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October 27, 2022

VIA Electronic Mail

Attn: Richard Huggins  
Materials Recovery and Waste Management Division  
Office of Resource Conservation and Recovery  
United States Environmental Protection Agency

Re: CCR Rule Part A Demonstration – Progress Report and Updated Request for Site-Specific Deadline to Cease Receipt of Waste  
Columbia Energy Center  
Wisconsin Power and Light Company  
Town of Pacific, Wisconsin

Mr. Huggins:

On November 24, 2020, Wisconsin Power and Light Company (WPL), a wholly-owned subsidiary of Alliant Energy, submitted a complete demonstration to the U.S. Environmental Protection Agency (EPA) that requested approval of a site-specific alternative deadline to initiate closure pursuant to 40 C.F.R. § 257.103(f)(1) for the existing CCR surface impoundment (Primary Ash Pond) located at the Columbia Energy Center near Portage, Wisconsin. In that submittal, WPL requested an alternative deadline of October 31, 2022 to continue to receive CCR and non-CCR wastestreams at the Primary Ash Pond after April 11, 2021 in order to install new capacity for managing CCR and non-CCR wastewaters, including installation of a dry ash handling system. On January 11, 2022, EPA informed WPL that the demonstration was complete and that the April 11, 2021 deadline to cease receipt of waste was tolled pending a final decision on the application.

WPL received a request for additional information in February 2022 to assist EPA in determining whether the facility is on track to meet the site-specific deadline to cease placement of CCR in the Primary Pond and initiate closure of the CCR unit. At that time, WPL indicated that the project remained on track but there were unforeseen issues that had the potential to create delays, including delayed delivery of a conveyor system, which was originally set to arrive on or before March 15, 2022. WPL also indicated that a commissioning period is required to verify that the system meets the performance specifications and can be relied upon to manage the facility's bottom ash safely and effectively. The commissioning period was originally scheduled to occur between June 7, 2022 and September 15, 2022 and would involve tying in the various plant systems (Bottom Ash, Economizer Ash and Pyrites individually from both units) into the Remote Drag Chain Conveyor (RDDC) System (also referred to as a submerged flight conveyor, or SFC) in sequence. WPL anticipated that discharges to the Primary Pond to permanently end after the commissioning period, on or slightly before the requested October 31, 2022 deadline.

Since February 2022, WPL has worked expeditiously to complete installation of the dry ash handling system as fast as technically feasible and the dry bottom ash system is now operational. However, despite WPL's efforts, there have been additional unforeseen challenges that have delayed final

confirmation that the system meets the performance specifications and final tie-ins of additional plan drain systems. These issues include:

- Delayed delivery of the conveyor system, which did not arrive until April 12, 2022.
- Delayed delivery of an electrical panel due to supply chain constraints. WPL notified EPA via email on August 29, 2022 of this issue. WPL was able to acquire and install an alternative panel, but resolution of this issue resulted in a short delay.
- Discovery of a defective pump during initial system operations in October 2022. The faulty pump was leaking and was sent back to the manufacturer for repairs and additional pressure testing.
- Discovery of leaking valves that disrupt water balance in the system. WPL is actively investigating and resolving these concerns to ensure that the system does not have too much or too little water.

The current status of CCR and Non-CCR wastestreams that were identified in the November 2020 demonstration is presented in the table on Page 3. All flows to the Primary Pond have been discontinued under normal operations, except for the chemical sump that will be tied in early in the commissioning period. Under normal operations, flows to the Primary Pond have been substantially reduced from an average of 1,302 gallons per minute (gpm) to 34 gpm. Flows to the Primary Pond may temporarily increase during the commissioning period to avoid overflow of a tank within the RDDC system (which would likely violate the facility's NPDES permit), repair and/or tune system components, or complete final tie-ins. Given that commissioning will be occurring as the winter season approaches, the facility will also be verifying that all freeze protection systems are functioning as designed.

In summary, WPL has worked diligently to install the new dry bottom ash handling system and redirect flows from the Primary Pond, which will enable closure of the Primary Pond to be initiated as planned. WPL is now completing the performance testing and final system tie-ins to ensure that the system can be operated reliably and safely. WPL is respectfully updating our request for a site-specific deadline to cease placement of all CCR and non-CCR waste in the Primary Pond by extending the deadline to **December 31, 2022** to complete this work.

WPL remains committed to completing commissioning of the dry bottom ash handling system and initiating closure of the Primary Ash Pond. Closure of the Primary Ash Pond by removal of all CCR continues to be scheduled for 2023. We appreciate EPA's continued consideration of the Part A applications, including this request for a new deadline to cease placement of waste in the Primary Pond. If you or your colleagues need further information, please contact me at [EricSandvig@alliantenergy.com](mailto:EricSandvig@alliantenergy.com) or Jeff Maxted at [JeffreyMaxted@AlliantEnergy.com](mailto:JeffreyMaxted@AlliantEnergy.com).

Sincerely,



Eric Sandvig

Director of Operations – Columbia Energy Center

Current Status of CCR and Non-CCR Wastestreams for WPL Columbia Energy Center Primary Pond

Wastestream	Average Flow (gpm)	Description	Status
Bottom Ash	Initial: 660 Current: 0 under normal operations	Water is used to transport bottom ash away from the Unit 1 and Unit 2 boilers. The sluice water is recirculated.	Bottom ash is directed to the new dry bottom ash system (Remote Drag Chain Conveyor (RDCC) System) under normal operations. If an abnormal situation (water balance upset / potential tank overflow) occurs during the commissioning period, water and/or CCR from this system will go to the Primary Pond. Flow to the Primary Pond will be permanently discontinued by December 31, 2022.
Economizer Ash	Initial: 18 Current: 0 under normal operations	Economizer ash is currently handled with the bottom ash.	Economizer ash system is handled with the new dry bottom ash system. Flow to the Primary Pond will be permanently discontinued by December 31, 2022.
Pyrites (non-CCR but handled with CCR wastestreams)	Initial: 3 Current: 0 under normal operations	Pyrites are currently handled with the bottom ash.	Pyrites system is handled with the new dry bottom ash system. Flow to the Primary Pond will be permanently discontinued by December 31, 2022.
Chemical Waste Sumps	Initial: 34 Current: 34	Collects flows from multiple sources including Demin Waste, RO Reject, and miscellaneous equipment drains.	Flows are pumped to Primary Ash Pond. These flows will require relocation to the condensate sump discharge which currently flows to the cooling pond via Outfall 301. This work is part of the final tie-in scheduled to be completed by December 31, 2022.
Air Heater (AH) Wash Sump Discharges	Initial: 215 Current: 0	Collects flow from multiple sources including boiler blowdown and fly ash exhauster seal water.	Flow to the Primary Pond has been permanently discontinued. The air heater wash sump flows have been redirected to the condensate sump discharge which currently flows to the cooling pond and to Outfall 301.
Boiler Room Sump Discharges	Initial: 362 Current: 0 under normal operations	Collects flow from multiple sources including fire protection, condenser priming, tripper floor washdown, refractory cooling, ash hopper seal water, and miscellaneous drains.	The boiler sump flows are directed into the new RDCC system under normal operations. If an abnormal situation (water balance upset / potential tank overflow) occurs during the commissioning period, water from this system will go to the Primary Pond. Flow to the Primary Pond will be permanently discontinued by December 31, 2022.
Duck Pond	Initial: 10 Current: 0	Collects flows from the landfill runoff and leachate.	Flow to the Primary Pond has been permanently discontinued. WPL received a modification to the facility's NPDES permit effective June 2022 that enables these flows to be routed to the FGD system for use as make-up water and be evaporated in the SDA.