

**Midwest Generation, LLC
Powerton Generating Station
Bypass Basin Retrofit and Former Ash Basin Closure
Public Meeting General Summary**

INTRODUCTION

In accordance with Title 35 of the Illinois Administrative Code (“35 IAC”) Section 845.240, Midwest Generation, LLC (MWG) posted the public meeting notice for closure of the Powerton Generating Station’s Former Ash Basin and the Retrofit Plan for the Bypass Basin on its publicly available website and provided a copy of such notice to the Illinois Environmental Protection Agency (Illinois EPA or Agency) to email to its listserv for this facility. The public meeting notice was also mailed to all residents within at least 1 mile of the facility on April 14, 2022, which totaled 986 residential mailing addresses. The notice was also posted in 31 public locations within 10 miles of the facility boundary.

The public meetings for Powerton Generating Station’s Bypass Basin and Former Ash Basin (FAB) were held on May 18, 2022 from 6:00 p.m. to 8:00 p.m. and on May 19, 2022 from 10:00 a.m. to 12:00 p.m. The meetings were held in a hybrid format – in person and via Zoom or telephone. Seven members of the public attended the May 18th meeting in person; four attended via Zoom. Seven members of the public attended the May 19th meeting in person; eleven attended via Zoom. The remaining attendees were MWG affiliate employees and consultants. Attendees who wished to sign up for a copy of the meeting summary and/or be added to Illinois EPA’s listserv for the facility were asked to sign up via a form provided at the in-person location or a link to a Google form that was provided within the chat function of the Zoom meeting and posted on MWG’s website, midwestgenerationllc.com. Seventeen attendees requested a copy of the meeting summary, eleven of whom requested transmittal of their email address to the Agency to be added to the Agency’s listserv for the facility. It was also announced that the link would be available on MWG’s public website for two weeks. After an introduction and approximate 50-minute presentation on the proposed retrofit and closure construction plans, the public was given approximately 1 hour during each meeting to ask questions and provide comments.

This document serves as a summary of the issues and questions raised during the meeting.

MWG proposes to retrofit the Bypass Basin by removing and disposing of the remaining material in the basin, decontaminating the existing geomembrane liner so that it will act as another protective layer in the composite liner system, and installing a composite liner system and leachate collection system. MWG proposes to close the Former Ash Basin in-place by installing an alternate final cover system (ClosureTurf®).

SUMMARY OF ISSUES AND QUESTIONS RAISED DURING THE MEETING

General

Powerton Lake

In response to a specific question, there is one fish advisory specific to Powerton Lake, for the channel catfish. The advisory is for polychlorinated biphenyls (PCBs) and the Illinois Department of Public Health recommends that people consume no more than 1 meal per week of channel catfish that are between 15 and 19 inches in size, and no more than 1 meal per month of channel catfish that are 19 inches or longer. Note that the Illinois Department of Natural Resources (IDNR) leases Powerton Lake for fishing, waterfowl hunting, and other recreation uses; IDNR has leased Powerton Lake since 1984. In 2021, IDNR stocked the Powerton Lake with over 230,000 fish across three species: blue catfish, smallmouth bass, and hybrid striped bass. Information on IDNR's management of the fishery at Powerton Lake can be found on IDNR's website (<https://www.ifishillinois.org/profiles/waterbody.php?waternum=00039>).

Labor

Midwest Generation, LLC operates under a Power House Labor Agreement (PHLA) that gives preference to Union labor for construction and maintenance activities at all plants that MWG owns and/or operates in Illinois. MWG will continue to abide by PHLA.

Availability of Information

Questions were raised about availability of information regarding MWG's plans for retrofitting the Bypass Basin and closing the FAB. Generally, MWG posts all required reports and assessments to its publicly available website within 14 days of completion. This information can be found at midwestgenerationllc.com.

Former Ash Basin

FAB History

Questions were asked about whether ash has washed out of the FAB into the Illinois River, if MWG has studied whether potential contaminants have leached over time into the Illinois River, and whether MWG has studied the Illinois River.

The ash that is currently in the FAB is stable and not moving. Powerton Station personnel inspect the FAB weekly and the FAB is inspected by a third-party Professional Engineer annually. The inspection reports are posted at midwestgenerationllc.com.

MWG has not studied whether potential contaminants have leached over time because MWG is unable to recreate the initial conditions that likely produced the ash that is in the FAB. Powerton Station began operation in the late 1920's with pulverized coal-fired (PC) boilers (Units 1 through 4) that burned Illinois coal. Units 1 through 4 were retired before MWG began operating Powerton Station, presumably in the 1970's, the same decade that placement of ash in the FAB ceased.

Ash from the FAB was sampled and analyzed as required by the IL CCR Rule. The results of that sampling can be found in the Initial Operating Permit application, available at midwestgenerationllc.com. MWG did not identify any constituent levels of concern in that sampling.

MWG does not study the Illinois River. Instead, we monitor our discharges to the Illinois River and report those to the Illinois EPA as required by the Station's NPDES permit.

Groundwater Monitoring

Groundwater monitoring at the FAB shows that groundwater from each of the four downgradient monitoring wells meet the Section 845.600(a) groundwater protection standards which are based on the Illinois Class I Potable Resource Groundwater standards.

Closure in Place Regulations and Financial Assurance

Several questions were asked about whether the regulations allow for closure in place of the FAB as it is unlined and not separated from the uppermost aquifer by at least five feet.

The regulations do not distinguish between closure methods for unlined or lined CCR surface impoundments, nor do the regulations distinguish between closure methods for CCR surface impoundments that fail any location restrictions. Instead, the regulations require impoundments that are unlined or fail one or more location restrictions to close. The closure alternatives analysis compared three methods of closure in place and one closure by removal. Various transportation methods were examined for closure by removal.

Under Illinois EPA oversight, MWG will be required to inspect and monitor any CCR surface impoundment that is closed in place for at least 30 years after the closure construction is complete. Post-closure care includes continued groundwater monitoring, impoundment inspections, as-needed repairs to the final cover system, and corrective actions as necessary. Once 30 years of monitoring have been completed, the owner or operator of a CCR surface impoundment must request Illinois EPA approval to terminate post-closure care. While MWG cannot predict future events, the Illinois EPA will continue to have oversight for CCR surface impoundments until the Agency agrees that its oversight is no longer necessary.

Owners and operators of CCR surface impoundments are required to financially assure the costs of closure and post-closure care through the end of the post-closure care period. Financial assurance would be used only in the case of owner insolvency; otherwise costs for closure, post-closure care, and any necessary remedial activities are paid by the surface impoundment owner and/or operator. The responsibility for a CCR surface impoundment would transfer to any future owner, similarly to how the FAB responsibility transferred to MWG when MWG became the operator of Powerton Station in 1999. Additionally, should any additional corrective actions be required in the future, 35 IAC Part 845 requires the owner to financially assure the costs of the additional corrective actions. In addition, the corrective action would be performed by the CCR surface impoundment owner to ensure that impacts to the environment, including groundwater, do not occur or are corrected under EPA oversight. Groundwater modeling may be used as part of evaluating the appropriate corrective action to demonstrate the selected corrective action's effectiveness in remediating the environmental impacts.

Closure in Place Design

Several questions were asked about the northern berm that is included in the closure in place design. The berm is designed to be three to four feet above grade to prevent flooding of the impoundment once the final cover system is placed. The berm will be constructed of fill material composed of natural soils, but the specific materials have not been chosen at this time. Material specifications will be included in construction bid requests. Construction bid requests will not occur until a final closure construction permit is issued by the Agency.

The FAB will be dewatered before placement of the final cover system. The final cover system will be the proprietary ClosureTurf cover system that consists of an impermeable geomembrane liner covered with synthetic turf and sand infill. The impermeable geomembrane liner is a specially designed plastic liner that minimizes precipitation from passing through it and moves precipitation off the liner, so it does not accumulate on top of the liner. The synthetic turf and sand infill protect the geomembrane liner from animal, weather, and UV damage. Third party testing has demonstrated the geomembrane liner has a permeability of 1×10^{-13} centimeters per second (cm/s) and a lifespan of at 100 years. Additional testing has demonstrated that the freeze-thaw cycle has no impact on the integrity and effectiveness of the geomembrane liner.

Questions were raised regarding potential future concerns, specifically seismic activity and rising water levels. On its website, the United States Geological Survey (USGS) lists earthquakes in Illinois since 1900. No earthquakes have been recorded in Tazewell County in the 122-year period recorded by the USGS. Closure in place requires continued monitoring of the surface impoundment and corrective action if necessary. As part of the Initial FAB Operating Permit application, the location of the FAB was determined to not be located in a seismic impact zone, not in a fault area, and not in an unstable area.

Onsite Landfill/Consolidate and Close

An onsite landfill was considered and ultimately ruled out because of the lengthy process of siting a new landfill and lack of available space vertically and horizontally. One commentor suggested MWG examine removing ash from the northern portion of the FAB, placing a liner in that area, and consolidating the ash in the northern portion. While MWG did not overtly examine this scenario in the closure alternatives analysis, it was considered and eliminated because installation of a liner and consolidating the ash in the northern portion could be considered construction of a CCR landfill, further delaying the closure of the FAB.

The rail line that separates the northern portion of the FAB from southern portion acts as a berm to prevent flooding of the southern portion from the Illinois River, so consolidation in the southern half could be the better option for protection of the environment. This alternative option is still being internally considered/evaluated, but consideration could not be finalized within the 14 days that this summary is required to be posted.

Closure Costs

The selected option for closure of the FAB is not the least expensive based on engineering analysis that is documented in the Closure Alternatives Analysis. Costs were not determinative in selecting closure in place.

Bypass Basin

Bypass Basin Underlying Surface

Questions were asked about whether the Bypass Basin currently has a Poz-o-Pac liner, had a Poz-o-Pac liner, and whether the Bypass Basin retrofit includes reusing the Poz-o-Pac liner if it exists.

During the May 18 meeting, MWG mistakenly stated that the Bypass Basin never had a Poz-o-Pac liner and corrected that statement during the May 19 meeting when the question was asked again. The original construction documents show that a 12-inch-thick layer of Poz-o-Pac was installed over the Bypass Basin's original Hypalon® liner along the basin floor.

Both the Poz-o-Pac and Hypalon® liners were removed from the Bypass Basin when the basin was relined in 2010 with a 60-mil HDPE geomembrane liner. Currently, the Bypass Basin does not have either of its original Poz-o-Pac or Hypalon® liners; only the relatively new 60-mil HDPE geomembrane liner is present.

It should be noted that Poz-o-Pac is a cementitious material and has been used as a supporting surface for things like roads, highways, and parking lots (in addition to similar pozzolan-stabilized base materials). According to the Federal Highway Administration, Poz-o-Pac was used at over 100 sites throughout Illinois between 1955 and 1985.

Questions were asked about the material that underlies the Bypass Basin's current HDPE geomembrane liner and whether this material will be tested during the retrofit process. The plan for retrofitting the Bypass Basin does not include testing of soils beneath the HDPE geomembrane liner unless tears in the liner are discovered which may indicate the potential release of contaminants into the Bypass Basin's subgrade. The competency of the Bypass Basin's existing HDPE geomembrane liner will be verified by conducting an electrical leak location survey, which involves placing a voltage across the entire liner and using a detection probe to determine whether any tears are present in the liner. Where a tear is present, the probe will identify an electrical current flowing through the tear. If a tear is discovered, the soils under the tear will be inspected to determine whether any contaminants have been released into the basin subgrade. Contaminated soils identified during this inspection will be removed and replaced with structural fill.

Retrofit Design

Questions were asked about the structural fill material that will be used to establish the slopes for the retrofitted Bypass Basin's leachate collection system. This fill material will be comprised of natural soils, not CCR; however, the specific soil materials have not been chosen at this time. Material specifications will be included in construction bid requests. Construction bid requests will not occur until a final retrofit construction permit is issued by the Illinois EPA.

SUMMARY OF REVISIONS, CHANGES, AND CONSIDERATIONS

Public engagement is an important part of the permitting process. Midwest Generation, LLC valued the opportunity to hear and consider the comments of community members and others who participated in the public meetings. At this time, Midwest Generation is proceeding with the proposal for retrofitting the Bypass Basin and closing the Former Ash Basin in-place as presented at the public meetings. Taking public comments into consideration, the current analysis continues to indicate that the proposed plan – which remains subject to regulatory review and approval – prioritizes the environment and community well-being.