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April 24, 2023

## Submitted Electronically via Email

Attn: Richard Huggins Energy Recovery and Waste Disposal Branch Office of Resource Conservation and Recovery United States Environmental Protection Agency

RE: Indiana & Michigan Power Company Mitchell Power Pant Alternative Closure Demonstration

Dear Mr. Huggins,

American Electric Power (AEP) originally submitted the Rockport CCR Surface Impoundment Demonstration for a Site-Specific Alternate to Initiation of Closure Deadline on November 30, 2020. On March 15, 2022 AEP submitted a letter stating that it was still on target to meet the original proposed deadline dates but facing many supply chain and CCR removal issues that may impact the project schedule. On August 18, 2022, AEP representatives informed US EPA by phone call that various issues would, in fact, make it impossible to meet certain dates in the Demonstration Request. During that call, EPA requested that AEP submit an updated timeline.

AEP has been aggressively working towards the goals outlined in the Rockport CCR Surface Impoundment Demonstration for a Site-Specific Alternate to Initiation of Closure and has met interim targets to cease sluicing CCR and non-CCR waste streams to the East Bottom Ash Pond and to remove/reroute all stormwater flows and coal pile runoff from the West Bottom Ash Pond (BAP). AEP has also removed all CCR material from the East BAP and will be submitting a closure report to the Indiana Department of Environmental Management (IDEM) for approval. However, as a result of wet weather, the presence of very fine materials in the pond, wet subgrade, and delays in securing necessary permits, as detailed further in this letter, AEP requests that certain interim target completion dates contained in the original proposed compliance timeline be modified as described, below.

- Removal of all CCR material and repurposing CCR compliant East BAP for treatment of CCR and non-CCR waste streams: <u>Request to modify from May 11, 2023 to November 17, 2023</u>.
- Routing of CCR and non-CCR waste streams to CCR compliant East BAP: <u>Request to modify from May</u> <u>11, 2023 to November 17, 2023</u>.
- Start Closure of West BAP by removal of remaining CCR material: <u>Request to modify from May 11,</u> 2023 to November 17, 2023.

The Rockport West BAP is an Eligible Unlined CCR Surface Impoundment as defined in the CCR rule at 40 CFR 257.53. The West BAP meets the location restrictions specified in 257.60 through 257.64, is in compliance with the periodic safety factor assessment requirements under 257.73(e) and (f), and no constituents listed in Appendix

IV have been detected at a statistically significant level exceeding a groundwater protection standard defined under 257.95(h). The Rockport West BAP is subject to the October 15, 2024 extension deadline per the rule.

Below are some of the major accomplishments to date from the submitted project schedule, along with a justification for the revised compliance dates:

### Accomplishments to Date

- Engineering & Design All Detailed engineering for Civil, Structural, Mechanical, Electrical, and Instrumentation & Controls for the project was completed on target to support the original proposed construction contracts.
- Permitting –AEP submitted a permit application for closure of the East and West BAPs to IDEM. AEP is working with IDEM to expedite the permit. AEP has obtained all other permits necessary for closure of East and West BAPs, such as Stormwater Pollution Prevention Plans (SWP3) for pond complex and borrow area and NPDES Permit.
- Labor Contracts All labor contracts have been awarded in accordance with the original schedule to support the original compliance timeline.
- Construction AEP started construction in accordance with the original schedule but construction has progressed at a slower than anticipated rate due to severe CCR removal issues, detailed below.
- Least Terns Least terns are a protected species that nest over the Summer (May to August) in the area of the Wastewater Ponds at the Rockport Plant. The original plans were to stop work on the project over the Summer so as to avoid disturbing the Least Terns. However, AEP worked with Indiana Department of Natural Resources (IDNR) to develop a construction plan that would ensure protection of the Least Terns so that construction could proceed on the East BAP; otherwise, the completion of the overall project would be delayed even more significantly.
- Removal of CCR material from the East BAP Removal of CCR material includes the following items: removal of all CCR material to visually clean plus one (1) foot, soil testing verification at this depth to ensure soil meets all background values, and over excavation of additional material if material is above background levels. Through great effort, this portion of the project was completed February 8, 2023, with a final closure report to be submitted to IDEM in the near future.
- Subgrade Preparation and Fill This work has recently started, and wet and soft subsurface conditions are being experienced. AEP is currently working on potential solutions to allow construction to safely continue, such as placing a heavy geotextile or geogrid overlain by aggregate. The borrow site has been established for the separation fill and development started in October 2022.
- Fill for Subgrade Material is available at the borrow site and has been tested to ensure compliance with project requirements.
- Geosynthetic Clay Liner (GCL) Material has been tested and verified in compliance with CCR rules. Material was purchased in early February 2023.
- Geomembrane A material supplier has been identified. Material was purchased in early February 2023.
- Reroute Stormwater and Coal Pile Runoff Pipes from West BAP AEP completed this work on February 24, 2023.

# <u>Drivers Preventing Completion by Original Proposed Dates and Steps Taken to Minimize Extension of</u> <u>Schedule Compliance Dates</u>

### **Removal of CCR Material from East Bottom Ash Pond**

- Unanticipated Wet and Very Fine CCR material The original plan was to remove the CCR material by dewatering and mechanical excavation. However, we encountered very wet and fine material, which has prevented heavy equipment from safely accessing the area. Moreover, this material did not dry out when exposed to the atmosphere. The recommended solution was to mix the CCR Material with hydrated lime and fly ash, which has stabilized the wet, fine CCR material. It took two (2) months to characterize material and compile permit details and one (1) month and three (3) weeks to get approval from IDEM to implement this alternative, which required additional review and approval related to dust control and disposal at the landfill. In addition, adding hydrated lime and fly ash meant it took extra time to mix the material and it took more time to haul the material to the landfill because there was more material to haul. AEP estimates that the volume of material hauled to the landfill increased by approximately 20% as a result of the addition of hydrated lime and fly ash.
- Severe Weather Delays Between September 2021 and August 2022, Rockport experienced wetter than normal weather with 6.75 inches of rain and snow in February, July, and August 2022, which saturated the CCR material, and 22 lost days were experienced. AEP has had its employees and contractors working Saturdays to minimize the impacts associated with these weather delays.
- Additional CCR Material Encountered The quantity of CCR material within the East BAP was approximately 50,000 cubic yards more than originally anticipated, meaning it took three weeks longer than originally anticipated to remove the material.

In summary, the above items delayed the project by approximately five (5) months. The delay would have been significantly longer if AEP had not worked with the IDNR to facilitate construction during the Least Tern season.

### Subgrade Stabilization and Backfill

After removal of the CCR material, the pond bottom was wet and soft. AEP developed solutions to stabilize the pond bottom to allow construction to proceed. To address these concerns, we placed heavy geotextile overlain by aggregate or mixed lime kiln dust into the subgrade. The stabilization methods slowed subgrade fill activities and had a two-month impact for the pond construction. More backfill than originally anticipated will be required to maintain at least 5 feet of separation from the upper limit of the uppermost aquifer. We have estimated an additional 75,000 cubic yards of backfill to maintain a separation layer. This will result in a two-month delay to install the additional fill.

### Winter Construction

Because of the delays identified above, AEP opted to continue fill placement during the Winter 2023 (November to March) to lessen schedule delays. Winter construction is historically avoided due to low production rates of placing low permeability fill. The backfill generally cannot be effectively dried without additives like lime and cement. As a result, AEP utilized lime and cement additives to maintain minimal productivity during the winter instead of a complete winter shut down. This slowed the pace of work which limited the amount of fill placed.

### **Permitting Delays from IDEM**

While AEP has been working diligently to meet the requirements of the federal CCR Rule, AEP must also abide by state law requirements, which have caused delays. In particular, IDEM is interpreting the authority it was given when the Indiana Legislature incorporated the federal CCR Rule by reference to allow IDEM to impose additional, more stringent requirements as conditions of its approval. Additionally, IDEM has acknowledged that it is short staffed and, as a result, is processing plan approvals very slowly.

- AEP originally anticipated that it would take IDEM one-year to approve plans for closing the CCR unit pursuant to IDEM's solid waste regulations. The original schedule showed AEP submitting the closure plan to IDEM in March 2021 and receiving approval in March 2022.
- AEP and IDEM held a pre-application meeting in March 2021, and during the meeting IDEM indicated it would require AEP to meet additional requirements as a matter of state law.
- As a result of IDEM's demands, AEP had to perform additional soil sampling and analysis requiring an additional five months to complete.
- AEP also had to prepare and submit the liner design ahead of the anticipated schedule and make changes to the requirements in 40 CFR 257.72 based on comments from IDEM.
- Because of the foregoing, AEP submitted the closure plan to IDEM in January 2022, ten (10) months later than anticipated in the original demonstration request timeline.
- To date, AEP has not yet received the final approval of its closure plan.

In conclusion, AEP has made great strides towards completing work at Rockport in accordance with the original proposed compliance timeline; however due to pond construction issues and IDEM permitting delays, the original timeline can no longer be met. The new proposed date for completion of the East Bottom Ash Pond and routing all CCR material to the repurposed CCR compliant lined East Bottom Ash Pond is November 17, 2023. The closure of the West Bottom Ash Pond cannot commence until the East Bottom Ash Pond is operational and in compliance with EPA rules.

Sincerely,

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David A. Miller, P.E. Director, Environmental Environmental Services Department