6.2.d.7, VIOs in which “A licensee fails to meet or implement any emergency planning standard or requirement not directly related to assessment and notification (e.g., emergency response training, emergency equipment maintenance)” are characterized as SL IV VIOs.

Enforcement: Safety Condition S-1 of SNM License SNM-1097, states, in part “For use in accordance with [the] statements, representations and conditions of [the license] application.” Chapter 8 of the SNM-1097 license application, Radiological Contingency and Emergency Plan, states, in part, that “the requirements of the Radiological Contingency and Emergency Plan are implemented through approved documented procedures maintained by GNF-A.” WI-20-108-01, Rev. 2.2, Emergency Organization Initial Qualification and Requalification Training, Attachment 3, Emergency Organization Position Requalification Requirements, states, in part that the emergency director/interim emergency director and the licensing advisor complete a “Biennial Requalification Drill.” Section 4.2.9 in WI-20-108-01 states, in part, “upon notification of annual requalification training and annual drill/exercise schedule, the EO Position holder shall undertake the requalification requirements as follows: ... for those positions where a biennial drill is required, participate in (or fill the role of a Controller/Evaluator) a minimum of one drill (or actual qualifying event) that permits demonstration and evaluation of the major responsibilities for the position within a two year period.”

Contrary to the above, on or before October 20, 2016, three licensee's EO position holders failed to participate in (or fill the role of a Controller/Evaluator) a minimum of one drill (or actual qualifying event) that permits demonstration and evaluation of the major responsibilities for the position within a two year period. Specifically, three EO members failed to participate in a biennial drill and complete the requalification requirements in WI-20-108-01, Rev. 2.2.

The inspectors determined that there was no actual safety significance because the individuals involved did not respond to an actual emergency in the positions during the time-period in which they had not been requalified. The licensee initiated corrective action CR 22034, reviewed the drills/event reports from the past two years, removed the EO members that were not proficient in their requalification requirements from their EP positions, and updated their ENS database to include fields that denote drill proficiency for each position required biennially.

The failure to ensure the requirements of the Radiological Contingency and Emergency Plan were implemented through approved documented procedures constitutes a cited SL IV VIO of NRC requirements in accordance with Enforcement Policy Section 6.2.d.7 and will be documented as VIO 70-1113/2016-005-01, "Failure to maintain Emergency Organization qualifications." A Notice of Violation is enclosed.

b. Conclusion

One SL IV VIO of NRC requirements was identified for the failure to maintain EO qualifications. No other issues of significance were identified.

C. Special Topics: Inspections specific to GLE

1. Plant Operations (Inspection Procedure 88020)

a. Inspection Scope and Observations

The inspectors toured the GLE plant areas containing safety controls and IROFS to assess the material condition of the equipment and verify configuration of the systems were in accordance with the Integrated Safety Analysis (ISA) and Chapter 3 of and the license application. The inspectors reviewed the applicable Functional Test Instructions (FTIs) to verify that the attributes of system IROFS were properly tested for functionality. The inspectors reviewed the ISA to verify that the installation of Machine 1 (M1) did not create an unanalyzed condition. The licensee's compliance calendar was reviewed to verify that the IROFS testing was being tracked and scheduled at the correct frequencies. The inspectors reviewed training records to verify that affected operators received training on the modifications to the equipment and the associated IROFS prior to commencing operations involving M1.

b. Conclusion

No violations of NRC requirements were identified.

2. Plant Modifications (Inspection Procedure 88070)

a. Inspection Scope and Observations

The inspectors reviewed the plant modification packages for installation of M1, Change Request (CR) 474, and the package for operation of M1, CR 495. These packages were reviewed against licensee procedures and work instructions (CP-16-106 "Change Management Process," WI-16-106-02 "Configuration Management Program – Nuclear Manufacturing Operations," and WI-16-106-04 "GLE Test Loop Configuration Management Program") to verify the configuration management program was properly implemented in accordance with License Application section 11.2 as it applied to the installation and operation of M1.

The inspectors reviewed these packages to verify that applicable installation testing, and training requirements were identified and performed prior to completion of change packages and the start of system operations. The inspectors reviewed design information to determine if instrument set points accurately reflected the protection of safety limits based on instrument and calibration uncertainties.

The inspectors performed walk-downs of selected modifications to determine whether they were installed in accordance with approved design documents and drawings.

b. Conclusion

No violations of NRC requirements were identified.

D. Exit Meeting

The inspection scope and results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized on October 20 and December 15, 2016, to A. Hilton and staff and on December 8, 2016, to R. Crate and staff. No dissenting comments were received from the licensee. Proprietary information was discussed but not included in the report.

SUPPLEMENTARY INFORMATION

1. KEY POINTS OF CONTACT

Licensee personnel

<u>Name</u>	<u>Title</u>
D. Allen	Fire Pump Technician (GNF-A)
J. Berger	Manager Powder P&SS/FMO Building Manager (GNF-A)
H. Bryant	Radiation Protection Program Manager (GNF-A)
C. Davidson	Fire Protection Programs Lead (GNF-A)
A. Daley	Environmental Health and Safety (GNF-A)
D. Franklin	Radiation Protection (GNF-A)
A. Hilton	FMO Facility Manager (GNF-A)
D. Holbrook	Fire Pump Maintenance Supervisor (GNF-A)
T. Jones	Radiation Protection Supervisor (GNF-A)
P. Lachance	Maintenance Manager (GNF-A)
U. Latham	Senior Administrative Specialist, Licensing (GNF-A)
S. Lee	Fire Protection Engineer (GNF-A)
J. Mitcham	Industrial Hygiene and Chemical Management Lead (GNF-A)
D. Nay	Ceramics Production Support Manager (GNF-A)
P. Ollis	Facility Licensing (GNF-A)
C. Priest	FMO/EHS Industrial Safety Manager (GNF-A)
L. Quintana	Program Manager EHS & Security Licensing Advisor (GNF-A)
M. Venters	Emergency Preparedness Manager (GNF-A)
R. Crate	President and CEO (GLE)
P. Jenny	Security Manager (GLE)
R. Haughton	Principle Engineer (GLE)

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened & Closed

70-1113/2016-005-01	VIO	Failure to maintain Emergency Organization qualifications (Paragraph B.1)
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Closed

None

Discussed

None

3. INSPECTION PROCEDURES USED

88020	Operational Safety
88050	Emergency Preparedness
88054	Fire Protection Triennial
88055	Fire Protection Annual
88070	Plant Modifications

4. DOCUMENTS REVIEWED

Records:

Sprinkler System Deficiency List
 WI-27-110-01-F04, DCP Fire Extinguisher Inspection, dated September 7, 2016
 WI-27-110-16-F01, Sprinkler System Water Supply Monthly Inspection, dated August 2016
 2013 Annual Fire Hydrant Flow Test
 2014 Annual Fire Hydrant Flow Test
 2015 Annual Fire Hydrant Flow Test
 Work Order 231613, Annual Battery Test
 Work Order 239434, Annual Pull Station Testing
 Work Order 231612, Annual Fire Panel Battery Test
 Work Order 231612, Annual Fire Horn/Strobe Test
 Work Order 272257, Replace Smoke Detector 5402A
 Work Order 272255, Replace Smoke Detector 5401A
 Work Order 278058, Replace Module 4521
 Work Order 278061, Replace Module 3804
 Work Order 285131, Replace Module 4559
 Work Order 296145, Replace Power Modules 5534, 5535, 5536, 5539
 Work Order 286427, Replace Module 4855
 Work Order 286664, Check Operation of Listed PIVs
 Work Order 318609, Replace Zone 1680 Module
 Work Order 357719, Replace Module 5542
 Work Order 357723, Replace Module 1636
 Work Order 312982, Hydrogen Detector Calibration, dated September 4, 2016
 Fire Protection Program Lead training records (various)
 NOS-2015-20, RC &EP Annual Independent Audit Report, dated November 30, 2015
 Monthly RP Surveillance (Kits) (dated September 27, 2016 and August 17, 2016)
 Monthly RP Surveillance (WFSC) (dated August 29, 2016)
 Monthly RP Surveillance (ECC) (dated September 27, 2016, and August 17, 2016)
 Memorandum of Understanding between GNF-A and the Department of Emergency Management and 911 communications
 Memorandum of Understanding between GNF-A and New Hanover County Fire Rescue
 Memorandum of Understanding between GNF-A and New Hanover Regional Medical Center

Procedures:

Model 1820 Horizontal Split Case Pump Operation and Maintenance Manual
 CP-27-108, Combustible Control Program, Rev. 5.0
 WI-27-109-01, Hot Work Permits, Rev. 3.0
 WI-27-110-01, Fire Extinguisher Inspection, Maintenance, and Replacement, Rev. 4.1
 WI-27-110-02, Wilmington Site Fire Pump Inspection, Test, and Maintenance Program, Rev. 3.0

WI-27-110-05, Fire Hydrant Annual Flush, Rev. 0
 WI-27-110-08, Fire System Impairment, Rev. 0
 WI-27-110-09, Fire Protection Program, Rev. 0
 WI-27-110-16, Sprinkler System Water Supply Valve Monthly Inspection, Rev. 3.0
 WI-27-110-17, Sprinkler System Quarterly Inspection and Flow Alarm Test, Rev. 1.1
 WI-27-110-18, Sprinkler System Semi-Annual Supervisory Device Test, Rev. 1.1
 WI-27-110-25, Dry Pipe Sprinkler System Weekly Inspection, Rev. 2.0
 WI-27-113-01, Data Center Fire Suppression System Bypass Switch, Rev. 1.1
 WI-20-108-01, Emergency Organization Initial Qualification and Requalification Training,
 Rev. 2.2, dated December 18, 2014
 WI-28-114-09, Field Monitoring Team Management, Rev. 1, dated August 11, 2016
 WI-28-114-11, Staging Area Supervisor, Rev.1, dated August 16, 2016
 WI-28-114-17, Hazard Assessment, Rev. 0.1, dated September 16, 2015
 WI-28-114-16, Emergency Classification & Notification, Rev. 2, dated September 14, 2015
 CP-28-113, RC & EP Surveillance and Maintenance, Rev. 2, dated September 23 2015
 CP-28-113-F05, Monthly RP Surveillance (WFSC), Rev. 1, dated February 18, 2015
 CP-28-113-F06, Monthly RP Surveillance (Kits), Rev. 0, dated August 27, 2014
 CP-28-113-F04, Monthly RP Surveillance (ECC), Rev. 1, dated January 20, 2015
 CP-28-113-F07, Quarterly RP Surveillance (Hospitals), Rev. 1, dated September 23, 2015
 CP-20-108, Radiological Contingency and Emergency Plan (RC & EP) Training, Rev. 1.1,
 dated December 18, 2014
 WI-20-108-01, Emergency Organization Initial Qualification and Requalification Training,
 Rev. 2.2, dated December 18, 2014
 CP-16-106, Change Management Process, Rev. 8.1, dated September 26, 2016
 WI-16-106-02, Configuration Management Program – Nuclear Manufacturing Operations,
 Rev. 2.0, dated October 27, 2016
 WI-16-106-04, GLE Test Loop Configuration Management Program, Rev. 8.1, dated
 October 5, 2015

Condition Reports Written as a Result of the Inspection:

CR 21777
 CR 21794
 CR 21790
 CR 22034
 CAR-16-0010

Condition Reports Reviewed:

CR 17776
 CR 17778
 CR 21665
 CR 21677
 CR 9449
 CR 19314
 CR 20111
 CR 18930
 CR 17795
 CR 21687

Other Documents:

FHA BOP-01, Graded Fire Hazard Analysis Balance of Plant, Rev. 1

FHA 1320.00, Graded Fire Hazard Analysis Dry Conversion Process, Rev. 3

FHA 1001.00, Graded Fire Hazard Analysis Fuel Fabrication Operation, Rev. 1

Integrated Safety Analysis Summary, Rev. 19

SNM-1097, amendment 9, Materials License

Grid Maps-8000C12 Sheets 1-3

EP-0010 Recorder Position Fundamentals Lesson Plan

EP-017 Recorder Requalification Lesson Plan

MDV-15-103, Wilmington Staging Area Upgrade Plan, dated March 31, 2015

MDV-15-104, Wilmington Site Gates & Storage Pad Signage Project, dated April 14, 2015

Radiological Contingency and Emergency Plan (RC&EP), Rev. 25, dated July 13, 2016