## SCS ENGINEERS

December 27, 2018 File No. 25217156.00

Mr. Nathaniel Sievers Columbia Energy Center W8375 Murray Road Pardeeville, WI 53954

Subject: Groundwater Monitoring System Certification Columbia Dry Ash Disposal Facility – Module 4 (COL Mod 4), Pardeeville, Wisconsin

Dear Mr. Sievers:

The groundwater monitoring system at the Columbia Dry Ash Disposal Facility – Module 4 (COL Mod 4) 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 residue (CCR) unit and the quality of groundwater passing the waste boundary of the CCR unit.

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 three downgradient monitoring wells, which exceeds the minimum requirements of 40 CFR 257.91(c)(1).

This groundwater monitoring system at the COL Mod 4 facility monitors a single existing CCR unit:

Columbia Dry Ash Disposal Facility – Module 4

Based on the installation documentation 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).



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## **PE** Certification

* Sherren C. Clark E-29863 Madison, Wis.	I, Sherren C. Clark, hereby certify that that the groundwater monitoring system for the Columbia Dry Ash Disposal Facility – Module 4 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.	
	(signature)	(date)
	Sherren Clark (printed or typed name)	
	License number <u>E-29863</u>	
	My license renewal date is July 31, 2020.	
	Pages or sheets covered by this seal: Groundwark Monstaring Syste	em
	Cerhfication (2pages)	

Sincerely,

SL all

Sherren C. Clark, PE Project Director SCS Engineers

MDB/Imh/TK/SC

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Thomas J. Karwoski, PG Senior Project Manager SCS Engineers

cc: Jeff Maxted, Alliant Energy Jerry Lokenvitz, Columbia Energy Center

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