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December 2, 2022

**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: Kentucky Power Company and Wheeling Power Company  
Mitchell Power Plant Alternative Closure Demonstration

Dear Mr. Huggins,

American Electric Power (AEP) originally submitted the Mitchell 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 meeting the original proposed deadline dates but facing many supply chain issues that may impact the project schedule. On August 18, 2022, AEP representatives informed EPA by phone call that those supply chain 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.

**Original Proposed Compliance Timeline**

AEP has been aggressively working towards the following goals as outlined in the Mitchell CCR Surface Impoundment Demonstration for a Site-Specific Alternate to Initiation of Closure:

- Removal of all CCR material and repurposing Western portion of the Bottom Ash Pond for continued treatment of non-CCR waste streams by March 13, 2023.
- Cease sluicing CCR waste streams to the Bottom Ash Pond Complex (BAP) by April 21, 2023 (Dual Spring Outage), while the generating units are converted to dry ash handling.
- Closure of the entire BAP by removal of remaining CCR material from Eastern portion of the Bottom Ash Pond by July 31, 2023.

Due to some severe supply chain issues that AEP has not been able to overcome, as detailed further in this letter, it is requested that these dates be modified for compliance as detailed, below:

**New Proposed Compliance Timeline**

- Removal of all CCR material and repurposing the Western portion of the Bottom Ash Pond for continued treatment of non-CCR waste streams by September 2, 2023.
- Cease sluicing CCR waste streams to the Bottom Ash Pond Complex (BAP) by October 15, 2023, the start of the Fall 2023 outage (Dual Fall Outage), while the generating units are converted to dry ash handling.
- Closure of entire BAP by removal of remaining CCR material from Eastern portion of the Bottom Ash Pond by October 15, 2024.

AEP has been aggressively managing the project to try to stay on target, even though extreme challenges associated with Covid and market conditions have occurred and continue to occur. Below are some of the major accomplishments to date from the originally submitted project schedule, along with a justification for the revised compliance dates:

**Removal of all CCR material and repurpose Western Portion of the Bottom Ash Pond for Treatment of non-CCR waste streams****Completed or on track tasks:**

- 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 project schedule.
- Procurement – Last year, AEP awarded all the anticipated equipment / supply packages (Enclosure with Chemical Feed Equipment, Aeration Blowers, and Aeration Diffusers) for the new chemical treatment system, with deliveries scheduled early to support the overall construction schedule. However, additional treatment equipment will be required to ensure compliance with the new NPDES discharge permit, which imposes new requirements that were not in effect at the time we developed the original compliance schedule. A purchase order for the additional treatment equipment was placed on October 11, 2022, and delivery of the additional equipment is expected in May of 2023. In addition, a temporary treatment system to ensure compliance with the NPDES discharge permit in the interim has been installed and is operational. Some major issues with the equipment deliveries and operability were encountered and resulted in a delay of two months over the original timeline.
- Permitting – AEP has obtained all required permits for closure and conversion of the BAP, including the WV Dam Permit, Stormwater Pollution Prevention Plan (SWP3), and NPDES Permit.
- Labor Contracts – Pond Repurpose & Closure – Heavy Civil Package was awarded on September 29, 2021. The Structural / Mechanical and the Electrical / I&C packages have recently been awarded. All contracts were awarded to support the original timeline for compliance.

**Delays or adjustments to proposed schedule:**

- Construction – Western portion of the BAP Closure & Repurpose – Work commenced last year, and the contractor worked through the winter. AEP completed CCR removal on October 14, 2022, which is approximately four months later than anticipated in the original schedule. This delay is mainly due to the following two reasons:

- Two-month delay in getting the temporary treatment system operational, as CCR removal from the Western portion of the BAP could not commence until the temporary treatment system was operational. This delay was due to equipment delivery and installation challenges, and initial operational problems from blinding the filter media and an unreliable power supply.
- Two-month delay in removal of CCR material from the Western portion of the BAP, resulting from a severe shortage of truck drivers. The contractor's plan, upon which the original timeline was based, had 16 trucks running every day, weather permitting. However, only 4 to 14 truck drivers show up on any given day, with approximately 8 drivers on a typical day. The contractor approached all known trucking companies in the region with requirements that drivers needed to be union, trucks needed to have automatic transmissions due to travel to landfill and trucking firms needed to be reporting safety metrics in Vero, which is a safety management service used by AEP to measure contractor safety performance. Only two firms met these criteria. This lack of drivers has extended the timeframe for removal of CCR material by approximately 2 months.

The combination of these delays has extended the overall schedule for completion of the ponds by four months and pushed the backfill and liner construction into the winter months. Winter in West Virginia is not conducive to this work. Backfill cannot be effectively dried and compacted during this time period. Liner subgrade cannot be maintained in a smooth and compacted manner, as it will rut with construction traffic. In addition, the liner cannot effectively be seamed during this time due to damp and cold weather. The estimated time in the original schedule for the repurposing of the Western portion of the Bottom Ash Pond was 7.2 months. However, in light of the fact that certain work that has been delayed can't be done reliably during the winter months, AEP is requesting that the completion date be extended from March 13, 2023, to September 2, 2023, to allow for construction of the liner system during the spring and summer.

### **Cease Sluicing Bottom Ash and Complete Dry Ash Conversion**

#### **Completed or on track tasks:**

- 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 project schedule.
- Procurement - Last year AEP awarded the OEM Ash Handling Equipment package. All the other anticipated equipment / supply packages (Pumps, Power Distribution Centers, DCS, Cable, Valves, and Chem Feed) for the bottom ash conversion have been awarded on target to support the original proposed project schedule. Further, in an effort to compress the project schedule, the scope was subdivided into strategic sections that could streamline the engineering, design, and procurement steps so that certain construction activities could start as soon as possible.
- Permitting – AEP has obtained all required permits for bottom ash conversion, such as Stormwater Pollution Prevention Plan (SWP3) and Flood Plain Permit.
- Labor Contracts – All labor contracts have been awarded or are on track to be awarded soon in accordance with the original schedule to support the original compliance timeline. However, due to late deliveries of equipment, the contracted labor will not be able to complete construction per the original timeline for compliance.
- Construction – Construction has just started in accordance with the original timeline for compliance

**Delays or adjustments to proposed schedule:**

- Procurement Delays Due to Supply Chain Issues - Two of the equipment/supply packages that we ordered have very long extended lead times that do not support a 2023 Spring outage as originally planned. These deliveries, which are critical to completing the bottom ash conversion, are not expected to occur until after the spring outage. These two items are the Sicon Conveyor for the transport and unloading of the bottom ash into a bunker and the Power Distribution Centers (PDC) that power all the new equipment. The original estimated delivery date for the PDC buildings was November 15, 2022. The quoted delivery from the issued PO is now June 15, 2023, eight months later than planned. Similarly, the Sicon Conveyor, which was originally expected to be delivered by January 9, 2023, is now not expected to arrive until March 17, 2023.

AEP has had numerous discussions with four suppliers of similar equipment to investigate possible improvement in delivery schedule. Investigations into alternate designs were also considered.

Ultimately, neither of these efforts resulted in an improvement in schedule. The supply chain for this type of equipment is constrained across the industry. Therefore, the only workable option is to move this work to the Fall of 2023, which is the earliest outage date possible after expected delivery of the critical equipment.

**Closure of entire BAP by removal of remaining CCR material from Eastern portion of the Bottom Ash Pond****Completed or on track tasks:**

- Engineering and Design – All work has been completed
- Procurement – All packages have been awarded
- Labor Contracts – All packages have been awarded

**Delays or adjustments to proposed schedule:**

Closure of the BAP cannot commence until the Western portion of the Bottom Ash Pond is repurposed to accept and treat non-CCR waste streams. In addition, work cannot commence until bottom ash is no longer sluiced to the BAP. Therefore, work cannot commence until the start of the dual unit outage on October 15, 2023, which will delay completion by one year, to October 15, 2024.

In conclusion, while AEP has made great strides towards completing work at Mitchell in accordance with the original proposed compliance timeline, due to supply chain issues and seasonal construction limitations, this timeline can no longer be met.

Sincerely,



David A. Miller, P.E.  
Director, Programs and Reporting Services  
Environmental Services Division