Department of Energy
Washington, DC 20585

October 9, 2020

Ms. Michelle Reichert
President & Chief Executive Officer
Consolidated Nuclear Security, LLC
301 Bear Creek Road
P.O. Box 2008
Oak Ridge, Tennessee 37831

WEL-2020-04

Dear Ms. Reichert:

The Office of Enterprise Assessments' Office of Enforcement conducted an investigation into a finger amputation suffered by a Consolidated Nuclear Security, LLC (CNS) worker. The amputation occurred on March 30, 2019, when service and maintenance craft workers, herein after referred to as *craft workers*, were attempting to determine the motor torque on a malfunctioning lathe at the National Nuclear Security Administration's Y-12 National Security Complex in Oak Ridge, Tennessee. The event occurred when one of the worker's moved to the back of the lathe to observe the limit switch plate and touched it. When the worker touched the limit switch plate, it moved in the opposite direction pinching the worker's left index, middle, and ring fingers against the machine structure, resulting in the amputation of the tip of the worker's left middle finger. The investigation activities included interviews with contractor personnel, a review of relevant documentation, and a site tour, including the work area containing the lathe involved in the amputation. The onsite portion of the investigation was conducted October 21 through 23, 2019.

Based on the investigation, the Office of Enforcement identified concerns with CNS's implementation of 10 C.F.R. Part 851 (Part 851) *Worker Safety and Health Program* (WSHP) in the areas of hazard identification, assessment, prevention, abatement, and training and information that warrant management attention. Specifically, the Office of Enforcement determined that CNS did not:

- Identify the limit switch plate of the lathe as a location where workers, such as craft workers, are potentially exposed to pinch points and moving parts during tasks leading up to service and maintenance activities.

- Adequately protect *other* employees, such as craft workers performing service and maintenance activities on the lathe causing the injury, by installing a fixed guard over the limit switch plate to ensure that workers are not exposed to energized, machine component hazards. The investigation revealed that craft workers are required to work in machining areas, other than at the point of operation, and are potentially exposed to pinch points and other moving machine components during the course of their work.

- Ensure that craft workers understood when Lock-out/Tag-out was required, and could clearly distinguish between phases of maintenance such as "testing" and "troubleshooting." The investigation revealed that *troubleshooting* was only to be performed, if necessary, and that Lock-out/Tag-out was required when troubleshooting; however, workers did not understand the difference between testing and troubleshooting, leading to confusion about when to apply an energy control device.

- Identify safety awareness and machine guarding training in CNS program documentation as a requirement for workers performing work requiring energy controls on machinery; and

- Provide effective training on pinch points and other moving parts to enable craft workers to identify potential hazards, such as limit switch plates, on older equipment. The investigation revealed that workers received computer-based training; however, the training relied on hazard avoidance as the primary control for pinch-point hazards. The training did not mention machine guarding as a hazard control, and it did not provide examples of possible pinch-points and/or moving part hazards typically associated with older equipment.

The Office of Enforcement acknowledges that CNS promptly investigated the event, prepared a causal analysis, developed corrective actions, and installed a fixed guard over the limit switch plate to prevent recurrence.

The Office of Enforcement has elected to exercise enforcement discretion and will not pursue further enforcement activity in this matter. Consequently, Office of Enforcement is issuing this letter to share the regulatory concerns regarding CNS's implementation of Part 851 requirements. CNS should consider the information contained in this letter as evidence that its WSHP warrants improvement in order to maintain compliance with the Department's regulatory requirements, and to reduce the potential for worker injuries. In coordination with the National Nuclear Security Administration, the Office of Enforcement will continue to monitor CNS's efforts to maintain a safe and healthful workplace.

This letter imposes no requirements on CNS and no response is required. If you have any questions, please contact me at (301) 903-7707, or your staff may contact Robert Hailstone, Director, Office of Worker Safety and Health Enforcement, at (301) 903-0100.

Sincerely,

Kevin L. Dressman
Director
Office of Enforcement
Office of Enterprise Assessments

cc: Geoffrey Beausoleil, NPO
Kathy Brack, CNS