

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II

245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

December 8, 2022

EA-22-086 EN55770 EN55956

Mr. Wyatt Padgett Compliance Manager Louisiana Energy Services URENCO USA P.O. Box 1789 Eunice, NM 88231

SUBJECT: URENCO USA - NRC INSPECTION REPORT 07003103/2022007 AND APPARENT VIOLATIONS

Dear Mr. Padgett:

This letter refers to the inspection conducted on August 22 to 25, 2022, at the URENCO USA facility. The purpose of the inspection was to review potential failures to control construction vehicles on-site in March and June of 2022, including follow-up on unresolved items which had been opened during the special inspection that was documented in URENCO USA - SPECIAL INSPECTION REPORT 07003103/2022006 (Agency Documents Access and Management System (ADAMS) ML22126A182) dated May 10, 2022. The enclosed report presents the results of this inspection. The inspector, discussed the preliminary inspection findings with your staff at the conclusion of the on-site portion of the inspection. A final exit briefing was conducted remotely with you on October 14, 2022.

Based on the results of this inspection, two apparent violations were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <a href="http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html">http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html</a>. The apparent violations involved the failure to: (1) meet performance requirements in 10 CFR 70.61(b) by establishing IROFS50b and IROFS50c barriers, and (2) meet performance requirements in 10 CFR 70.61(b) by maintaining IROFS50b and IROFS50c independence.

Before the NRC makes its enforcement decision, we are providing you an opportunity to (1) respond to the apparent violations addressed in this inspection report within 30 days of the date of this letter, (2) request a Pre-decisional Enforcement Conference (PEC), or (3) request Alternative Dispute Resolution (ADR) mediation. If a PEC is held, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference. If you decide to participate in a PEC or pursue ADR, please contact Robert E. Williams at 404-997-4664 within 10 days of the date of this letter. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in NRC Inspection Report 07003103/2022-007; EA-22-086" and should

include for each apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. Additionally, your response should be sent to the NRC's Document Control Center, with a copy mailed to Laura A. Dudes, Region II, 245 Peachtree Center Avenue N.E., Suite 1200 Atlanta, GA 30303, within 30 days of the date of this letter. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned. In presenting your corrective action, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful."

In lieu of a PEC, you may also request Alternative Dispute Resolution (ADR) mediation with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a third-party neutral mediator. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <a href="https://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html">www.nrc.gov/about-nrc/regulatory/enforcement/adr.html</a>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), 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 ADAMS, accessible from the NRC Web site at <a href="www.nrc.gov/reading-rm/adams.html">www.nrc.gov/reading-rm/adams.html</a>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

If you have any questions concerning this matter, please contact Robert E. Williams of my staff at 404-997-4664.

Sincerely,

Anthony Moders Signed by Masters, Anthony on 12/08/22

Anthony D. Masters, Director Division of Fuel Facility Inspection

Docket No. 07003103 License No. SNM-2010

Enclosure:

NRC Inspection Report 07003103/2022007

cc w/ encl: Distribution via LISTSERV

SUBJECT: URENCO USA - NRC INSPECTION REPORT 07003103/2022007 AND APPARENT VIOLATIONS DATED DECEMBER 8, 2022.

### **DISTRIBUTION**:

- A. Masters, RII
- R. Williams, RII
- T. Sippel, RII
- P. Startz, RII
- M. Toth, RII
- S. Sparks, RII
- D. Edwards, RII
- L. Gibson, RII
- M. Kowal, RII
- N. Doiley, RII
- S. Price, RII
- M. Bartlett, NMSS
- J. Rowley, NMSS
- J. Zimmerman, NMSS
- R. Sun, NMSS
- S. Helton, NMSS
- L. Howell, NMSS
- A. Rivera-Varona, NMSS
- C. Rivera Diaz, OE
- J. Peralta, OE
- P. Snyder, OE
- R. Augustus, OGC
- J. Maltese, OGC

OE Mail

**PUBLIC** 

#### ADAMS ACCESSION NUMBER: ML22341A606

ABAMO AGGEOGICIA MOMBELA.							
χ SUNSI Review		X Non-Sensitive  Sensitive		X Publicly Available  Non-Publicly Available			
OFFICE	RII/DFFI	RII/DFFI	RII/DFFI	RII/EICS	RII/EICS		
NAME	L. Cooke	T. Sippel	R. Williams	M. Kowal	S. Price		
DATE	10/14/22	10/14/22	10/14/22	10/27/22	11/9/22		
OFFICE	OE	NMSS/DFM	OGC: NLO	RII/DFFI			
NAME	J. Peralta	S. Helton	R. Reginald	A. Masters			
DATE	11/30/2022	11/15/22	11/29/22	12/8/22			

**OFFICIAL RECORD COPY** 

# U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Number: 07003103

License Number: SNM-2010

Report Number: 07003103/2022007

Enterprise Identifier: I-2022-007-0003

Licensee: Louisiana Energy Services dba URENCO USA (UUSA)

Facility: Urenco USA

Location: Eunice, NM

Inspection Dates: August 22 to 25, 2022

Inspector: L. Cooke, Fuel Facility Inspector

Approved By: Anthony D. Masters, Division Director

Division of Fuel Facility Inspection

#### SUMMARY

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

#### **List of Violations**

Failure to meet performance requirements in 10 CFR 70.61(b) by not establishing IROFS						
barriers						
Significance	Report Section					
Severity Level APVIO	88020					
AV 07003103/2022007-01						
Open						
EA-22-086						

An apparent violation (AV) of 10 CFR 70.61(b) was identified for the failure to maintain the risk of a high-consequence event as highly unlikely. Specifically, the licensee failed to implement the appropriate item relied on for safety (IROFS) controls for a credible high-consequence accident sequence included in the Integrated Safety Analysis (ISA) Summary.

Loss of IROFS 50b/c independence					
Significance	Report Section				
Severity Level APVIO	88020				
AV 07003103/2022007-02					
Open					
EA-22-086					

An apparent violation of 10 CFR 70.61(b) was identified for the failure to maintain the risk of a high-consequence event as highly unlikely. Specifically, the licensee failed to maintain independence between IROFS50b and IROFS50c during a barrier breach resulting in degraded IROFS.

#### **Additional Tracking Items**

Type	Issue Number	Title	Report Section	Status
WER	07003103/2022-007-00	LOSS OF AN ITEM RELIED ON FOR SAFETY (EN55956)	88020	Closed
URI	07003103/2022006-01	Lack of Implementation of Safety Controls for an Analyzed High Consequence Event	88020	Closed
URI	07003103/2022006-03	Immediate Corrective Actions Upon Discovery of Lack of Controls (IROFS 50b/c)	88020	Closed

#### **PLANT STATUS**

The URENCO USA (UUSA) facility in Eunice, New Mexico enriches uranium hexafluoride (UF6) using gas centrifuge technology. During the inspection period, normal production activities were ongoing.

#### **INSPECTION SCOPES**

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

#### **SAFETY OPERATIONS**

#### 88020 - Operational Safety

The inspectors conducted walkdowns, interviewed staff, and reviewed licensee documentation to understand the licensee's actions and the facts surrounding the events that were reported to the NRC as EN55770 and EN55956. As part of this review, the inspectors also followed up on unresolved items (URIs) opened in URENCO USA - SPECIAL INSPECTION REPORT 07003103/2022006 (ML22126A182).

#### **INSPECTION RESULTS**

Failure to meet performance requirements in 10 CFR 70.61(b) by not establishing IROFS						
barriers						
Severity Report Section						
Apparent Violation	88020					
AV 07003103/2022007-01						
Open						
EA-22-086						

An apparent violation (AV) of 10 CFR 70.61(b) was identified for the failure to maintain the risk of a high-consequence event as highly unlikely. Specifically, the licensee failed to implement the appropriate IROFS controls for a credible high-consequence accident sequence included in the Integrated Safety Analysis (ISA) Summary.

<u>Description</u>: As described in more detail in the URENCO USA Special Inspection Report 07003103/2022006 (ML22126A182), and as reported to the NRC in EN55770, on March 2nd, three external site preparation construction vehicles were brought inside the controlled access area (CAA) in proximity of an area of concern and driven off their trailers prior to the IROFS50b and 50c barriers being established. Afterwards, erection of the IROFS50b and 50c barriers began, but they were not declared operable due to deficiencies with barrier placement (e.g., gaps in barrier coverage) and the posting of signage. On March 7th, a licensee shift manager noticed the construction vehicles were within the CAA without IROFS50b or 50c

being declared operable.

NEF-BD-50b, "Administratively Control Proximity of Vehicles by Use of Barriers," Revision (Rev.) 9 and NEF-BD-50c, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9 state that IROFS50b and 50c are applicable at all times while construction site preparation vehicles are in use and UF6 cylinders are located in the area of concern. The licensee's expectation was that the IROFS barriers were required to be in place prior to the vehicles entering the CAA. Areas of concern are established via OP-3-1000-24, "Managing IROFS50 Series Areas of Concern." For the Separation Building Module (SBM) 1001 Chiller HVAC project, the SBM 1001 UF6 handling area was designated as an area of concern because UF6 cylinders were stored close enough to the exterior wall of the structure that a construction vehicle could impact the wall with enough force to damage a cylinder and release UF6. IROFS50b and 50c should have been in place when the external site preparation construction vehicles were driven off their trailers and while they were on-site.

Work Order (WO) 1000509387, a non-safety related QL3 work order, was created in August 2021 to support excavation work related to the SBM 1001 chiller HVAC project. During an interdepartmental review of the work order, it was determined that IROFS50b and 50c controls applied to the project. WO 1000537772, which was a QL1 safety related work order, was then created in February 2022 to establish the IROFS50b and 50c barriers. However, no written procedure or work package was used to direct staging of the vehicles. Individuals involved in the work were not trained on IROFS50 and did not know that allowing the vehicles to be driven off the trailers and staged inside the CAA constituted using the external site preparation vehicles, as described in ORM 50b-50c, "Administratively Control Site Construction Vehicles Near the Areas of Concern" and the IROFS50b and 50c boundary definition documents. The ORM requires that IROFS50 barriers be established at all times while site construction vehicles are in use and UF6 cylinders are located in the areas of concern.

Work done to establish the IROFS50b and 50c barriers, under the above QL1 work order, was signed open for work on March 2nd. The barriers were being physically put in place from March 2nd - 4th and were inspected by shift managers on March 5th and 6th. The shift managers noted deficiencies in the barriers that would need to be resolved prior to declaring the IROFS50b and 50c barriers operable. On March 7th, during another walkdown of the IROFS50b and 50c barriers by a shift manager, the shift manager determined that the barriers still did not meet operability requirements and noted that construction vehicles were on-site. The licensee then responded by directing the contractor to remove the site preparation vehicles. The contractor staff operating the vehicles, who were not aware of or trained on IROFS50, then drove them off-site. Procedure ORM 50b-50c instead directs that operation of site preparation vehicles be suspended if proximity control of site construction vehicles relative to the area of concern cannot be maintained.

Corrective Actions: After the event, the licensee issued a stop work memorandum. The actions associated with the stop work were:

- 1) All activities conducted by contractors and vendors in the CAA will be done from within an open work order package to ensure that all work such as pre-staging of material and equipment are captured within the work control process.
- 2) All project managers will qualify on IROFS50 series to ensure that applicable personnel fully understand the consequences and risks of bringing this type of equipment into the CAA for any reason.
- 3) Shift managers will assess the operator's requisite level of knowledge on IROFS50 series

to determine whether adequate minimum understanding exists to preclude recurrence.

- 4) Security will not allow any site preparation construction vehicles into the CAA without obtaining the approval of the shift manager.
- 5) A documented extent of condition will be performed by shift operations to ensure compliance with IROFS50.

These actions have been completed and the stop work has been lifted. In addition, a root cause evaluation for this event, "Construction Equipment Brought into CAA Prior to IROFS50 Series Declared Operable," has been conducted. The root cause identified for this event was less than adequate change management. Corrective actions to minimize recurrence included additional management controls to control access of site preparation vehicles through work control and operating procedures.

Corrective Action References: EV 147490

Root Cause Evaluation Report, "Construction Equipment Brought into CAA Prior to IROFS50 Series Declared Operable"

<u>Analysis:</u> The initiating event of accident sequence OC2-1 is that an external site preparation construction vehicle failure or human error results in an impact to an area of concern (i.e., SBM 1001). For the uncontrolled accident sequence, the impact results in damage to the facility and a subsequent UF6 release with high consequences to the public or worker. For the controlled accident sequence, IROFS50b and 50c administratively control the proximity of construction site preparation vehicles around areas of concern to prevent impacts with areas of concern that would result in a release of UF6.

Accident Sequence OC2-1 has an initiating event frequency of -1, corresponding to a few failures expected in the lifetime of the facility. IROFS50b and 50c are enhanced administrative IROFS with a -2 credit each. The controlled accident sequence is thus at a -5 frequency, which is URENCO's threshold for what is considered highly unlikely.

The event did not lead to any vehicles actually striking an area of concern, so the event had no actual safety consequence. The potential consequence of this event was that the high-consequence accident sequence was no longer maintained as highly unlikely.

#### Enforcement:

Severity: This violation is being considered for escalated enforcement in accordance with the NRC Enforcement Policy.

Violation: 10 CFR 70.61(b) requires, in part, that "the risk of each credible high-consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely..."

10 CFR 70.62(d) requires that "each licensee shall establish management measures to ensure compliance with the performance requirements of 70.61... The management measures shall ensure that engineered and administrative controls that are identified as IROFS, are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements of 70.61."

NEF-BD-50b, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9 and

NEF-BD-50c, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9 implement the IROFS by establishing barriers of sufficient strength to alert the vehicle operator upon impact with the barrier at all times while construction site preparation vehicles are in use and UF6 cylinders are located in the areas of concern.

Contrary to the above, from March 2 to March 7, 2022, IROFS barriers were not implemented as available and reliable to reduce the likelihood of occurrence of a high-consequence event prior to three construction vehicles being used (driven) on-site. Specifically, the IROFS barriers were not physically in place before the vehicles arrived on-site and had not been established properly by the time they were driven off-site.

Enforcement Action: This violation is being treated as an apparent violation pending a final significance (enforcement) determination.

The disposition of this violation closes URIs: 07003103/2022006-01 and 07003103/2022006-03.

Loss of IROFS 50b/c independence					
Severity	Report Section				
Apparent Violation AV 07003103/2022007-02	88020				
Open					
EA-22-086					

An apparent violation of 10 CFR 70.61(b) was identified for the failure to maintain the risk of a high-consequence event as highly unlikely. Specifically, the licensee failed to maintain independence between IROFS50b and IROFS50c during a barrier breach resulting in a degraded IROFS.

Description: As reported in EN 55956, on June 21 a single individual was concurrently performing the administrative actions of IROFS50b and 50c by acting as the flagger for IROFS50b and 50c concurrently while a yard truck was breaching the IROFS50 barriers. The IROFS50b and 50c barriers were established around areas of concern sitewide after EN55770 and EN55802, because additional vehicles were being analyzed to ascertain if they required IROFS controls. Vehicle breaches into the IROFS50b and 50c areas of concern were being performed per procedure OP-3-1000-16, "IROFS 50b External Boundary Control," and OP-3-1000-17, "IROFS 50c External Boundary Control." These procedures had a note stating, "the same flag person may serve for both the IROFS50b and 50c breaches provided both breaches are in the same vicinity." This was contrary to the IROFS Boundary Definition Documents (e.g., NEF-BD-50b, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9) which required independence of IROFS50b from 50c.

The IROFS50b and 50c Boundary Definition Documents state that, "an individual with flags will be used to replace the barriers when they need to be removed to allow normal operations to occur." The Boundary Definition Documents specifically state that the IROFS50b "barrier is separate and independent from the barrier established for IROFS50c."

The event was recognized by the licensee during routine management observation. When the loss of IROFS independence was recognized, work was stopped.

Corrective Actions: Upon discovery of the event, work was immediately stopped, and a stop work order was issued for IROFS50 breaches until the associated procedures were revised

and personnel were trained on the new revisions.

Implementing procedures OP-3-1000-16, "IROFS50b External Boundary Control," and OP-3-1000-17, "IROFS50c External Boundary Control," were revised to ensure independence requirements are clear. To ensure similar instances do not occur, implementing procedures OP-3-1000-15, "IROFS50a UBC Storage Pad Barrier Control," and OP-3-1000-22, "IROFS50h UBC Storage Pad Barrier Control," were also revised to ensure similar independence requirements are clear. Shift managers and qualified personnel were subsequently trained on the procedural revisions. A detailed apparent cause evaluation of this event was being performed.

#### Corrective Action References: EV 152996, LES-22-107-NRC

<u>Analysis:</u> The initiating event of accident sequence OC2-1 is that an external site preparation construction vehicle failure or human error that results in an impact to an area of concern. For the uncontrolled accident sequence, the impact results in damage to the facility and a subsequent UF6 release with high consequences to the public or worker. For the controlled accident sequence, IROFS 50b and 50c administratively control the proximity of construction site preparation vehicles around areas of concern to prevent impacts with areas of concern that would result in a release of UF6.

NEF-BD-50b Rev. 9 states that IROFS50b and 50c are applicable at all times while construction site preparation vehicles are in use and UF6 cylinders are located in the areas of concern. It later states that for normal operations (e.g., cylinder movements) to occur, an individual with flags will be used to replace the barriers when they need to be removed to allow normal operations to occur. The IROFS boundary definition also states that IROFS50b is separate and independent of IROFS50c.

The IROFS50b and 50c barriers were in place due to the SBM 1001 chiller work as well as the ongoing analysis of other vehicles that may require additional controls.

The event was captured in the licensee's corrective action system as EV 152996. At the time of the event, procedure OP-3-1000-16 and OP-3-1000-17 had a note after step 5.3.3 indicating that one individual could perform the flagger duties for IROFS50b and 50c concurrently. The procedure was not in accordance with the IROFS independence requirements. The procedures have been revised, and the detailed apparent cause evaluation for this event is ongoing.

OC2-1 has an initiating event frequency of -1, a few failures expected in the lifetime of the facility. Then IROFS50b and 50c are enhanced administrative IROFS each with a -2 credit. The controlled accident sequence is at a -5, which is the threshold for a sequence to be considered highly unlikely, so loss or degradation of the IROFS results in a failure to meet 70.61(b) performance requirements.

The event did not lead to any vehicles actually striking an area of concern, so the event had no actual safety consequence. The potential consequence of this event is that the high-consequence accident sequence was no longer maintained as highly unlikely.

_		•										
E	n	1	$\sim$	r	$\hat{}$	$^{\circ}$	n	n	Δ	n	ď	٠.
_		ш	u		u	┖	ш		ㄷ		П	L.

Severity: This violation is being considered for escalated enforcement in accordance with the NRC Enforcement Policy.

Violation: 10 CFR 70.61(b) requires, in part, that "The risk of each credible high-consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely..."

10 CFR 70.62(d) requires that "each licensee shall establish management measures to ensure compliance with the performance requirements of 70.61... The management measures shall ensure that engineered and administrative controls that are identified as IROFS are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements of 70.61."

NEF-BD-50b, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9 and NEF-BD-50c, "Administratively Control Proximity of Vehicles by Use of Barriers," Rev. 9 state that, "for normal operations... an individual with flags will be used to replace the barriers when they need to be removed to allow normal operations to occur." The Boundary Definition Documents also state that the IROFS50b "barrier is separate and independent from the barrier established for IROFS50c."

Contrary to the above, on June 21, 2022, the barrier for IROFS50c was not implemented as separate and independent from IROFS50b, such that both IROFS were maintained reliable to reduce the likelihood of occurrence of a high-consequence event to highly unlikely. Specifically, one individual performed the flagging duties of IROFS50b and IROFS50c concurrently, thus failing to maintain the required independence between IROFS50b and IROFS50c, so that a single common mode human error could disable both IROFS.

This apparent violation closes WER 07003103/2022-007-00.

Enforcement Action: This violation is being treated as an apparent violation pending a final significance (enforcement) determination.

#### **EXIT MEETINGS AND DEBRIEFS**

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

On August 25, 2022, and October 14, 2022, the inspectors presented the NRC inspection results to Karen Fili and other members of the licensee staff.

## **DOCUMENTS REVIEWED**

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
88020	Engineering Evaluations		Root Cause Evaluation: Construction Equipment Brought into CAA Prior to IROFS50 Series Declared Operable	Rev. 3
			Apparent Cause Evaluation NRU URI #4 Timeliness of Event Notification, EV 151363	Rev. 0
		ISA-IAD-0034	Construction Vehicle Accident Probability Determination in Support of EV149740	Rev. 01
		ISA-MEM-0014	Operate While Constructing IROFS 50 Series	Rev. 16
	Miscellaneous	EN 55770 Retraction	Retracted Failure to Implement IROFS50b/c	04/25/2022
		EN 55802	Instances of Unanalyzed Conditions Associated with IROFS 50b/c	03/25/2022
EN 55956 Loss		EN 55956	Loss of an Item Relied on for Safety	06/22/2022
	LES-22-107-NRC 60 Day Follow up Report IROFS50b/c Independence		08/18/2022	
		LES-22-113-NRC	60 Day Report for EN 55770  Administratively Control Proximity of Vehicles by Use	09/01/2022
		Rev. 9		
		NEF-BD-50c	Administratively Control Proximity of Vehicles by Use of Barriers	Rev. 9
		ORM 50b-50c	Administratively Control Site Construction Vehicles Near the Areas of Concern	Rev. 5
		PPL-22-03	Stop Work for Site Preparation Vehicles in the CAA	03/07/2022
		PPL-22-08	Lifting of Stop Work for Vehicles Inside CAA	03/30/2022
	Procedures OP-3-1000-16 IROFS 50b External Boundary Control		IROFS 50b External Boundary Control	Rev. 10 and Rev. 11
		OP-3-1000-17	IROFS50c External Boundary Control	Rev. 11 and Rev. 12
		OP-3-1000-24	Managing IROFS50 Areas of Concern	Rev. 5
	Work Orders	WO 1000509387	SBM 1991 Chiller Project Earthwork #1	08/16/2021
		WO 1000537772	SBM 1001 Chill Water Project IROFS50	02/16/2022