Department of Energy
Washington, DC 20585

April 20, 2022

MEMORANDUM FOR THE UNDER SECRETARY FOR NUCLEAR SECURITY

FROM: MATTHEW B. MOURY
DIRECTOR
OFFICE OF ENVIRONMENT, HEALTH, SAFETY AND SECURITY

SUBJECT: Approval of a Permanent Variance to Use the California Occupational Safety and Health Administration's Safety and Health Regulations in Lieu of Title 10, Code of Federal Regulations, Part 851, *Worker Safety and Health Program*

ISSUE: Whether to approve a permanent variance request submitted by Lawrence Livermore Nuclear Security, LLC (LLNS), the management and operating contractor at the United States Department of Energy (DOE) Lawrence Livermore National Laboratory (LLNL), from specified provisions in Title 10, Code of Federal Regulations (CFR), Part 851, *Worker Safety and Health Program* (10 CFR Part 851), including Subparts B and C, and Appendix A (Attachment 1). This variance application was submitted as a follow on to the pilot program launched by the National Nuclear Security Administration's (NNSA) Office of Safety, Infrastructure and Operations (NA-50). The variance will apply to subcontractors of LLNS and only to the construction of the new Digital Infrastructure Capability Expansion (DICE) project at LLNL.

BACKGROUND: One of NNSA's missions is to build facilities supporting our national security, and to do so in a timely and cost-effective manner. Construction projects have a history of delays and cost increases that have affected this mission. To address this, NA-50 implemented a pilot program to improve project completion.

The National Defense Authorization Act for Fiscal Year 2018, under Section 3111, *Nuclear Security Enterprise Infrastructure Modernization Initiative*, authorized the creation of a process that would streamline the Administrator's ability to carry out effectively and efficiently, the construction of non-nuclear facilities that have a total estimated project cost of less than $100 million. The Administrator, in exercising this authority, approved a pilot program in June 2019. One of these projects is LLNL's DICE.

Title 10 CFR Part 851.3 defines a contractor as: *any entity, including affiliated entities, such as a parent corporation, under contract with DOE, or a subcontractor at any tier, that has responsibilities for performing work at a DOE site in furtherance of a DOE mission.* In performing its DOE mission, LLNS and its subcontractors are required to

comply with the provisions in 10 CFR Part 851, which establishes the framework for a worker protection program that will reduce or prevent occupational injuries and illnesses, and accidental losses by requiring DOE contractors to provide their employees with safe and healthful workplaces.

LLNS adheres to provisions of 10 CFR Part 851 and has trained its workforce to comply with its provisions. However, LLNS has faced significant challenges when hiring subcontractors to perform work. When they are not performing work on a DOE site, subcontractors are required to operate under the Occupational Safety and Health Administration's (OSHA) regulations or their state-approved occupational safety and health program and are not always familiar with the specific provisions of 10 CFR Part 851. This narrows the pool of qualified candidates to perform work on a DOE site, which reduces competition and could also reduce the quality of potential candidates while driving up costs. In addition, LLNS must train subcontractors to comply with 10 CFR Part 851, which sometimes causes significant time commitments and increased costs.

For the construction of the new DICE, LLNS is seeking a permanent variance from specified provisions of 10 CFR Part 851, subparts B and C, and appendix A. LLNS and its subcontractors will use Title 8, California Code of Regulations (CCR), section 3203 (8 CCR § 3203), instead of the provisions in subpart B, and comply with applicable California Occupational Safety and Health Administration (Cal/OSHA) regulations in lieu of the requirements in 10 CFR Part 851, subpart C, and appendix A. Where there are gaps between the requirements of 10 CFR Part 851 and Cal/OSHA, LLNS' application commits to comply with 10 CFR Part 851.

Cal/OSHA regulations and 10 CFR Part 851 are both intended to provide workers with a safe and healthful workplace. In those cases where the provisions of 10 CFR Part 851, subparts B and C, and appendix A are not adequately covered by Cal/OSHA regulations, or, in some cases, go beyond Cal/OSHA and California Department of Labor Regulations, LLNS and its subcontractors will incorporate those specific sections of 10 CFR Part 851 and existing contract provisions into their DOE-approved Injury and Illness Protection Program (IIPP), as needed, in order to "provide workers a place of employment, which is as safe and healthful as would result from compliance with the standard[s] from which the variance is sought," as required by § 851.31(d)(2)(ii).

Title 10 CFR § 851.30 authorizes Under Secretaries[1] to approve variances after considering the recommendation of the Associate Under Secretary for Environment, Health, Safety and Security [now, Director of the Office of Environment, Health, Safety and Security (EHSS Director)].[2] Title 10 CFR § 851.31(a) requires the contractor desiring the variance to submit a written application to the appropriate Cognizant

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[1] Under Secretary is defined in 10 CFR § 851.3 as "with respect to a particular situation, the DOE official who serves as the Under Secretary for Science and Energy [now the Under Secretary for Science and Innovation], or Under Secretary for Management and Performance, or the Under Secretary for Nuclear Security/Administrator for National Nuclear Security Administration who has primary line management responsibility for a contractor."

[2] The EHSS Director is referred to in 10 CFR Part 851 by the previous title of "Associate Under Secretary for Environment, Health, Safety and Security."

Secretarial Officer (CSO),[3] who may forward the application to the EHSS Director. LLNS submitted the permanent variance application to the Livermore Site Office on March 10, 2022, who forwarded the permanent variance application to the CSO for Safety, NNSA, on March 22, 2022. The CSO forwarded the variance application to the EHSS Director recommending that variance application be approved with the following conditions:

- Consistent with the previously approved LLNL Emergency Operations Center variance;

- Maintain an effective IIPP, as required by 8 CCR, section 3203, using a combination of applicable Cal/OSHA regulations and by incorporating existing contract provisions and certain provisions of 10 CFR Part 851 into the IIPP, as needed to provide project "workers a place of employment which is as safe and healthful as would result from compliance with the standard from which the variance is sought" as required by 10 CFR 851.31(d)(2)(ii);

- The IIPP would be approved by the appropriate Head of DOE Field Element; and

- LLNS' agreement to include variance requirements in the contract provisions for the DICE subcontractor(s).

Upon receipt of the application from a CSO, 10 CFR § 851.31(a)(3) requires the EHSS Director to review the application and make a written recommendation to approve the application, approve the application with conditions, or deny the variance application. Based on the information provided in the variance application and additional information obtained through the review process, the EHSS Director agrees with the Under Secretary for Nuclear Security that this variance application submitted by LLNS should be approved, subject to the conditions outlined below. A copy of the March 22, 2022, Memorandum from the CSO for Safety, NNSA, regarding the variance application and the LLNS variance application are attached.

LLNS' variance request proposes to establish, implement, and maintain an effective IIPP, as required by 8 CCR, section 3203, applicable Cal/OSHA regulations, and by incorporating existing contract provisions and certain provisions of 10 CFR Part 851 into the IIPP, as needed to provide its "workers a place of employment, which is as safe and healthful as would result from compliance with" the 10 CFR Part 851 requirements from which a variance is sought. As proposed, the IIPP would be approved by the appropriate Head of DOE Field Element. Tables 1, 2, and 3 (Attachment 2) of the LLNS variance application (Attachment 1) identifies specific Cal/OSHA or other relevant California regulations that would provide workers a place of employment, which is as safe and healthful as would result from compliance with the standards from which the variance is

[3] CSO is defined in 10 CFR § 851.3 as "with respect to a particular situation, the Assistant Secretary, Deputy Administrator, Program Office Director, or equivalent DOE official who has primary line management responsibility for a contractor, or any other official to whom the CSO delegates in writing a particular function under this part."

sought, and identifies areas not adequately covered by the California regulations. LLNS' variance request commits to include some 10 CFR Part 851 and existing contract requirements in the IIPP where those gaps exist.

Based upon a review by my office, I recommend approval with conditions of the LLNS variance application. The recommended approval is conditioned on LLNS':

- Adherence to the commitments made in Sections 4 and 5 of the LLNS variance application to meet requirements in 10 CFR § 851.31 to inform affected workers of the variance application and their right to petition the Director EHSS or designee for a conference prior to allowing construction activities to commence.

- Adherence to the commitments made in Tables 1, 2, and 3 of the LLNS variance application to adopt and implement in its IIPP the combination of 10 CFR Part 851 requirements, and California regulations indicated.

- Incorporation of applicable Cal/OSHA pressure safety regulations meeting or exceeding 10 CFR Part 851 requirements for the design, fabrication, testing, inspection, maintenance, repair, and operation of pressure systems into the LLNS variance application and IIPP.

- Agreement to include contract provisions with each of its subcontractors performing work on the DICE construction project at the LLNS site that require the subcontractors to adhere to the provisions of the LLNS variance and either adopt the LLNS IIPP or develop their own IIPPs that are consistent with the LLNS variance and approved by the Head of the Field Element.

- Incorporating the full set of applicable regulatory requirements, and any required by amendments or revisions to 10 CFR Part 851 or California safety and health regulations; and

- Terminating the variance upon completing the construction of the new DICE at LLNL.

In addition, LLNS must ensure that each subcontractor with its own IIPP:

- Has an IIPP that is approved by the Head of the Field Element and adheres to the commitments made in Tables 1, 2, and 3 of the LLNS variance application to adopt and implement in its IIPP the combination of 10 CFR Part 851 requirements and Cal/OSHA regulations indicated in the LLNS variance application for the work being performed at the site in furtherance of a DOE mission.

RECOMMENDATION: That you approve the permanent variance for construction of the DICE project at LLNL, subject to compliance with the conditions listed above. This recommendation is contingent upon the requirement that the variance will expire upon completion of construction of the DICE project, as indicated in the request by LLNS.

APPROVE: _____ DENY: _____ NEEDS DISCUSSION: _____ DATE: _____

Attachments