August 2, 2024
File No. 25224070.00

Mr. Matt Cole
Interstate Power and Light Company
2320 Power Plant Drive
Lansing, Iowa 52151

Subject: Groundwater Monitoring System Update - Certification
Former Lansing Generating Station, Lansing, Iowa

Dear Mr. Cole:

The groundwater monitoring system at the former Lansing Generating Station (LAN) has been updated in 2024. Monitoring well MW-307 has replaced MW-302 as a downgradient compliance monitoring well. MW-302 has been removed from the groundwater monitoring system as a downgradient compliance monitoring well but will remain as part of the corrective action monitoring program established under 40 CFR 257.98(a)(1).

This letter certifies, pursuant to 40 CFR 257.91(f), that the monitoring system is designed and constructed to meet the requirements of 40 CFR 257.91. The monitoring network is sufficient to accurately represent the quality of background groundwater that has not been affected by leakage from the coal combustion residuals (CCR) unit, and the quality of groundwater passing the waste boundary of the CCR unit.

MW-307 is replacing MW-302 in the monitoring network for the following reasons:

- MW-307 is approximately 170 feet closer to the CCR Unit's downgradient boundary than MW-302.
  - When the original CCR monitoring network, including MW-302, was installed, it was not practicable to install a well closer than MW-302 downgradient of the CCR unit due to the presence of a road, a steep berm containing buried utilities, and a pond (not identified as a CCR impoundment) between the downgradient edge of the Upper Ash Pond and MW-302.
  - MW-307 was installed in 2021, by which time the pond previously located between MW-302 and MW-307 had been closed and the lower edge of the road berm was safely accessible for drilling to support delineation of arsenic concentrations detected at MW-302.
- MW-307 represents concentrations of monitored constituents at the CCR Unit boundary.
  - Elevated arsenic concentrations at MW-302 have been attributed to in-situ geochemical processes in organic-rich sediments present near the location of MW-302.
  - Additional details about the arsenic evaluation are presented in the May 6, 2024 Selection of Remedy report.

Based on the design information provided for our review, the number, spacing, and depths of the monitoring system, components were determined using site-specific information in accordance with 40 CFR 257.91(b).

The groundwater monitoring system consists of one upgradient and three downgradient monitoring wells, which meets the minimum requirements of 40 CFR 257.91(c)(1). The minimum number of monitoring wells is appropriate at the Lansing Generating Station for the following reasons:

- Groundwater flow in the uppermost aquifer at the site is to the northwest, parallel to the axis of the valley in which the landfill and pond are located.
- The monitored CCR units are aligned with the direction of groundwater flow.
- The width of the downgradient zone perpendicular to groundwater flow is less than 700 feet. The maximum spacing between downgradient wells MW-301, MW-307, and MW-303 is approximately 350 feet.

The groundwater monitoring system at the Lansing Generating Station is a multi-unit system. The Lansing Generating Station includes two existing CCR units:

- LAN Landfill
- LAN Upper Ash Pond

The multi-unit system is designed to detect monitored constituents at the waste boundary of the facility as required by 40 CFR 257.91(d), which is appropriate based on the arrangement of the CCR units and their orientation with respect to groundwater flow in the uppermost aquifer.

An Assessment of Corrective Measures was initiated on April 15, 2019. The process of selecting a remedy per 40 CFR 257.97 has been completed, and the Selection of Remedy report was issued on May 6, 2024.

Based on the installation documentation for placement in the site operating record to meet the requirements of 40 CFR 257.105(h)(2) and provided for our review, the monitoring wells have been cased in a manner that will maintain the integrity of the monitoring well borehole and were constructed in accordance with the requirements of 40 CFR 257.91(e).

PE Certification

	I, Eric J. Nelson, hereby certify that the groundwater monitoring system at the Lansing Generating Station has been designed and constructed to meet the requirements of 40 CFR 257.91. This certification is based on my review of documentation in the operating record regarding the design, installation, and development of the groundwater monitoring system components. I am a duly licensed Professional Engineer under the laws of the State of Iowa. 08/02/2024 (signature) (date) Eric J. Nelson (printed or typed name) License number 23136 My license renewal date is December 31, 2024. Pages or sheets covered by this seal: Groundwater Monitoring System Update – Certification, all pages.

Sincerely,

Eric J. Nelson, PE
Project Director
SCS Engineers

Thomas J. Karwoski
Senior Project Manager
SCS Engineers

MDB/AJR/BRK/EJN/TK

cc: Jeff Maxted, Alliant Energy
Robin Nelson, Interstate Power and Light Company

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