



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

October 1, 2019

Mr. John Sauger  
Executive Vice President  
Chief Nuclear Officer Reactor D&D  
Energy Solutions  
2701 Deborah Avenue  
Zion, IL 60099

**SUBJECT: LA CROSSE BOILING WATER REACTOR – ACKNOWLEDGEMENT OF  
DISCONTINUATION OF FACILITY GROUNDWATER MONITORING**

Dear Mr. Sauger:

By letter dated August 26, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19240A312), LaCrosseSolutions, LLC (LS, the licensee), requested concurrence from the U.S. Nuclear Regulatory Commission (NRC) for termination of the groundwater monitoring program at the decommissioning La Crosse Boiling Water Reactor (LACBWR) in Genoa, Wisconsin, upon removal of the last shipment of radiological waste from the site prior to license termination. In the letter, LS stated that groundwater monitoring and sampling has been ongoing throughout the decommissioning process at LACBWR, is typically performed on a quarterly basis, and will be terminated upon completion of all radiological waste shipments from the site, which is scheduled to be completed in September 2019.

In addition, LS noted that the only significant groundwater monitoring event that occurred during decommissioning of the LACBWR facility took place in March 2018, when tritium levels in excess of the reportable limits were identified in certain onsite groundwater monitoring wells. The source of the tritium was identified as a byproduct of the demolition in the LACBWR reactor building, an investigation into this issue was initiated, and the sampling for the impacted wells was increased to a monthly frequency. The source of the contamination was addressed, and the impacted areas were remediated in 2018 and early 2019. Since that time, tritium levels in the impacted wells have decreased significantly and are now well below the U.S. Environmental Protection Agency's drinking water standard. The NRC staff evaluated this tritium release, the impact on groundwater monitoring, and the licensee's corrective actions as part of its review and approval of the LACBWR License Termination Plan, which was approved on May 21, 2019 (ADAMS Accession No. ML19008A079; see Section 3.7 of the Safety Evaluation Report).

The NRC staff has completed a review of the licensee's summary of groundwater sample results provided in the August 26, 2019, letter and determined that the LACBWR groundwater monitoring program shows no remaining evidence of radioactive groundwater contamination. In addition, the licensee's assertion that (1) groundwater monitoring will continue until the final radiological waste is transported from the site, and (2) if any sample result anomalies occur between now and the final samples taken, LACBWR will commit to additional sampling as agreed to with the NRC, gives the staff confidence that the groundwater monitoring program will be adequately implemented throughout the remainder of the decommissioning process.

Based on the above discussion, the NRC staff has determined that the proposed termination of the LACBWR groundwater monitoring program upon removal of all radiological waste from the site is acceptable, and the licensee may proceed with cancellation of the program and abandonment of the onsite and offsite monitoring wells at that time. This approach is also being discussed and approved by the State of Wisconsin under separate correspondence.

Should you have any questions regarding this matter, please contact myself or Marlayna Vaaler Doell at (301) 415-3178 or via e-mail at [marlayna.doell@nrc.gov](mailto:marlayna.doell@nrc.gov).

Sincerely,

**//RA//**

Bruce A. Watson, CHP, Chief  
Reactor Decommissioning Branch  
Division of Decommissioning, Uranium Recovery  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

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