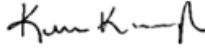




UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 8 2021

MEMORANDUM TO: Chris Miller, Director
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

FROM: Kerri A. Kavanagh, Chief  Signed by Kavanagh, Kerri
Quality Assurance and Vendor Inspection Branch on 07/08/21
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

SUBJECT: TRIP REPORT BY THE NUCLEAR REGULATORY
COMMISSION STAFF OF THE NUPIC JOINT UTILITY AUDIT AT
Reuter-Stokes, LLC

On May 10 - 14, 2021, Andrea Keim, of the Office of Nuclear Reactor Regulation, Division of Reactor Oversight, Quality Assurance and Vendor Inspection Branch, observed the performance of a Nuclear Procurement Issues Corporation (NUPIC) joint utility audit of Reuter-Stokes, LLC (hereafter referred to as Reuter-Stokes) in Twinsburg, OH. Nebraska Public Power District led the audit, with participation from Tennessee Valley Authority, Energy Harbor Nuclear, DTE Energy, and Exelon Nuclear, using Revision 21 of the NUPIC audit checklist. The Reuter-Stokes audit number is 24930. The purpose of the NRC staff's observation was to assess the NUPIC quality assurance audit process used for suppliers of components to the nuclear industry. The trip report of the staff's observations includes a list of the NUPIC audit team members.

CONTACT: Andrea Keim, NRR/DRO/IQVB
(301) 415-1671

SUBJECT: TRIP REPORT BY THE NUCLEAR REGULATORY COMMISSION STAFF OF
THE NUPIC JOINT UTILITY AUDIT AT REUTER-STOKES, LLC
Dated: July 8, 2021

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NAME	AKeim	KKavanagh
DATE	7//2021	7/8/2021

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NUCLEAR PROCUREMENT ISSUES CORPORATION
JOINT UTILITY AUDIT OBSERVATION TRIP REPORT

Vendor Audited: Reuter-Stokes, LLC
8499 Darrow Road, Edison Park
Twinsburg, OH 44087-2398

Lead Licensee: Nebraska Public Power District

Lead Contact: Mr. John Larson
Nuclear Procurement Issues Corporation Lead Auditor
Cooper Nuclear Station
402-825-5822
jlarso@nppd.com

Nuclear Industry Activity: Reuter-Stokes, LLC (Reuter-Stokes) manufactures radiation monitoring equipment and in-core radiation detectors and instrumentation

Observation Dates: May 10 - 14, 2021

Observers: Andrea Keim, NRR/DRO/IQVB

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

Subject

This trip report documents observations made by a member of the U.S. Nuclear Regulatory Commission (NRC), Office Nuclear Reactor Regulation, Division of Reactor Oversight, Quality Assurance and Vendor Inspection Branch, during a Nuclear Procurement Issues Corporation (NUPIC) joint utility audit conducted on May 10 - 14, 2021, at the Reuter-Stokes, LLC (hereafter referred to as Reuter-Stokes) facility in Twinsburg, OH.

Background/Purpose

NUPIC was formed in 1989, by a partnership involving all domestic and several international nuclear utilities. The NUPIC program evaluates suppliers furnishing safety-related components, services, and commercial-grade items to nuclear utilities. The NUPIC audit was performed using Revision 21 of the NUPIC audit checklist and the results will be provided to NUPIC members that procure items and services from Reuter-Stokes.

The purpose of the NUPIC audit was to evaluate the implementation and effectiveness of Reuter-Stokes's Quality Assurance (QA) program in accordance 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, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," American Society of Mechanical Engineers (ASME) NQA-1, "Quality Assurance Requirements for Nuclear Facility Applications," and 10 CFR Part 21, "Reporting of Defects and Noncompliance," at the Twinsburg, OH facility. The NUPIC audit also included review and assessment of the effectiveness of corrective actions that Reuter-Stokes took for a previous a finding and deficiencies identified during the last NUPIC audit performed in November 2017. This NUPIC audit team was led by Nebraska Public Power District, with participation from Tennessee Valley Authority, Energy Harbor Nuclear, DTE Energy, and Exelon Nuclear. The NUPIC audit team consisted of one team lead, five audit team members and one technical specialist.

The purpose of the NRC staff's observation of this audit was to ensure that the NUPIC audit process continues to meet the requirements of Appendix B to 10 CFR Part 50. The NRC staff utilized Inspection Procedure 43005, "NRC Oversight of Third-Party Organizations Implementing Quality Assurance Requirements," dated October 2015, during the observation.

Observation Activities

The NRC staff independently assessed and reviewed Reuter-Stokes' implementation of their QA program to evaluate whether the NUPIC audit team effectively identified and responded to issues. Reuter-Stokes provided the QA manual and implementing procedures to the NUPIC audit team. The NRC staff observed the NUPIC audit team as they conducted a performance-based review of the specific audit checklist sections which included a review of Reuter-Stokes' QA manual and other lower tier implementing documents such as procedures, purchase orders, and other quality assurance records. The NRC staff requested additional documents from Reuter-Stokes in order to draw their own conclusions. The NRC staff also refrained from directing or leading NUPIC, as to not interfere with the conduct of NUPIC's audit.

The QA areas reviewed during the audit included the following: contract review, design, commercial-grade dedication, procurement, fabrication/assembly activities, material control and handling, storage and shipping, special processes, test, inspections, and calibration, document control/adequacy, organization/program, document control/adequacy, internal audits,

corrective action, training/certification, records, nonconforming items, and 10 CFR Part 21. The NRC staff accompanied the NUPIC audit team while they performed walkthroughs and interviews of Reuter-Stokes's personnel. In addition, the NUPIC audit team and the NRC staff observed Reuter-Stokes performance of leak testing of ASME Code weld, welding using an orbital autogenous filler weld system and additional nondestructive examinations.

Discussion

The NRC staff verified the NUPIC audit team adequately considered Reuter-Stokes' scope of supply and observed a demonstration of work practices to verify activities were being implemented in accordance with applicable procedures. Due to workplace restrictions associated with the pandemic caused by the Coronavirus Disease 2019 (COVID-19), the NRC staff member focused its observation on a limited sample of the NUPIC audit checklist. Specifically, the NRC staff observed the NUPIC audit team members review documentation, observe fabrication and testing processes and interview Reuter-Stokes personnel related to, commercial-grade dedication, fabrication/assembly activities, procurement, and supplier oversight portions of the NUPIC audit checklist. The NRC staff observed NUPIC's findings and deficiency determinations during internal NUPIC daily debriefs and briefings with Reuter-Stokes personnel. The NUPIC audit resulted in three findings in the areas of (1) internal audits (2) commercial grade dedication, and (3) procurement. In accordance with the NUPIC processes, the finding related to commercial grade dedication required immediate notification to all NUPIC members. In addition, the NUPIC audit team identified three deficiencies in the areas of QA program indoctrination, review of external audit, and the records. During the exit meeting, the NUPIC audit team presented these findings and deficiencies to Reuter-Stokes's management and technical staff. Reuter-Stokes initiated corrective actions to address these findings and deficiencies.

The previous NUPIC audit identified one finding and five deficiencies during the July 2017 audit. The NUPIC audit team reviewed the corrective actions and reviewed a sample of documents to verify if any repeat issues were identified. The NUPIC audit team did identify a repeat issue in the area of internal audits. As a result of the NUPIC audit team's review of the corrective actions opened in response to the 2017 finding and deficiencies, NUPIC determined these issues to be closed. Since there are repeat minor issues identified in internal audits, the current observations will be dispositioned as a finding for the current 2021 audit report in accordance with the NUPIC audit process.

With the exception of the findings and deficiencies identified, the NUPIC audit team determined that Reuter-Stokes was effectively implementing its QA program for the program elements that were audited. In addition, the NUPIC audit team concluded that the deficiencies had no impact on product quality. Although, the NUPIC audit team does recommend a limited scope audit focused on commercial grade dedication and internal audits be performed midway through the NUPIC audit cycle.

Conclusion

The NRC staff verified a limited sample of the NUPIC audit checklist review areas. The NRC staff found that the NUPIC audit team adequately addressed the specific areas of the checklist on which the NRC staff focused their review.

The NRC staff observed the daily team meetings to verify the NUPIC audit team was adequately addressing issues and effectively verifying the implementation of QA requirements.

The NRC staff concluded that the NUPIC audit checklist was effectively implemented by the NUPIC audit team. In addition, all of the NUPIC audit team members were onsite during the audit. The NRC staff noted that the NUPIC audit team engaged the NRC throughout the audit, and when requested, provided clarification on regulatory positions. Specifically, the NRC staff participated in a meeting between Reuter-Stokes and the NUPIC audit team related to concerns associated with not being able to perform audits or commercial-grade surveys of their suppliers due to the travel restrictions caused by the COVID-19 pandemic. The NUPIC audit team discussed some options available to Reuter-Stokes and the NRC staff described what actions the NRC has taken to address this issue.

The NRC also had access to all interactions between Reuter-Stokes and the NUPIC audit team, as well as access to the same records reviewed by the NUPIC audit team. The NUPIC audit team was technically capable and effectively engaged the vendor; asking the right questions and challenging the vendor as required. Furthermore, the NUPIC audit team was effective at communicating with each other and knowledgeable in their assigned areas of review. The NRC staff concluded the NUPIC audit team met expectations, and NUPIC's oversight of activities were effectively implemented.

List of Participants

Name	Title	Affiliation	Entrance	Exit
John Larson	Audit Team Leader	Nebraska Public Power District – Cooper Nuclear Station	X	X
	Technical Specialist	SNC	X	X
John Ott	Audit Team Member	Xcel Energy	X	X
Gerard Machalick	Audit Team Member	Talen Energy	X	X
Robert Carvel	Audit Team Member	Pacific Gas and Electric Company	X	X
Tim Czuba	Audit Team Member	Entergy Operations, Inc.	X	X
Diona Russell	Audit Team Member	DTE Energy	X	X