



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

February 24, 2023

Mr. John Sauger  
President and Chief Nuclear Officer  
Reactor D & D  
EnergySolutions, LLC  
121 W. Trade Street, Suite 2700  
Charlotte, NC 28202

SUBJECT: LA CROSSE BOILING WATER REACTOR – COMPLETION OF LICENSE TERMINATION ACTIVITIES AND RELEASE OF REMAINING CLASS 1 SURVEY UNITS FROM POSSESSION ONLY LICENSE NO. DPR-45 BASED ON FINAL STATUS SURVEY REPORT AND SUPPORTING INFORMATION (CAC 000083; EPID L-2019-DF1-0003 AND EPID L-2019-LIT-0000)

Dear Mr. Sauger:

By letters dated September 11, 2019, December 13, 2019, and January 28, 2020, as supplemented by letter dated November 2, 2020, LaCrosseSolutions, LLC (LS, the licensee) requested U.S. Nuclear Regulatory Commission (NRC) review of the Final Status Survey Report (FSSR) for the La Crosse Boiling Water Reactor (LACBWR). These submittals support the LACBWR partial site release request received on February 14, 2020, as supplemented by letter dated December 14, 2021, which would remove a 36.5-acre portion of the site from the LACBWR Possession Only License No. DPR-45, which was issued pursuant to Part 50, “Domestic Licensing of Production and Utilization Facilities,” of Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed action would effectively terminate the LACBWR 10 CFR Part 50 license outside the footprint for the remaining onsite Independent Spent Fuel Storage Installation (ISFSI), which encompasses approximately 39 acres.

The LS letter dated December 14, 2021, requested that the NRC staff expedite review of the FSSR documentation related to the LACBWR Class 2 and Class 3 survey units and approve the release of those survey units from the 10 CFR Part 50 license in advance of the Class 1 survey units. The Class 2 and Class 3 survey units consisted of eight above grade building survey units, seven open land survey units, and nine buried piping survey units for a total of 24 survey units. The NRC staff also evaluated one Class 1 buried piping survey unit as part of the review in order to be able to include all of the LACBWR buried piping survey units as part of this initial partial site release. The release of these 25 survey units from LACBWR’s Possession Only License No. DPR-45 was approved in an NRC letter dated May 24, 2022.

The sixteen remaining LACBWR Class 1 survey units consist of two basement survey units and fourteen land survey units (including seven below grade excavation survey units). The removal of these survey units from the LACBWR 10 CFR Part 50 license will represent the completion of decommissioning activities at the LACBWR reactor site, until such time as the ISFSI is no longer needed for the storage of spent fuel and subsequently decommissioned. The FSSR associated with these survey units is the documentation that demonstrates completion of the activities described in the LACBWR License Termination Plan (LTP), which was submitted by

letter dated June 27, 2016, as supplemented. The LACBWR LTP was approved by the NRC on May 21, 2019. The LACBWR LTP provided the details of the plan for characterizing, identifying, and remediating the remaining residual radioactivity at the LACBWR site to a level that will allow the site to be released for unrestricted use. The LACBWR LTP also described how the licensee will confirm the extent and success of remediation through radiological surveys, as captured in the FSSR, provide financial assurance to complete decommissioning, and ensure the environmental impacts of the decommissioning activities are within the scope originally envisioned in the associated environmental documents.

The NRC staff has completed its review of the portions of the LACBWR FSSR associated with removing sixteen Class 1 survey units from the LACBWR 10 CFR Part 50 license: two basement survey units and fourteen land survey units. The NRC staff's review considered if the FSSR for these survey units meets the criteria in 10 CFR 50.82(a)(11): whether the remediation of these survey units is in accordance with the approved LTP and whether these survey units meet the criteria for unrestricted release in Subpart E, "Radiological Criteria for License Termination," of 10 CFR Part 20, "Standards for Protection Against Radiation." The radiological dose contributions associated with the sixteen LACBWR Class 1 survey units were evaluated in aggregate with the 25 LACBWR Class 1, 2, and 3 survey units previously released to ensure that the site, as a whole, meets the criteria for unrestricted release.

The NRC staff reviewed the portions of the LACBWR FSSR associated with the sixteen remaining Class 1 survey units. The licensee's Final Status Survey (FSS) design criteria, implementation of the Data Quality Objectives (DQO) process, and survey approach/methods were reviewed, and results were assessed against the licensee's approved release criteria. Based on this review, the NRC determined that the remaining LACBWR Class 1 survey units meet the criteria in 10 CFR 50.82(a)(11). Therefore, the NRC staff finds the release of the sixteen remaining Class 1 survey units to be acceptable and releases these survey units from the LACBWR Possession Only License, No. DPR-45. Following their removal from the license, in the unlikely event the released areas were to become radiologically contaminated as a result of later decommissioning activities at the LACBWR ISFSI, the contamination would be considered an offsite release, and subject to 10 CFR Part 20.

In addition, the NRC staff notes that the licensee is required to maintain \$50 million in onsite nuclear liability insurance coverage. This insurance level was approved by the NRC in an exemption issued on July 24, 2018 (see Agencywide Documents Access and Management System (ADAMS) Accession No. [ML18082A370](#)). LACBWR Indemnity Agreement No. B-62 describes the onsite nuclear liability insurance coverage as needing to be maintained "until all the radioactive material has been removed from the location and transportation of the radioactive material from the location has ended as defined in subparagraph 5(b), Article 1, or until the Commission authorizes the termination or modification of such financial protection." Approval of this partial site release request of the area outside of the LACBWR ISFSI footprint has no impact on the terms of the indemnity agreement. In particular, it should be noted that the site location described in Item 4 of the indemnity agreement means the "original" 10 CFR Part 50 license site boundaries. The liability insurance coverage level shall not be reduced below the minimum \$50 million amount without prior NRC approval.

The enclosure to this letter contains the NRC staff's evaluation and analysis of the portions of the LACBWR FSSR associated with the remaining Class 1 survey units, and supports the determination that these sixteen survey units may be released from the LACBWR 10 CFR Part 50 license. This evaluation also includes other license termination verification activities that were completed to support removal of the remaining portion of the site from the LACBWR

license. The NRC now considers the LACBWR Possession Only License No. DPR-45 to be terminated outside the boundary of the LACBWR ISFSI.

The staff also reviewed the residual radioactivity values in the LACBWR FSSR and compared them to the trigger values in the 2002 Memorandum of Understanding (MOU) between the NRC and the U.S. Environmental Protection Agency (EPA) entitled "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." Based on this review, the residual radioactivity in soil and groundwater at the site do not exceed the trigger values in the MOU and, as such, Level 2 consultation with EPA in accordance with the MOU is not required.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning this evaluation, please contact me or Marlayna Doell, the LACBWR Project Manager, at (301) 415-3178 or via email at [marlayna.doell@nrc.gov](mailto:marlayna.doell@nrc.gov).

Sincerely,

*/RA/* {{signature:jem1}}

Jane E. Marshall, Director  
Division of Decommissioning, Uranium Recovery,  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket Nos.: 50-409 and 72-046

License No.: DPR-45

Enclosure: Safety Evaluation of Final Status Survey Report  
For Remaining LACBWR Class 1 Survey Units

cc w/enclosure: Distribution via Listserv