

MWVG

Midwest Generation, LLC

Powerton Generating Station

2025 Inflow Design Flood Control System Plan for Ash Surge Basin, Bypass Basin, & Former Ash Basin

Revision 0

October 13, 2025

Issue Purpose: Use

Project No.: A12661.205

55 East Monroe Street
Chicago, IL 60603-5780 USA
312-269-2000

www.sargentlundy.com



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EXECUTIVE SUMMARY

This report presents the 2024 inflow design flood control system plan for the Ash Surge Basin, Bypass Basin, and Former Ash Basin at Midwest Generation, LLC's (MWG) Powerton Generating Station ("Powerton" or the "Station"). This annual plan, prepared by Sargent & Lundy (S&L) on behalf of MWG, documents how the inflow design flood control systems for the Ash Surge, Bypass, and Former Ash Basins have been designed and constructed to meet the hydrologic and hydraulic capacity requirements for coal combustion residual (CCR) surface impoundments promulgated by 35 Ill. Adm. Code 845.510.

To complete this assessment, S&L re-evaluated the bases of the most recent hydrologic and hydraulic calculations prepared for the Ash Surge, Bypass, and Former Ash Basins. These calculations were completed in 2021 for the Ash Surge and Former Ash Basins and in October 2024 for the Bypass Basin, after the basin was retrofitted. The hydrologic and hydraulic calculations for all three basins were performed by conservatively assuming no rainfall abstraction (*i.e.*, the full design precipitation depth over a basin's catchment area was assumed to enter the basin). Moreover, it was conservatively assumed that the surface water elevations in the Ash Surge Basin at the time of the design storm event was at the basin's maximum design operating levels. Finally, it was conservatively assumed that the surface water elevation in the Former Ash Basin at the time of the design storm event was at 450.00 feet above mean sea level (amsl), four feet higher than the maximum surface water elevation recorded in the basin's annual inspection reports that had been completed through October 2021.

To verify the results of the latest hydrologic and hydraulic calculations were still valid, S&L determined (1) whether any changes to the calculation inputs have occurred since the calculations were performed and (2) whether identified changes warrant updating the calculations. Where changes were determined to impact the results and conclusions of the calculations for a given basin, the hydrologic and hydraulic calculations were revised in accordance with the updated input. Where no changes were noted for a given input, or where identified changes were determined to have no impact on the results and conclusions of the hydrologic and hydraulic calculations for a given basin, the previous evaluation of that input was considered to remain valid for this 2025 inflow design flood control system plan.

Since retrofitting the Bypass Basin in 2024, Powerton has used the basin to manage the Station's ash dewatering bin effluent. Operating conditions at the basin have not changed since the retrofit construction was completed. Meanwhile, upon completion of retrofit activities at the Bypass Basin, Powerton took the Ash Surge Basin out of service, dewatered the basin, and started removing ash in accordance with the Station's ash basin maintenance practices. With the Ash Surge Basin out of service, the normal surface water elevation in that basin will be lower than its maximum design operating level, which was the assumed water level in the basin at the time of the design storm event in the 2021 hydrologic and hydraulic

calculations. Finally, the maximum surface water elevation observed in the inactive Former Ash Basin between 2021 and 2024 (approximately 446 feet amsl) is less than the surface water elevation assumed for the Former Ash Basin prior to the inflow design flood (450 feet amsl) in the 2021 hydrologic and hydraulic calculations. Therefore, the operating conditions at the Ash Surge, Bypass, and Former Ash Basins have not changed in a manner since the latest hydrologic and hydraulic calculations were completed that warrant updating the calculations.

Per the basins' 2025 hazard potential classification assessment prepared in accordance with 35 Ill. Adm. Code 845.440(a)(1), the Ash Surge, Bypass, and Former Ash Basins remain classified as Class 2 CCR surface impoundments. Therefore, the inflow design flood event for the basins remains the 1,000-year storm per 35 Ill. Adm. Code 845.510(a)(3). In addition, there have been no significant modifications to the embankments for the Ash Surge and Former Ash Basins (mass excavations, fill placement, etc.) since the latest hydrologic and hydraulic calculations were completed in 2021. Meanwhile, post-construction survey data provided by the contractor who retrofitted the Bypass Basin that was used to perform the hydrologic and hydraulic assessment for that basin in October 2024 is unchanged and remains valid for use in this 2025 assessment.

Based on the preceding discussion, the results and conclusions documented for the Ash Surge and Former Ash Basins' inflow design flood control systems in the 2021 inflow design flood control system plan remain valid. Similarly, the results and conclusions documented for the Bypass Basin's inflow design flood control system in the 2024 inflow design flood control system plan also remain valid.

Table ES-1 presents the results from the hydrologic and hydraulic calculations performed for the Ash Surge and Former Ash Basins in 2021 and for the retrofitted Bypass Basin in 2024, all in accordance with 35 Ill. Adm. Code 845.510(c)(1). Based on these results, water entering the basins during the inflow design flood event will not overtop the basins' crests. The calculated freeboards in each basin following the design storm event were determined to be 2.12 feet (Ash Surge Basin), 2.37 feet (Bypass Basin), 4.13 feet (Former Ash Basin, North Pond), and 6.77 feet (Former Ash Basin, South Pond). In addition, water entering the Ash Surge Basin will not overflow into that basin's emergency spillway structure.

**Table ES-1 – Summary of Hydrologic & Hydraulic Assessment Results for
 Powerton Ash Surge Basin, Retrofitted Bypass Basin, & Former Ash Basin**

CCR Surface Impoundment	Ash Surge Basin	Retrofitted Bypass Basin	Former Ash Basin, North Pond	Former Ash Basin, South Pond
IL Hazard Potential Classification	Class 2	Class 2	Class 2	Class 2
Inflow Design Flood	1,000 Year	1,000 Year	1,000 Year	1,000 Year
Maximum Surface Water EL.	465.88 feet	466.67 feet	450.87 feet	451.23 feet
Emergency Spillway EL.	466.00 feet	N/A	N/A	N/A
Basin's Crest / Rim EL.	468.00 feet	469.04 feet	455.00 feet	458.00 feet

1.0 PURPOSE & SCOPE

1.1 PURPOSE

The Ash Surge Basin, Bypass Basin, and Former Ash Basin at Midwest Generation, LLC's (MWG) Powerton Generating Station ("Powerton" or the "Station") are existing coal combustion residual (CCR) surface impoundments that are regulated by the Illinois Pollution Control Board's "Standards for the Disposal of Coal Combustion Residuals in CCR Surface Impoundments." These regulations are codified in Part 845 to Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code 845, Ref. 1) and are also referred to herein as the "Illinois CCR Rule." Pursuant to 35 Ill. Adm. Code 845.510(c)(1), MWG must prepare an annual inflow design flood control system plan documenting how the inflow design flood control systems for the Ash Surge, Bypass, and Former Ash Basins have been designed and constructed to meet the hydrologic and hydraulic capacity requirements for CCR surface impoundments promulgated by 35 Ill. Adm. Code 845.510.

This report documents the 2025 inflow design flood control system plan prepared in accordance with the Illinois CCR Rule by Sargent & Lundy (S&L) on behalf of MWG for the Ash Surge, Bypass, and Former Ash Basins at Powerton. This report:

- Lists the inputs and assumptions used to determine whether the Ash Surge, Bypass, and Former Ash Basins can manage the inflow design flood,
- Discusses the methodology used to prepare the 2025 inflow design flood control system plan,
- Summarizes the results of the latest hydrologic and hydraulic calculations performed to support the conclusions of whether the Ash Surge, Bypass, and Former Ash Basins meet the hydrologic and hydraulic requirements for CCR surface impoundments promulgated by the Illinois CCR Rule.
- Evaluates potential changes to the design inputs used in the latest hydrologic and hydraulic calculations to determine whether new or updated calculations are warranted, and
- Provides the results of the hydrologic and hydraulic calculations used to determine whether the Ash Surge, Bypass, and Former Ash Basins can manage the inflow design flood.

1.2 SCOPE

In addition to being regulated under the Illinois CCR Rule, Powerton's Ash Surge Basin, Bypass Basin, and Former Ash Basin are also regulated by the U.S. Environmental Protection Agency's (EPA) "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," 40 CFR Part 257 Subpart D (Ref. 2), also referred to herein as the "Federal CCR Rule." Per the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act, the Ash Surge, Bypass, and Former Ash Basins will continue to be subject to both the Illinois and Federal CCR Rules until the U.S. EPA approves the Illinois EPA's CCR permit program. However, the scope of this 2025 inflow flood control system plan is strictly limited to demonstrating compliance with the Illinois CCR Rule. Pursuant to 40 CFR 257.82(c)(4), the next inflow design flood control

system plan for demonstrating compliance with the Federal CCR Rule is not required until 2026, five years after the last periodic plan was completed (2021).

2.0 INPUTS

Ash Basin Conditions & Inflow Design Flood Control Systems

The operating and physical conditions for the Ash Surge, Bypass, and Former Ash Basins and for their inflow design flood control systems were based on the following inputs:

- Observations made by S&L during a site visit on September 23, 2025.
- Discussions with MWG personnel.
- The basins' initial federal inflow design flood control system plans (Refs. 3 and 4).
- The histories of construction prepared for the CCR surface impoundments in accordance with 40 CFR 257.73(c) (Refs. 10 and 11).
- The most recent annual inspection reports prepared for the CCR surface impoundments in accordance with 35 Ill. Adm. Code 845.540(b) (Refs. 12 and 13).

Inflow Design Flood Event

Per their 2025 hazard potential classification assessment (Ref. 5), the Ash Surge, Bypass, and Former Ash Basins are classified as Class 2 CCR surface impoundments pursuant to 35 Ill. Adm. Code 845.440(a)(1). Therefore, the inflow design flood event used in this hydrologic and hydraulic assessment of the Ash Surge, Bypass, and Former Ash Basins is based on the 1,000-year storm (Ref. 1, § 845.510(a)(3)). Per the National Oceanic and Atmospheric Administration's Atlas 14 (Ref. 6), the precipitation depth for the 1,000-year, 24-hour storm event at the Powerton site is 9.00 inches.

Site Topography

Topographic data for the Ash Surge Basin, Bypass Basin, and surrounding areas was obtained from an aerial survey performed by Aero-Metric, Inc. in 2008 (Ref. 7). Topographic data for the Former Ash Basin and surrounding areas was obtained from a survey performed by Ridgeline Consultants in 2016 (Ref. 8).

Aerial Images

Historical and recent aerial images of the Station and surrounding areas were obtained from Google Earth Pro (Ref. 9).

3.0 ASSUMPTIONS

There are no assumptions in this document that require verification.

4.0 METHODOLOGY

The inputs for the latest hydrologic and hydraulic calculations performed for the Ash Surge Basin, Bypass Basin, and Former Ash Basin were reviewed to determine if any changes have occurred since these calculations were completed. Identified changes were then evaluated to determine if updates to these calculations were warranted. If changes were identified, then the hydrologic and hydraulic calculations performed for the Ash Surge Basin, Bypass Basin, and/or Former Ash Basin were revised for this 2025 inflow design flood control system plan. Where no changes were noted for a given input, or where identified changes were determined to have no impact to the results and conclusions of the hydrologic and hydraulic calculations, then the previous evaluation of that input was considered to remain valid for this 2025 inflow design flood control system plan.

5.0 HYDROLOGIC & HYDRAULIC ASSESSMENT

5.1 INFLOW DESIGN FLOOD CONTROL SYSTEMS

The following descriptions of the inflow design flood control systems for the Ash Surge and Bypass Basins are taken from the basins' initial federal inflow design flood control system plan, which was prepared by Geosyntec Consultants in October 2016 (Ref. 3):

The [Ash Surge and Bypass] Basins are located east of the old inlet canal and northeast of the main powerblock building. The [b]asins are operated to receive sluiced CCR and other process water from plant operations one basin at a time. Inflow from plant operations is discharged into the [b]asins through concrete inflow channels located along the southern boundary of the Ash Surge Basin and the [northwestern] boundary of the Bypass Basin.

Routine outflow from the Ash Surge Basin drains northward through a 48-inch diameter reinforced concrete pipe located at the bottom of the basin along its northern perimeter. This pipe connects to the sump located within the pump station located approximately 35 feet north of the Ash Surge Basin. [Powerton] maintains three pumps at the pump station, including one backup pump. As indicated by historical sump water level data, the pump controls are managed so that the water level within the Ash Surge Basin is maintained between 463.5 feet and 465 feet [above mean sea level (amsl)]. From the pump station, discharged process water is pumped to the Service Water Basin located northwest of the Ash Surge Basin. The Ash Surge Basin also includes an emergency spillway along the eastern boundary that would discharge toward the Former Ash Basin (FAB). The spillway is constructed with two box culverts, each approximately 4.5 feet in width and approximately 1.5 feet in height that extend beneath the embankment crest. A concrete apron is located east of the box culvert and rip rap is located downstream of the apron. Topographic survey point data from the

basin crest indicates a minimum crest elevation of the [Ash Surge Basin] of approximately 467.6 feet [amsl].

Routine outflow from the Bypass Basin flows over a weir wall within the basin into a 36-inch diameter reinforced concrete pipe. This pipe extends northward within the east embankment of the Bypass and Ash Surge Basins until it reaches the northeast corner of the Ash Surge Basin, where the pipe extends west to the pump station north of the Ash Surge Basin. From the pump station, discharged process water is pumped to the [Service Water Basin] located northwest of the Ash Surge Basin. When in service, the operating water level in the Bypass Basin is maintained at the elevation of the top of the weir wall.

The following description of the inflow design flood control system for the Former Ash Basin is taken from the basin's initial federal inflow design flood control system plan, which was prepared by Geosyntec Consultants in May 2018 (Ref. 4):

The [Former Ash Basin] is an inactive surface impoundment with an approximate area of 30 acres, located near the Illinois River. A rail road embankment built in 2010 divides the impoundment into North and South Pond...Based on current operations at the Powerton station, there is no regular discharge of sluiced ash into the North and South Ponds of the [Former Ash Basin].

No intake or decant structure exist for [the Former Ash Basin]. No spillway exists for [the Former Ash Basin].

5.2 SUMMARY OF LATEST HYDROLOGIC & HYDRAULIC CALCULATIONS

5.2.1 ASH SURGE BASIN AND FORMER ASH BASIN

The latest hydrologic and hydraulic calculations for Powerton's Ash Surge Basin and Former Ash Basin were completed in October 2021. The inputs, methodology, and results of these calculations are documented in the basins' 2021 inflow design flood control system plan (Ref. 14). As stated in the 2021 plan, these calculations were performed by conservatively assuming no rainfall abstraction (*i.e.*, the full design precipitation depth over a basin's catchment area was assumed to enter the basin). Moreover, it was conservatively assumed that the surface water elevations in the Ash Surge Basin at the time of the design storm event was at the basin's maximum design operating level. Finally, it was conservatively assumed that the surface water elevation in the Former Ash Basin at the time of the design storm event was at 450.00 feet amsl, four feet higher than the maximum surface water elevation recorded in the basin's annual inspection reports that had been completed through October 2021.

The 2021 hydrologic and hydraulic assessment for the Ash Surge Basin evaluated whether the basin could contain the inflow design flood without surface water overflowing into its emergency spillway structure at EL. 466.00 feet amsl. Indeed, the assessment concluded that water entering the basin during the inflow design flood event would not overflow into the basin's emergency spillway structure. The water level in the Ash Surge Basin following the design event was estimated to be 0.12 below the emergency spillway structure. Meanwhile, the freeboard was estimated to be 2.12 feet. Based on these results, it was concluded that the Ash Surge Basin has adequate hydraulic capacity to retain the 1,000-year flood event without water overflowing into the basin's emergency spillway structure or overtopping the basin's dikes. Therefore, the basin was determined to be in conformance with 35 Ill. Adm. Code 845.510(a).

Similarly, the 2021 hydrologic and hydraulic assessment for the Former Ash Basin evaluated whether the basin's North and South Ponds could contain the inflow design flood without surface water overtopping the ponds' embankments, which have approximate crest elevations of EL. 455.00 feet amsl and EL. 458.00 feet amsl, respectively. Indeed, the assessment concluded that water entering the ponds during the inflow design flood event would not overtop the ponds' dikes. The freeboards for the North and South Ponds following the design event were estimated to be 4.13 feet and 6.77 feet, respectively. Based on these results, it was concluded that the ponds have adequate hydraulic capacities to retain the 1,000-year flood event without water overtopping the ponds' dikes, and, thus, the Former Ash Basin was determined to be in conformance with 35 Ill. Adm. Code 845.510(a).

5.2.2 BYPASS BASIN

The latest hydrologic and hydraulic calculations for Powerton's Bypass Basin were completed in October 2024 to account for the retrofit construction completed at that time. The inputs, methodology, and results of these calculations are documented in the basin's 2024 inflow design flood control system plan (Ref. 14). As stated in the October 2024 plan, these calculations were performed by conservatively assuming no rainfall abstraction (*i.e.*, the full design precipitation depth over the basin's catchment area was assumed to enter the basin).

The 2024 hydrologic and hydraulic assessment for the Bypass Basin evaluated whether the basin could contain the inflow design flood without surface water overtopping the basin's embankment at EL. 469.04 feet amsl. Indeed, the assessment concluded that water entering the basin during the inflow design flood event would not overtop the basin's embankments. The freeboard in the Bypass Basin following the design event was estimated to be 2.37 feet. Based on these results, it was concluded that the Bypass Basin has adequate hydraulic capacity to retain the 1,000-year flood event without water overtopping the basin's dikes. Therefore, the basin was determined to be in conformance with 35 Ill. Adm. Code 845.510(a).

5.3 CHANGES TO INPUTS FOR LATEST HYDROLOGIC & HYDRAULIC CALCULATIONS

The following subsections summarize the evaluation conducted to determine if changes to the inputs used in the latest hydrologic and hydraulic calculations for the Ash Surge Basin, Bypass Basin, and Former Ash Basin have occurred since the calculations were completed that warrant updating the calculations.

5.3.1 CHANGES IN ASH BASIN OPERATIONS

Since retrofitting the Bypass Basin in 2024, Powerton has used the basin to manage the Station's ash dewatering bin effluent. Operating conditions at the basin have not changed since the latest hydrologic and hydraulic calculations were prepared for the basin in October 2024. Thus, there have been no significant changes to the operations of the Bypass Basin that warrant updating the 2024 hydrologic and hydraulic calculations for the basin.

After the Bypass Basin was retrofitted in October 2024, Powerton took the Ash Surge Basin out of service, dewatered the basin, and started removing ash in accordance with the Station's ash basin maintenance practices. MWG currently plans to retrofit the Ash Surge Basin with a new composite liner system and a new LCRS upon receipt of a retrofit construction permit from the Illinois EPA in accordance with Subpart B of the Illinois CCR Rule. MWG submitted a construction permit application for retrofitting the Ash Surge Basin to Illinois EPA on July 27, 2023.

Finally, the Former Ash Basin is an inactive CCR surface impoundment and, therefore, is not used by the Station to manage any of Powerton's wastestreams. However, the basin still collects stormwater from direct precipitation and run-off from adjacent areas. Per the basin's July 2025 annual inspection report (Ref. 13), the maximum surface water elevation in the basin's North and South Ponds between the 2021 and 2024 annual inspections was estimated to be approximately EL. 446 feet amsl. Per the basin's July 2025 annual inspection report (Ref. 13), the maximum water depth observed was estimated to be 2.8 feet. Using the area-capacity curve provided for the basin in its history of construction (Ref. 11), the maximum surface water elevation for the basin was approximately 435 feet amsl.

Based on the preceding discussion, the operating conditions at the Ash Surge and Former Ash Basins have not changed in a manner since the latest hydrologic and hydraulic calculations were prepared in 2021 that warrant updating their hydrologic and hydraulic calculations. The maximum surface water elevation observed in the Former Ash Basin between 2021 and 2025 (approximately 446 feet amsl) is less than the surface water elevation assumed for the Former Ash Basin prior to the inflow design flood (450 feet amsl). Meanwhile, with the Ash Surge Basin out of service and dewatered, the normal surface water elevation in that basin will be lower than its maximum design operating level, which was the assumed water level in the basin at the time of the design storm event in the 2021 hydrologic and hydraulic calculations. Because these calculations were based on conservative assumptions regarding the surface water elevations in the Ash

Surge and Former Ash Basins, there have been no significant changes to the operations of these basins that warrant updating the 2021 hydrologic and hydraulic calculations for the basins.

5.3.2 CHANGES IN ASH BASIN TOPOGRAPHY

Based on visual observations made by S&L during a site visit on September 23, 2025, reviews of the latest annual inspection reports (Refs. 12 and 13), and reviews of Google Earth aerial images (Ref. 9), there have been no significant modifications to the Ash Surge, Bypass, and Former Ash Basins' embankments (mass excavations, mass fill placement, *etc.*) since the latest hydrologic and hydraulic calculations were completed for the basins. Therefore, the topographic data collected for the site in 2008 and 2016 (Refs. 7 and 8) and the area-capacity curves documented in the Ash Surge and Former Ash Basins' histories of construction (Refs. 10 and 11) that were used in these calculations are unchanged and remain valid for use in this 2025 assessment. Meanwhile, post-construction survey data provided by the contractor who retrofitted the Bypass Basin (Ref. 16) that was used to perform the October 2024 hydrologic and hydraulic calculations for the retrofitted Bypass Basin remains valid for use in this 2025 assessment.

5.3.3 CHANGES TO INFLOW DESIGN FLOOD EVENT

Per the basins' 2025 hazard potential classification assessment (Ref. 5), the Ash Surge, Bypass, and Former Ash Basins are classified as Class 2 CCR surface impoundments pursuant to 35 Ill. Adm. Code 845.440(a)(1), the same hazard potential classifications the basins were assigned in 2021. Therefore, the inflow design flood event for the basins remains the 1,000-year storm (Ref. 1, § 845.510(a)(3)). As documented in the Ash Surge and Former Ash Basins' 2021 inflow design flood control system plan (Ref. 14) and the Bypass Basin's 2024 inflow design flood control system plan (Ref. 15), the precipitation value for the 1,000-year, 24-hour storm event used in the latest hydrologic and hydraulic calculations completed for the Ash Surge, Bypass, and Former Ash Basins was 9.00 inches per NOAA's Atlas 14. As stated in Section 2.0, NOAA's 1,000-year, 24-hour precipitation value for the Powerton site remains 9.00 inches. Therefore, the inflow design flood event used in the latest hydrologic and hydraulic calculations performed for the basins is unchanged and remains valid for use in this 2025 assessment.

5.4 RESULTS

There have been no significant modifications to the Ash Surge and Former Ash Basin and no changes to the basins' inflow design flood events since the latest hydrologic and hydraulic calculations were prepared for the basins in 2021. Therefore, the results and conclusions documented for the Ash Surge and Former Ash Basins' inflow design flood control systems in the 2021 inflow design flood control system plan (Ref. 14) remain valid. In addition, there have also been no significant modifications to the Bypass Basin and no changes to the basin's inflow design flood event since the latest hydrologic and hydraulic calculations were

prepared for the basin in 2024. Thus, the results and conclusions documented for the Bypass Basin’s inflow design flood control system in the 2024 inflow design flood control system plan (Ref. 15) also remain valid.

Table 5-1 summarizes the results from the latest hydrologic and hydraulic calculations performed for the Ash Surge and Former Ash Basins (2021) and for the Bypass Basin in (2024). Based on these results, water entering the Ash Surge Basin during the inflow design flood event will not overflow into the basin’s emergency spillway structure. The water level in the Ash Surge Basin following the design event was estimated to be 0.12 foot and 2.12 feet, respectively, below the invert elevation of its emergency spillway structure and the crest elevations of its embankments. Meanwhile, the freeboard in the retrofitted Bypass Basin following the design event was estimated to be 2.37 feet. Finally, water entering the Former Ash Basin during the inflow design flood event will not overtop the North Pond’s or South Pond’s dikes; the freeboards in the North and South Ponds following the design event were estimated to be 4.13 feet and 6.77 feet, respectively.

Table 5-1 – Summary of Hydrologic & Hydraulic Assessment Results for Powerton Ash Surge Basin, Retrofitted Bypass Basin, & Former Ash Basin

CCR Surface Impoundment	Ash Surge Basin	Retrofitted Bypass Basin	Former Ash Basin, North Pond	Former Ash Basin, South Pond
IL Hazard Potential Classification	Class 2	Class 2	Class 2	Class 2
Inflow Design Flood	1,000 Year	1,000 Year	1,000 Year	1,000 Year
Maximum Surface Water EL.	465.88 feet	466.67 feet	450.87 feet	451.23 feet
Emergency Spillway EL.	466.00 feet	N/A	N/A	N/A
Basin’s Crest / Rim EL.	468.00 feet	469.04 feet	455.00 feet	458.00 feet

6.0 CONCLUSIONS

Based on the results in Table 5-1, the Ash Surge Basin, Bypass Basin, and Former Ash Basin have adequate hydraulic capacities to retain the 1,000-year flood event without water overtopping the basins' dikes. In addition, the Ash Surge Basin has adequate hydraulic capacity to retain the 1,000-year flood event without water overflowing into its emergency spillway structure. Therefore, the Ash Surge Basin, Bypass Basin, and Former Ash Basin are able to collect and control the inflow design flood event specified in 35 Ill. Adm. Code 845.510(a)(3).

7.0 CERTIFICATION

I certify that:

- This inflow design flood control system plan was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.510.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2025

Seal:



8.0 REFERENCES

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