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December 28, 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.

On October 27, 2022, WPL provided EPA with an update on efforts to install new capacity for managing CCR and non-CCR wastewaters. In that correspondence, WPL communicated that the new Remote Drag Chain Conveyor (RDCC) System (also referred to as a submerged flight conveyor, or SFC) was operational. However, early operation of the system had been met with unforeseen technical challenges, including a defective pump and a leaking valve that was adding excess water to the system. At that time, WPL updated the 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.

Since the last update in October 2022, WPL has successfully resolved the issues that resulted in an updated deadline of December 2022. Unfortunately, additional operational issues have been identified that require additional time to resolve. During this period, WPL may need to periodically discharge wastewater to the Primary Pond to perform maintenance on the RDCC and continue the commissioning process. The additional operational issues include:

- Bottom ash entering the RDCC is sticking to the walls causing it to not properly settle out onto the bottom of the RDCC where it can be conveyed to ash bunker. Additional flush nozzles have been designed to remove this ash but they need to be installed and tested to verify that they resolve this issue.
- Two augers and one pump in a system clarifier are not operating as designed and must be repaired.
- The surge tank level detector is performing poorly. Two new level detectors of a different technology have been purchased and need to be installed.
- Evaporation of water in the RDCC has not been fully tested at high load, which is critical to maintaining water balance in the system.
- Operators discovered that the clinker grinder seal water system was adding water to the RDCC system. Flow control valves are being added to limit that flow and improve water balance control.
- The facility is exploring installation of an additional frac tank system to further accelerate a permanent end to potential discharges to the Primary Pond.

The status of CCR and Non-CCR wastestreams identified in the November 2020 demonstration remains the same as described in the October 2022 update, except that the chemical sump was successfully redirected away from the Primary Pond. As a result, the only flows directed to the Primary Pond are intermittent discharges from the RDCC to perform maintenance or to avoid overflow of a surge tank (which would likely violate the facility's NPDES permit).

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 continues to complete performance testing and commissioning activities 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 **March 31, 2023** 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 or Jeff Maxted at 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
December 2022 Update

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 March 31, 2023 .
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 March 31, 2023 .
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 March 31, 2023 .
Chemical Waste Sumps	Initial: 34 Current: 0	Collects flows from multiple sources including Demin Waste, RO Reject, and miscellaneous equipment drains.	Flows have been redirected to the condensate sump discharge which currently flows to the cooling pond via Outfall 301. Flow to the Primary Pond has been permanently discontinued.
Air Heater (AH) Wash Sump Discharges	Initial: 215 Current: 0	Collects flow from multiple sources including boiler blowdown and fly ash exhaust 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 March 31, 2023 .
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.

