September 26, 2024
File No. 25224143.00

Mr. Brian Clepper
Columbia Energy Center
W8375 Murray Rd
Pardeeville, Wisconsin 53954

Subject: Groundwater Monitoring System Update - Certification
Columbia Energy Center Former Primary Ash Pond, Pardeeville, Wisconsin

Dear Mr. Clepper:

The groundwater monitoring system at the Columbia Energy Center (COL) former Primary Ash Pond has been updated in 2024. The monitoring network was originally certified on October 11, 2017. Monitoring well MW-304R has replaced MW-304 as a compliance monitoring well. MW-304 was damaged by heavy equipment during the impoundment closure. MW-304 was subsequently abandoned and replacement well MW-304R was installed.

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-304R is replacing MW-304 in the monitoring network as follows:

- MW-304 was damaged and could not practicably be returned to service; therefore, it has been properly abandoned.
- MW-304R was installed approximately 8 feet horizontally from the location of MW-304.
- MW-304R is screened across the water table, as was MW-304.

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 two upgradient and four downgradient monitoring wells, which exceeds the minimum requirements of 40 CFR 257.91(c)(1). The downgradient monitoring well locations are based on historically radial groundwater flow directions observed when the CCR unit was active. Groundwater mounding and radial outward flow observed at the Primary Pond prior to pond closure have decreased following closure; however, MW-304R is positioned to represent sample groundwater quality in an area that was previously downgradient and could have been impacted by CCR constituents passing the waste boundary of the CCR unit when the unit still contained CCR.

The groundwater monitoring system at the COL Former Primary Ash Pond Lansing Generating Station monitors a single closed CCR unit:

- Former Primary Ash Pond

The groundwater monitoring system is designed to detect monitored constituents at the waste boundary of the facility as required by 40 CFR 257.91(d).

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, Sherren C. Clark, hereby certify that the groundwater monitoring system at the Columbia Energy Center Former Primary Ash Pond 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 Wisconsin.

9/26/2024

(signature) (date)

Sherren Clark

(printed or typed name)

License number E-29863

My license renewal date is July 31, 2026.

Pages or sheets covered by this seal:

Groundwater Monitoring System Update – Certification, all pages.

Sincerely,

Sherren Clark, PE
Project Director
SCS Engineers

Thomas J. Karwoski, PG
Senior Project Manager
SCS Engineers

MDB/AJR/SCC/TK

cc: Matt Bizjack, Alliant Energy
Jeff Maxted, Alliant Energy

I:\25224143.00\Deliverables\Well Network Recertification\240926_COL_PE_Recertification_Letter_Final.docx