

MWVG

Midwest Generation, LLC

Powerton Generating Station

2024 Hazard Potential Classification Assessment for Ash Surge Basin, Bypass Basin, & Former Ash Basin

Revision 0

October 13, 2024

Issue Purpose: For Use

Project No.: A12661.190

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EXECUTIVE SUMMARY

This report presents the 2024 hazard potential classification assessment for the Ash Surge Basin, Bypass Basin, and Former Ash Basin at Midwest Generation, LLC's (MWG) Powerton Generating Station ("Powerton" or the "Station"). Pursuant to 35 Ill. Adm. Code 845.440(a)(1), this annual assessment, prepared by Sargent & Lundy (S&L) on behalf of MWG, documents the hazard potential classification for each basin in accordance with the hazard potential classifications defined in 35 Ill. Adm. Code 845.120.

Per last year's hazard potential classification assessment, the Ash Surge, Bypass, and Former Ash Basins were each designated as a Class 2 CCR surface impoundment pursuant to 35 Ill. Adm. Code 845.440(a)(1), which is the equivalent of a significant hazard potential CCR surface impoundment under 40 CFR 257.53, after it was determined that the bases for the initial federal hazard potential classifications assigned to the three basins in 2016 (Ash Surge and Bypass Basins) and in 2018 (Former Ash Basin) in accordance with 40 CFR 257.73(a)(2) were still valid. Accordingly, to complete this assessment, S&L re-evaluated the bases of the initial federal hazard potential classifications assigned to the three basins to determine (1) if any changes have occurred since the initial assessments were completed and (2) whether identified changes warrant adjusting the basins' 2023 hazard potential classifications. 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 initial federal hazard potential classification assessment, the previous evaluation of that input was considered to still be valid for this 2024 hazard potential classification assessment.

Since last year's hazard potential classification assessment, Powerton has taken the Ash Surge Basin out of service and has started dewatering the basin. In addition, the Station has retrofitted the Bypass Basin in accordance with 35 Ill. Adm. Code 845.770 and the retrofit construction permit issued by the Illinois Environmental Protection Agency on July 3, 2024, by installing a new composite liner and a new leachate collection and removal system under the basin's existing geomembrane liner, which was left in-place as a supplemental liner for the retrofitted basin. However, the basin's overall storage capacity was reduced to accommodate the new composite liner system and new LCRS. Because the retrofitted Bypass Basin has a reduced storage capacity compared to its original design capacity, and because the Ash Surge Basin has been taken out of service, the 2016 hypothetical dike breach analyses performed for both basins in support of their initial federal hazard potential classification assessments are conservative for the present conditions at both basins. Otherwise, no other significant changes to the Ash Surge, Bypass, and Former Ash Basins or to downstream developments were identified in this 2024 hazard potential classification assessment.

Based on the preceding observations, the significant hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins in 2016 and 2018 pursuant to 40 CFR 257.73(e) and the bases for these assignments remain valid for this 2024 assessment. Per the analyses performed in support of the 2016 and 2018 federal hazard potential classification assessments, a loss of human life is unlikely to result from a

hypothetical failure at these three CCR surface impoundments, but potential offsite environmental damage could occur to Lost Creek and the Illinois River. Because a CCR surface impoundment classified as a significant hazard potential is considered to be an Illinois Class 2 CCR surface impoundment, the Ash Surge, Bypass, and Former Ash Basins remain classified as Class 2 CCR surface impoundments pursuant to 35 Ill. Adm. Code 845.440(a)(1). However, this is not a reflection of the potential for the impoundments to fail. The 2024 annual safety factor assessment conducted pursuant to 35 Ill. Adm. Code 845.460 shows that the Ash Surge and Bypass Basins are stable under design operating conditions. Moreover, no visual signs of distress that could be indicative of dike instability were observed during the August 22, 2024, and September 25, 2024, condition assessments performed by S&L in support of the basins' 2024 annual structural stability assessment under 35 Ill. Adm. Code 845.450. Finally, as noted in both assessments, MWG is closing the Former Ash Basin given the lack of necessary information available to perform these assessments due to the construction age of the basin.

Table ES-1 presents the 2024 hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins at Powerton in accordance with 35 Ill. Adm. Code 845.440(a)(1).

Table ES-1 – 2024 Illinois Hazard Potential Classifications for the Ash Surge Basin, Bypass Basin, & Former Ash Basin at the Powerton Generating Station

CCR Surface Impoundment	2024 Illinois Hazard Potential Classification
Ash Surge Basin	Class 2
Bypass Basin	Class 2
Former Ash Basin	Class 2

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 845.440(a)(1), MWG must conduct and complete an annual hazard potential classification assessment that documents the hazard potential classifications for the Ash Surge Basin, Bypass Basin, and Former Ash Basin in accordance with the hazard potential classifications defined in 35 Ill. Adm. Code 845.120.

This report documents the 2024 hazard potential classification assessment conducted and completed 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 in the 2024 hazard potential classification assessment,
- Lists and compares the definitions for the hazard potential classifications for CCR surface impoundments promulgated by the Illinois CCR Rule and by the U.S. Environmental Protection Agency's regulations for CCR surface impoundments,
- Discusses the methodology used to conduct the 2024 hazard potential classification assessment,
- Provides the 2024 hazard potential classifications for the Ash Surge, Bypass, and Former Ash Basins in accordance with 35 Ill. Adm. Code 845.440(a)(1).

1.2 SCOPE

In addition to being regulated under the Illinois CCR Rule, Powerton's Ash Surge, Bypass, and Former Ash Basins 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 Basin, Bypass Basin, and Former Ash Basin 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; the Illinois EPA has yet to publish a timeline for submitting its proposed CCR permit program to the U.S. EPA for approval. However, the scope of this 2024 hazard potential classification assessment is strictly limited to demonstrating compliance with the Illinois CCR Rule. Pursuant to 40 CFR 257.73(f)(3), the next hazard potential classification assessment for demonstrating compliance with the Federal CCR Rule will be completed in 2026, five years after the last federal assessment was completed (2021).

2.0 INPUTS

Hazard Potential Classifications

The Illinois CCR Rule (Ref. 1, § 845.120) defines “hazard potential classification” as “the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances.” The Illinois CCR Rule (Ref. 1, § 845.440(a)(1)) requires a CCR surface impoundment be designated as either a Class 1 CCR surface impoundment or a Class 2 CCR surface impoundment. Per 35 Ill. Adm. Code 845.120, the two Illinois hazard potential classifications are defined as follows:

- *Class 1 CCR surface impoundment* means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.
- *Class 2 CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

The Federal CCR Rule (Ref. 2, § 257.53), has the same definition for “hazard potential classification” as the Illinois CCR Rule. However, the Federal CCR Rule has three hazard potential classifications instead of the two designations promulgated by the Illinois CCR Rule. Per 40 CFR 257.53, the three federal hazard potential classifications are defined as follows:

- *High hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.
- *Low hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner’s property.
- *Significant hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

Per the preceding sets of definitions for the federal and Illinois hazard potential classifications, a high hazard potential CCR surface impoundment per the Federal CCR Rule is the same as a Class 1 CCR surface impoundment per the Illinois CCR Rule. Similarly, a CCR surface impoundment that is classified as a low or significant hazard potential per the Federal CCR Rule is considered to be a Class 2 CCR surface impoundment per the Illinois CCR Rule.

A CCR surface impoundment’s hazard potential classification is not a reflection of the probability of a hypothetical failure event associated with the surface impoundment. Hazard potential classifications are not contingent upon a CCR surface impoundment’s structural stability; they only classify the potential impacts should a hypothetical failure occur. For example, a well-maintained CCR surface impoundment with

appropriate factors of safety may be classified as a Class 1 hazard potential solely because a loss of human life would be probable if a hypothetical failure event did occur. Instead, the structural integrity of a CCR surface impoundment and its potential for failure are evaluated and documented in the structural stability and safety factor assessments prepared pursuant to 35 Ill. Adm. Code 845.450 (Ref. 5) and 35 Ill. Adm. Code 845.460 (Ref. 6), respectively.

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).

Impacted Areas

Areas impacted by hypothetical failures at different breach points of the Ash Surge, Bypass, and Former Ash Basins were obtained from the basins' initial federal hazard potential classification assessments (Refs. 3 and 4), the dike breach analysis conducted in 2016 for the Ash Surge Basin's eastern dike (Ref. 9), and the dike breach inundation map included in for the Ash Surge and Bypass Basins' Emergency Action Plan (Ref. 10). The inputs, assumptions, and methodology utilized to identify areas impacted by failures at each of the basins' dikes were evaluated to determine whether any updates to these analyses were warranted.

Appendix A provides the initial federal hazard potential classification assessment conducted by Geosyntec Consultants in 2016 for the Ash Surge and Bypass Basins. Meanwhile, Appendix B provides the initial federal hazard potential classification assessment conducted by Civil & Environmental Consultants, Inc. in 2018 for the Former Ash Basin.

Aerial Images

Historical and recent aerial images of the Station and surrounding areas were obtained from Google Earth Pro (Ref. 11).

Property Boundaries

Boundaries for the Station's property and adjacent properties were obtained from the geographic information system (GIS) for Tazewell County, Illinois (Ref. 12).

100-Year Floodway & Floodplain

Delineations for the floodway and floodplain for the 1% annual chance flood ("100-year flood") at and downstream from the Powerton site were obtained from the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) for the subject area (Ref. 13).

Ash Pond Conditions

The operating and physical conditions for the Ash Surge, Bypass, and Former Ash Basins were based on discussions with MWG personnel and on the annual inspection reports prepared for the three CCR surface impoundments in accordance with 40 CFR 257.83(b) and 35 Ill. Adm. Code 845.540(b) (Refs. 14 through 29).

Illinois & Midland (I&M) Railroad

Information on the Illinois & Midland (I&M) Railroad, which is owned by Genesee & Wyoming, Inc. (G&W), was obtained from G&W's website for the railroad (Ref. 30), as well as information published on Union Pacific's website (Ref. 31).

3.0 ASSUMPTIONS

There are no assumptions in this document that require verification.

4.0 METHODOLOGY

As documented in last year's hazard potential classification assessment, the 2023 hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins were based on the initial federal hazard potential classifications assigned to the three basins pursuant to the Federal CCR Rule after it was determined that the bases for the initial federal hazard potential classifications were still valid. Accordingly, the bases for the Ash Surge, Bypass, and Former Ash Basins' initial federal hazard potential classifications as documented within their respective initial federal hazard potential classification assessments were re-evaluated to determine if any changes have occurred since the initial assessments were completed. Identified changes were then evaluated to determine if the basins' 2023 hazard potential classifications warrant adjustments. 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 initial federal hazard potential classification assessment, the previous evaluation of that input was considered to still be valid for this 2024 assessment.

In instances where changes to one or more factors used as the bases for the initial hazard potential classifications were identified (*e.g.*, downstream development that was not present in 2016), hypothetical dike breaches were considered at each of the three CCR surface impoundments to evaluate the impacts that a release of CCR and CCR wastewater would have on the identified factor(s). These hypothetical dike breaches were evaluated regardless of potential causes and/or apparent dike stability. When evaluating a hypothetical dike breach at a subject CCR surface impoundment, the solid waste materials in the given CCR surface impoundment were conservatively considered as an equivalent volume of liquid, and the CCR surface impoundment was assumed to be entirely filled with liquid.

When evaluating the downstream impacts from a hypothetical dike breach at a CCR surface impoundment, the primary consideration examined was whether a loss of human life is probable under the given hypothetical failure scenario. Loss of human life is the critical aspect of the Class 1 hazard potential classification. If a loss of human life is unlikely to occur, then the CCR surface impoundment was not considered to be a Class 1 hazard potential and was instead classified as a Class 2 hazard potential.

5.0 ASSESSMENT

5.1 SUMMARY OF 2023 HAZARD POTENTIAL CLASSIFICATION ASSESSMENT

The previous hazard potential classification assessment for the Ash Surge, Bypass, and Former Ash Basins was completed on October 13, 2023. Ultimately, the 2023 hazard potential classifications for the Ash Surge, Bypass, and Former Ash Basins were based on the initial federal hazard potential classifications that were assigned to all three basins after it was determined that the bases for the initial federal hazard potential classifications were still valid. Per the initial federal hazard potential classification assessments for the Ash Surge, Bypass, and Former Ash Basins, all three basins were classified as significant hazard potential CCR surface impoundments pursuant to 40 CFR 257.53. Based on the comparison between the Federal and Illinois CCR Rules' definitions for hazard potential classifications in Section 2.0, a significant hazard potential CCR surface impoundment under the Federal CCR Rule is the equivalent of a Class 2 CCR surface impoundment under the Illinois CCR Rule. Therefore, the Ash Surge, Bypass, and Former Ash Basins were classified as Class 2 CCR surface impoundments in the 2023 hazard potential classification assessment.

5.2 SUMMARY OF INITIAL FEDERAL HAZARD POTENTIAL CLASSIFICATION ASSESSMENTS

The initial federal hazard potential classification assessment for the Ash Surge and Bypass Basins was completed in October 2016 and is included in its entirety in Appendix A. This assessment evaluated the potential consequences of hypothetical dike failures for both basins. A quantitative dike breach analysis was also conducted for the southern portion of the Ash Surge Basin's east dike, which was determined to pose the most risk to human life amongst the eight dikes between the two basins. This 2016 dike breach analysis also assumed the Ash Surge Basin was at capacity at the time of the hypothetical failure. Ultimately, these 2016 assessments concluded that the worst-case, hypothetical failure at the Ash Surge and Bypass Basins would not result in a probable loss of human life due to the lack of occupied buildings near the CCR surface impoundments. However, it was determined that hypothetical failures at each of these two CCR surface impoundments could result in environmental damage to Lost Creek and the Illinois River. Therefore, the Ash Surge and Bypass Basins were classified as significant hazard potential CCR surface impoundments.

The initial federal hazard potential classification assessment for the Former Ash Basin was completed in April 2018 and is included in its entirety in Appendix B. This assessment evaluated the potential

consequences of hypothetical dike failures at each of the exterior dikes for the basin's two impoundment areas, the North Pond and the South Pond. Potential dike failure scenarios were not considered for the South Pond because the pond's perimeter was determined to be effectively incised into the adjacent ground surface. Ultimately, the 2018 assessment concluded that a failure along the North Pond's perimeter dike would not result in a probable loss of human life but could cause wastewater to be released into the Illinois River. Consequently, the Former Ash Basin was classified as a significant hazard potential CCR surface impoundment.

5.3 CHANGES IN BASES FOR INITIAL FEDERAL HAZARD POTENTIAL CLASSIFICATIONS

Because the 2023 hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins are based on the analyses performed in 2016 and 2018 pursuant to the Federal CCR Rule, this 2024 assessment re-evaluates the bases for all three basins' initial federal hazard potential classifications to determine if any changes have occurred since the initial assessments were completed that warrant adjusting the basins' 2023 hazard potential classifications.

5.3.1 CHANGES IN ASH POND OPERATIONS & EMBANKMENT GEOMETRY

In early October 2020, Powerton took the Bypass Basin out of service for routine cleaning. On July 3, 2024, Illinois EPA issued a retrofit construction permit for the Bypass Basin in accordance with Subpart B of the Illinois CCR Rule. Shortly after, in accordance with the permit, MWG installed a new composite liner system and a new leachate collection and removal system (LCRS) in the Bypass Basin. The new liner and the new LCRS were installed over the basin's existing liner, which was left in-place as a supplemental liner in accordance with 35 Ill. Adm. Code 845.770(a)(4). Meanwhile, the basin's embankments were raised by about 1.5 feet. However, the basin's overall storage capacity was reduced to accommodate the new composite liner system and new LCRS.

Powerton has taken the Ash Surge Basin out of service and has started dewatering the basin. 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 regulated by the Illinois CCR Rule as 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. During the basin's most recent annual inspection on July 10, 2024 (Ref. 29), the total volume of water impounded in the Former Ash Basin was estimated to be 10 acre-feet.

Since the initial federal hazard potential classification assessments were completed for the three basins, the operating conditions at the Bypass and Ash Surge Basins have changed. As previously mentioned in Section 5.2, the basin's 2016 federal hazard potential classification assessments examined hypothetical breach scenarios assuming the basins were at their respective design capacities. The retrofitted Bypass Basin has a reduced storage capacity compared to its original design capacity, and the Ash Surge Basin has been taken out of service. Therefore, the operating conditions assumed for the 2016 analyses are conservative for the basins' current operating conditions, so it is not necessary to re-evaluate the surface water elevations used to conduct the initial federal hazard potential classification assessments for the Ash Surge and Bypass Basins. Meanwhile, the operating conditions at the Former Ash Basin have not changed since its initial federal hazard potential classification assessment was completed; therefore, there is no basis to re-evaluate the surface water elevation in the Former Ash Basin for this 2024 assessment.

Based on reviews of the annual inspection reports (Refs. 14 through 29) and Google Earth aerial images (Ref. 11), there have been no significant modifications to the Ash Surge and Former Ash Basins (mass excavations, major embankment modifications, *etc.*) since the initial federal hazard potential classification assessments were completed in 2016 and 2018. Meanwhile, the retrofitted Bypass Basin's dikes have the same alignment as they did when the basin's initial federal hazard potential classification assessment was completed in 2016 (i.e., the basin's original embankments were not laterally expanded during retrofit construction). Therefore, there is no basis to re-evaluate the embankment geometry for this 2024 assessment.

5.3.2 CHANGES IN SITE TOPOGRAPHY

Based on reviews of the annual inspection reports (Refs. 14 through 29) and Google Earth aerial images (Ref. 11), there have been no significant modifications to the ground surfaces (mass excavations, mass fill placement, *etc.*) adjacent to the Ash Surge, Bypass, and Former Ash Basins or within the dike breach impact areas since the initial hazard potential classification assessments were completed. Therefore, the topographic data collected for the site in 2008 (Ref. 7) and 2016 (Ref. 8) remains valid for use in this 2024 assessment.

5.3.3 CHANGES IN DOWNSTREAM PROPERTY DEVELOPMENTS

Based on reviews of Google Earth aerial images (Ref. 11) and the Tazewell County, Illinois GIS (Ref. 12), no new buildings, roads, or rail lines have been constructed within the dike breach impact areas identified in the initial federal hazard potential classification assessments since assessments were conducted in 2016 and 2018. Thus, there is no basis to re-evaluate the potential impacts to the areas downstream of the Ash Surge, Bypass, and Former Ash Basins for this 2024 assessment.

5.4 2024 ANNUAL HAZARD POTENTIAL CLASSIFICATION ASSESSMENT

There have been no significant modifications to the Former Ash Basin; no significant modifications to the topography adjacent to and downstream of the Ash Surge, Bypass, and Former Ash Basins; and no significant buildings, roads, or rail lines that have been constructed in the areas downstream of the CCR surface impoundments since the initial federal hazard potential classification assessments were completed in 2016 and 2018 that would be impacted by a hypothetical dike breach. Although the Bypass Basin has since been retrofitted, the new composite liner system and LCRS in the basin have reduced the available storage capacity in the basin, thereby making the 2016 assessment conservative under present conditions. The 2016 analysis is also conservative for the present condition of the Ash Surge Basin, which has been taken out of service. Therefore, the initial federal hazard potential classification assessments completed in 2016 and 2018 for the Ash Surge, Bypass, and Former Ash Basins remain valid. In addition, the 2016 dike breach analysis for the southern portion of the Ash Surge Basin's eastern dike still represents the worst-case failure scenario for the Ash Surge and Bypass Basin dikes since the Ash Surge Basin has significantly more storage capacity than the Bypass Basin and, at approximately 9-feet tall, the Ash Surge Basin's southern dike is the tallest of the basin's four dikes.

In addition to the lack of human-occupied buildings downstream of the CCR surface impoundments, it was further noted that the only transport corridors that would be impacted by a hypothetical failure at either of the Ash Surge, Bypass, and Former Ash Basins are the Station's coal yard rail loop between the Former Ash Basin's North and South Ponds and the I&M Railroad line southeast of the CCR surface impoundments. A review of publicly available information on the I&M Railroad published by its owner, Genesee & Wyoming, Inc., and by Union Pacific indicated that trains traveling along the rail line predominately carry coal and agricultural commodities and do not provide public transportation services. Therefore, a loss of human life along the identified rail lines would be unlikely as a result of a hypothetical failure or mis-operation at the Ash Surge, Bypass, or Former Ash Basins.

Based on the preceding observations, the significant hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins in 2016 and 2018 pursuant to the Federal CCR Rule and the bases for these assignments remain valid for this 2024 assessment. A loss of human life is unlikely to result from a hypothetical failure at these three CCR surface impoundments, but potential offsite environmental damage could occur to Lost Creek and the Illinois River. As discussed in Section 2.0, a CCR surface impoundment classified as a significant hazard potential per the Federal CCR Rule is considered to be an Illinois Class 2 CCR surface impoundment. Therefore, the Ash Surge, Bypass, and Former Ash Basins remain classified as Class 2 CCR surface impoundments pursuant to 35 Ill. Adm. Code 845.440(a)(1). However, this is not a reflection of the potential for the impoundments to fail. The 2024 annual safety factor assessment conducted pursuant to 35 Ill. Adm. Code 845.460 (Ref. 6) shows that the Ash Surge and Bypass Basins are stable under design operating conditions. Moreover, no visual signs of distress that could be indicative of dike

instability were observed during the August 22, 2024, and September 25, 2024, condition assessments performed by S&L in support of the basins' 2024 annual structural stability assessment under 35 Ill. Adm. Code 845.450 (Ref. 5). Finally, as noted in both assessments, MWG is closing the Former Ash Basin given the lack of necessary information available to perform these assessments due to the construction age of the basin.

6.0 CONCLUSIONS

This assessment re-evaluated the factors and design inputs used as the bases for the initial federal hazard potential classification assessment completed in 2016 and 2018 pursuant to the Federal CCR Rule for Powerton's Ash Surge, Bypass, and Former Ash Basins. Other than the Bypass Basin being retrofitted and the Ash Surge Basin being taken out of service, no other significant changes to the CCR surface impoundments or to downstream developments have occurred within the last eight years that would necessitate changing any of the basins' initial federal hazard potential classifications. Moreover, because the retrofitted Bypass Basin has a reduced storage capacity compared to its original design capacity, and because the Ash Surge Basin has been taken out of service, the 2016 hypothetical dike breach analyses performed for both basins are conservative for the present conditions at both basins. Therefore, the initial hazard potential classifications for these two basins are still valid under their current conditions. Thus, because the 2023 Illinois hazard potential classifications for all three basins were based on their initial federal hazard potential classifications, the 2023 Illinois hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins and the bases for these assignments remain valid for 2024.

Table 6-1 presents the 2024 hazard potential classifications assigned to the Ash Surge, Bypass, and Former Ash Basins at Powerton in accordance with 35 Ill. Adm. Code 845.440(a)(1).

Table 6-1 – 2024 Illinois Hazard Potential Classifications for the Ash Surge Basin, Bypass Basin, & Former Ash Basin at the Powerton Generating Station

CCR Surface Impoundment	2024 Illinois Hazard Potential Classification
Ash Surge Basin	Class 2
Bypass Basin	Class 2
Former Ash Basin	Class 2

However, as noted above, the 2024 hazard potential classifications for the Ash Surge, Bypass, and Former Ash Basins do not reflect the probability of a hypothetical failure event associated with the basins and are not contingent upon the basins' structural stability. Indeed, the 2024 annual safety factor assessment conducted pursuant to 35 Ill. Adm. Code 845.460 (Ref. 6) shows that the Ash Surge and Bypass Basins are structurally

stable under design operating conditions. Moreover, no visual signs of distress that could be indicative of dike instability were observed during S&L's August 22, 2024, and September 25, 2024, condition assessment performed in support of the basins' 2024 annual structural stability assessment under 35 Ill. Adm. Code 845.450 (Ref. 5). Finally, as noted in both assessments, MWG is closing the Former Ash Basin given the lack of necessary information available to perform these assessments due to the construction age of the basin.

7.0 CERTIFICATION

I certify that:

- This hazard potential classification assessment was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.440.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2024

Seal:



8.0 REFERENCES

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**APPENDIX A: 2016 ASH SURGE & BYPASS BASIN FED.
HAZARD POTENTIAL CLASSIFICATION ASSESSMENT**

**HAZARD POTENTIAL CLASSIFICATION ASSESSMENT
ASH SURGE AND BYPASS BASINS
POWERTON STATION
OCTOBER 2016**

Pursuant to Code of Federal Regulations Title 40, Part 257, Subpart D (40 CFR), herein referred to as the coal combustion residual (CCR) Rule, § 257.73(a)(2), Geosyntec Consultants (Geosyntec) prepared this initial hazard potential classification assessment (HPCA) for the Ash Surge Basin and Bypass Basin (the Basins) at the Powerton Station (Site) in Pekin, Illinois. The CCR regulations were published in the Federal Register on 17 April 2015 and became effective as of 19 October 2015. The Site is a coal-fired power station, owned and operated by Midwest Generation, LLC (Midwest Generation).

Ms. Jane Soule, P.E., of Geosyntec, prepared this HPCA in accordance with §257.73(a)(2). Mr. Robert White reviewed this report in accordance with Geosyntec's peer review policy.

Summary

Based on the results of the analyses provided in this report, the Ash Surge and Bypass Basins are classified as significant hazard potential CCR surface impoundments because their failure would not result in probable loss of life, but could result in economic and environmental losses.

1. Regulation Requirements - §257.73(a)(2)

According to the Preamble of the CCR regulations (page 21377), "a hazard potential classification provides an indication of the potential for danger to life, development, or the environment in the event of a release of CCR from a surface impoundment." This classification is not an assessment of the likelihood of a release or failure, but rather an evaluation of the potential impacts if one were to occur. Per §257.73(a)(2), "the owner or operator must document the hazard potential of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment or a low hazard potential surface impoundment." The assessment must include certification from a qualified professional engineer stating that the initial hazard potential classification (and each subsequent periodic classification) was conducted in accordance with these requirements. Section 257.53 provides the following definitions for hazard potential classifications:

- A high hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation will probably cause loss of human life;
- A significant hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life,

but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns; and

- A low hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

Based on the definitions contained in §257.53, a demonstration that an impoundment does not qualify for either a low or high hazard potential classification results in a hazard classification of significant by default.

2. Site Plan

The Basins are located in the northeastern portion of the Site (see Figure 1), east of the Old Intake Canal¹, northeast of the main power block building and south and west of the coal rail track. A Site Plan identifying the Basins and key site elements, including buildings and other surface impoundments, is shown in Figure 2.

The Ash Surge Basin is located east of the Main Wastewater Building and the Metal Cleaning Basin, west of the inactive Limestone Basin, north of the Bypass Basin and East Roof and Yard Runoff (ERYR) Basin, southeast of the Service Water Basin (SWB), and southwest and west of the Former Ash Basin (FAB). The Bypass Basin is located east of the ERYR Basin and south of the southeast corner of the Ash Surge Basin.

Based on reported site observations and a review of available construction documents, the Basins were constructed with elevated embankments surrounding the Basins. Therefore, run-on to the Basins is limited to the area within the embankment crests. Topographic survey point data from the basin crest indicates a minimum crest elevation of the Basins of approximately 467.6 feet MSL (Aero-Metric, 2008). Topography of the area surrounding the Basins is shown in Figure 3 and 5.

The estimated capacities and maximum depths of the Basins as reported in the History of Construction Report (Geosyntec, 2016a) are shown in Table 1 below:

¹ The outlet structure along the northern boundary of the Old Intake Canal was sealed in 2016.

Table 1: Estimated Basin Capacity and Maximum Depth

	Ash Surge Basin	Bypass Basin
Estimated Capacity ² (acre-feet)	92.1	5.1
Estimated Maximum Basin Depth (feet)	16	10

3. Basin Failure Impact Evaluation

In order to classify the hazard potential of the Basins, impacts of a potential failure must be evaluated. The following sections evaluate the potential for failure or mis-operation to cause loss of human life by examining the proximity of buildings with human occupancy to potential inundation areas. Figure 2 identifies the location of buildings in the vicinity of the Basins, including both occupied and unoccupied buildings.³ In addition, the potential for offsite economic and/or environmental impacts are evaluated.

3.1 Ash Surge Basin

The following sections describe potential impacts from failure of each of the Ash Surge Basin embankments. Figure 3 presents potential flow paths for discharge from potential embankment failures.

3.1.1 Eastern Embankment

Discharge from a potential failure along the northern half of the eastern embankment would drain eastward toward the FAB. Because no occupied buildings are located between the Ash Surge Basin and the FAB, potential failure of this portion of the eastern embankment is not likely to cause loss of human life. During flood conditions, discharge from the potential failure may overflow along the eastern boundary of the FAB into Lost Creek, resulting in offsite environmental impacts. This excludes the Ash Surge Basin from a low hazard classification.

² Estimated capacity is based on the invert elevation of the emergency spillway for the Ash Surge Basin (466 feet MSL) and the top of the overflow riser pipe (466.75 feet MSL) for the Bypass Basin.

³ Buildings are assumed to be occupied if there is at least one human occupant a minimum of 12 hours per day.

An inundation map was developed for a potential breach in the southern half of the eastern embankment (south of the Limestone Basin) to evaluate potential impacts to occupied buildings such as the main power block. HEC-HMS Version 4.1 (HEC-HMS, 2013) modeling software was used to estimate the breach hydrographs which are plots of the rate of flow over time. A FLO-2D model (FLO-2D, 2009) was then used to estimate flow depth resulting from the selected hydrograph. The results of the modeling are shown in Figure 4 and indicate that discharge from the potential breach would flow eastward into a depression east of the Bypass Basin and then flow northward into the FAB. Due to increases in topography south of the Bypass Basin, flow is anticipated to extend approximately 200 feet south of the Bypass Basin. If the breach were to occur during flood conditions, flow patterns would remain the same, with minimal storage in the Limestone Basin and localized depression east of the Bypass Basin and could result in increased volume of discharge into the FAB. Potential overflow from the FAB area could enter Lost Creek and flow north to the Illinois River. Flow from the potential breach is not anticipated to extend to the main power block and therefore, a potential failure of the eastern embankment is not anticipated to cause loss of human life. Details of the modeling methods and procedures are presented in Geosyntec (2016b).

3.1.2 Southern Embankment

The Bypass Basin and ERYR Basin are located immediately south of the Ash Surge Basin. Potential failure of the western portion of the southern embankment, with a crest elevation of approximately 467.6 MSL, would result in flow of CCR and CCR laden water into the ERYR Basin. The minimum crest elevation of the ERYR Basin is located at its western embankment at approximately 459 feet MSL. Therefore, surplus discharge into the ERYR from a potential failure of the Ash Surge Basin would flow over the western embankment of the ERYR Basin (at elevation 459 feet) into the Old Intake Canal. Because there are no occupied buildings within the potential impact areas of the Old Intake Canal or ERYR Basin, potential failure of the southern embankment of the Ash Surge Basin is not likely to cause loss of human life.

Failure of the eastern portion of the southern embankment may result in flow of CCR and CCR-laden water into the Bypass Basin. Embankment crest elevations with the Bypass Basin are at approximately the same elevation as those for the Ash Surge Basin. Depending on the rate of failure and existing water levels within the Basins, failure of the southern embankment of the Ash Surge Basin is anticipated to result in equalization of water levels between the Ash Surge and Bypass Basins and no anticipated loss of human life.

3.1.3 Western Embankment

The western embankment of the Ash Surge Basin is limited in height to approximately 9 to 10 feet above surrounding grades along the northern portion of the western embankment and to

approximately 12 feet where the Ash Surge Basin is bounded on the west by the Metal Cleaning Basin. Potential failure of this embankment may result in flow of CCR and CCR-laden water into either the Metal Cleaning Basin and/or the Old Intake Canal, located approximately 300 feet west of the Ash Surge Basin. Because no occupied buildings are located between the Ash Surge Basin and the Old Intake Canal, potential failure of this embankment is not likely to cause loss of human life.

3.1.4 Northern Embankment

Discharge from a potential failure of the northern embankment would drain either toward the FAB, located northeast and east of the Ash Surge Basin, or toward the SWB Basin, located northwest of the Ash Surge Basin. Potential overflow from the SWB could drain to the Old Intake Canal or the FAB. As there are no occupied buildings north of the Ash Surge Basin in these areas, a potential failure of the northern embankment is not anticipated to cause loss of human life.

3.2 Bypass Basin

The following sections describe potential impacts from failure of each of the Bypass Basin embankments. The Bypass Basin's capacity is approximately 80% smaller than the capacity of the Ash Surge Basin. With a significantly reduced volume from a potential release, it may be reasonably assumed that the risk to human life due as a result of failure of the Bypass Basin is equally reduced. Figure 5 presents potential flow paths for discharge from potential embankment failures.

3.2.1 Eastern Embankment

Discharge from a potential failure of the eastern embankment would have a similar flow path to flow from a potential breach of the southern half of eastern embankment of the Ash Surge Basin (see Figure 4). Discharge would drain eastward toward a localized depression area directly east of the Bypass Basin. Excess water not contained within this depression would drain northward toward the FAB. Because there are no occupied buildings immediately south or east of the Bypass Basin within the potential inundation area, potential failure of the western embankment of the Bypass Basin is not likely to cause loss of human life. During flood conditions, discharge from the potential failure may overflow along the eastern boundary of the FAB into Lost Creek, resulting in potential offsite environmental impacts. This excludes the Bypass Basin from a low hazard classification.

3.2.2 Southern Embankment

The maximum embankment height along the southern perimeter of the Bypass Basin is approximately 6 feet. A potential breach from the southern embankment is anticipated to have an inundation area similar to that of the eastern embankment of either the Ash Surge or Bypass Basins (see Figure 4). Failure of the southern embankment may result in localized ponding of water directly south of the Bypass Basin and flow of water into the depression area east of the Bypass Basin and into the FAB (if flooding conditions are present at the time of failure). As there are no occupied buildings south and east of the Bypass Basin, a potential failure of the southern embankment is not anticipated to cause loss of human life.

3.2.3 Western Embankment

The ERYR Basin is located directly west of the Bypass Basin. Failure of the western embankment may result in flow of CCR and CCR-laden water into the ERYR Basin, similar to the impacts from a potential failure of the southern embankment of the Ash Surge Basin (see Section 3.1.2). Because there are no occupied buildings within the potential impact areas of the Old Intake Canal or ERYR Basin, potential failure of the western embankment of the Bypass Basin is not likely to cause loss of human life.

3.2.4 Northern Embankment

Discharge from a potential failure of the northern embankment would flow into the Ash Surge Basin. Depending on the rate of failure and existing water levels within the Ash Surge and Bypass Basins, this potential failure is anticipated to result in equalization of water levels within these two basins and no probable loss of human life.

4. Hazard Classification Assessment

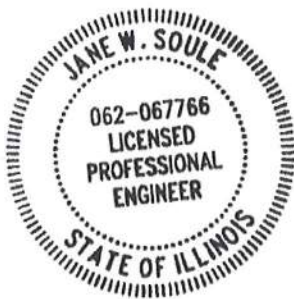
Loss of human life resulting from failure of the embankments of the Ash Surge Basin or Bypass Basin is not probable because no occupied buildings are located within the anticipated inundation areas. Potential failure during flood conditions could result in offsite economic or environmental impacts. Therefore, these basins are classified as significant hazard potential CCR surface impoundments as their failure would not be expected to result in probable loss of life, but could result in potential offsite economic loss and environmental damage.


5. Limitations and Certification

This hazard potential classification assessment report was prepared to comply with §257.73(a)(2) of the Code of Federal Regulations Title 40, Part 257, Subpart D, and was prepared in accordance with current practices and the standard of care exercised by scientists and engineers

Ash Surge and Bypass Basins, Powerton Station
Hazard Potential Classification Assessment
October 2016

performing similar tasks in the field of civil engineering. The contents of this report are based solely on the observations of the conditions observed by Geosyntec personnel and information provided to Geosyntec by Midwest Generation. Consistent with applicable professional standards of care, our opinions and recommendations were based in part on data furnished by others, which was consistent with other information that we developed in the course of our performance of the scope of services. The information contained in this report is intended for use solely by Midwest Generation and their subconsultants.




Jane W. Soule, P.E.
Illinois Professional Engineer No. 062-067766
Expiration Date: 11/30/2017

6. References

- Aero-Metric, 2008. Aerial topography dated 06-19-2008, AeroMetric, Inc.
- FLO-2D, 2009. FLO-2D Basic, FLO-2D Software, Inc., Arizona 2009.
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- Geosyntec, 2016b. Ash Surge Basin, Hazard Potential Classification Assessment Embankment Breach Analysis, Powerton Station, Pekin, Illinois, October.
- HEC-HMS, 2013. HEC-HMS Hydrologic Modeling System – User’s Manual, Version 4.0, U.S. Army Corps of Engineers, Hydrologic Engineering Center (HEC), Davis, California, December 2013.

Attachments

- Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – Ash Surge Basin Potential Breach Flowpaths
Figure 4 – Powerton Ash Surge Basin-East Breach Flood Conditions-Maximum Flow Depth
Figure 5 – Bypass Basin Potential Breach Flowpaths



Residential Area

Lost Creek

Illinois River

Ash Surge Basin

Old Intake Canal

Bypass Basin

Powererton Generating Station

Powererton Road

Powererton Fish and Wildlife Area

Legend

CCR Ponds

Vicinity Map
Ash Surge Basin and Bypass Basin
Midwest Generation, LLC
Pekin, Illinois

Geosyntec
consultants

San Diego October 2016

Figure 1



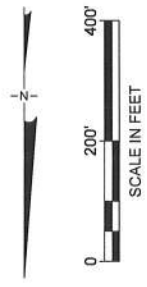
SITE PLAN

POWERERTON STATION
PEKIN, ILLINOIS

Geosyntec
consultants

PROJECT NO. SW0251 OCTOBER 2016

FIGURE
2

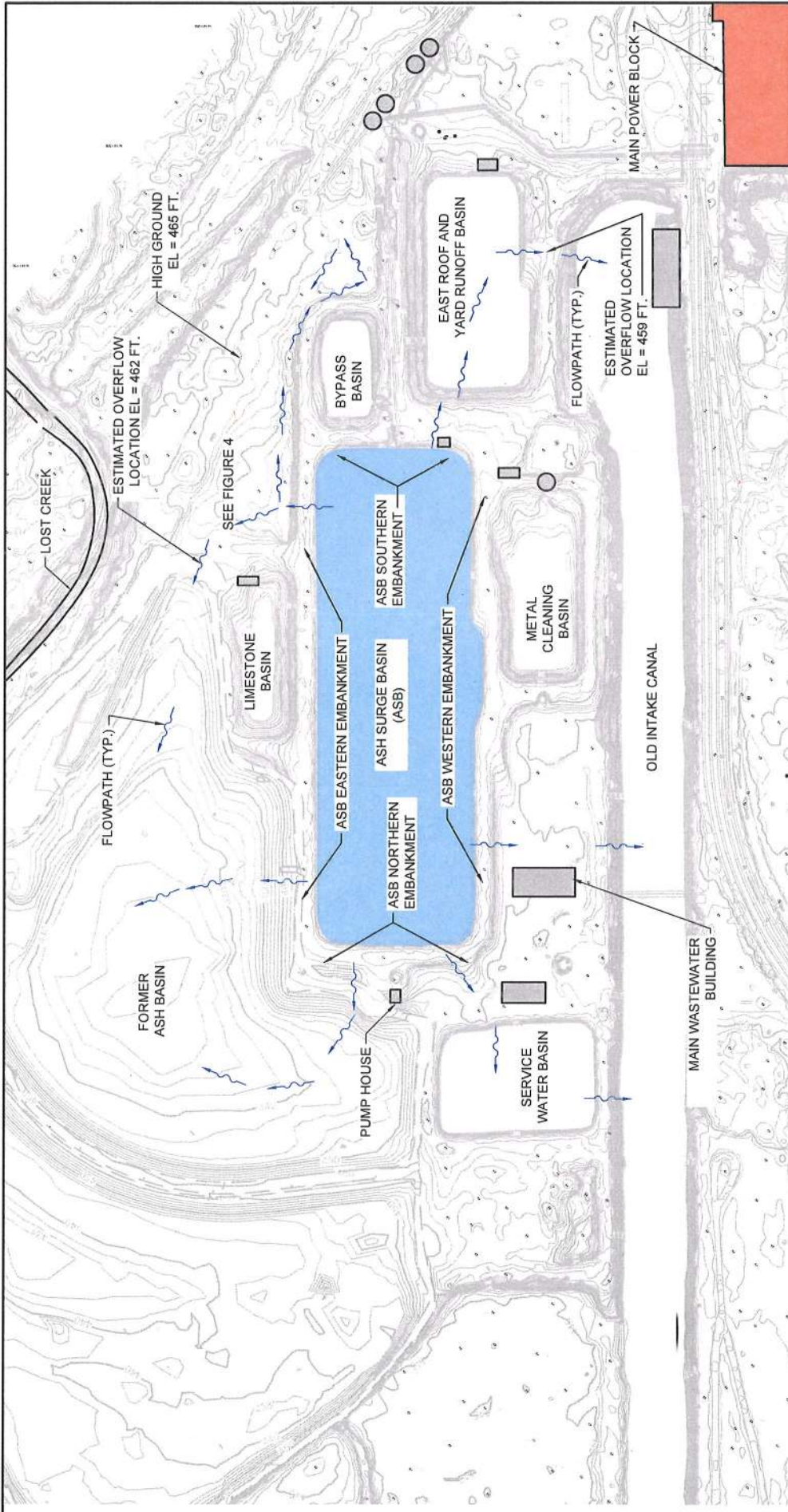


LEGEND

STRUCTURES

- OCCUPIED
- UNOCCUPIED

AERIAL IMAGE: MICROSOFT CORP. (BING MAPS)
CAPTURE DATE: APRIL 2011



SOURCE OF SURVEY:
 TOPOGRAPHY SOUTH OF SECONDARY ASH SETTLING BASIN AND FAB IS BASED ON AERIAL SURVEY PERFORMED BY AEROMETRIC, INC. DATED JUNE 19, 2008. TOPOGRAPHY NORTH OF ASH SURGE BASIN IS BASED ON SURVEY BY RIDGELINE CONSULTANTS PERFORMED IN FEBRUARY AND MARCH 2016.

NOTE:
 1. TOPOGRAPHY SHOWN DOES NOT REFLECT MINOR REGRADING OF THE SLOPE EAST OF THE BYPASS BASIN PERFORMED IN FALL 2016.

LEGEND

STRUCTURES

- OCCUPIED
- UNOCCUPIED

ASH SURGE BASIN
 POTENTIAL BREACH FLOWPATHS

POWERTON STATION
 PEKIN, ILLINOIS

Geosyntec
 consultants

PROJECT NO. SW0251 OCTOBER 2016

SCALE IN FEET
 0 200' 400'

FIGURE
3



Legend

- Computational Boundary
- CCR Ponds

Structures

- Occupied
- Unoccupied

Calculated Maximum Flow Depth (ft)

- 0.0 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- 3.0 - 4.0
- 4.0 - 5.0
- > 5.0

**Poweron-Ash Surge Basin-East Breach
Flood Conditions-Maximum Flow Depth**

Midwest Generation, LLC
Pekin, Illinois

Geosyntec
consultants

San Diego October 2016

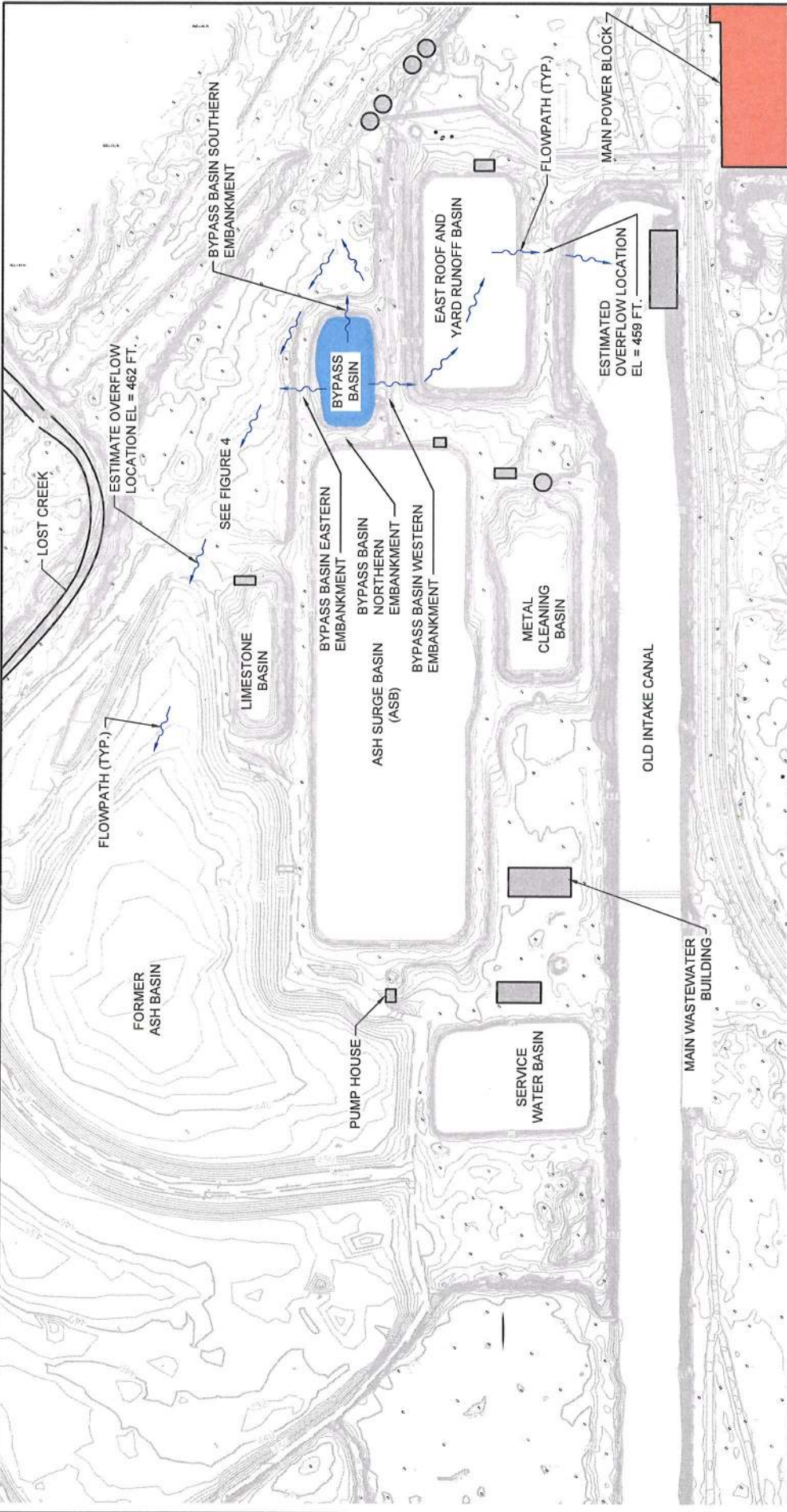
**Figure
4**

GeoEye, Earthstar
N. GP swisstopo



Main Power Block

Path: g:\other\dd\mm\yyyy\Poweron-Ash Breach\Flood-Flow-Depth-Contours-10-16.dwg



SOURCE OF SURVEY:
 TOPOGRAPHY SOUTH OF SECONDARY ASH SETTLING BASIN AND FAB IS BASED ON AERIAL SURVEY PERFORMED BY AEROMETRIC, INC. DATED JUNE 19, 2008. TOPOGRAPHY NORTH OF ASH SURGE BASIN IS BASED ON SURVEY BY RIDGELINE CONSULTANTS PERFORMED IN FEBRUARY AND MARCH 2016.

NOTE:
 1. TOPOGRAPHY SHOWN DOES NOT REFLECT MINOR REGRADING OF THE SLOPE EAST OF THE BYPASS BASIN PERFORMED IN FALL 2016.

LEGEND

STRUCTURES

- OCCUPIED
- UNOCCUPIED

POTENTIAL BREACH FLOWPATHS

POWERTON STATION
 PEKIN, ILLINOIS

Geosyntec
 consultants

PROJECT NO. SW0251 OCTOBER 2016

FIGURE 5

**APPENDIX B: 2018 FORMER ASH BASIN FEDERAL
HAZARD POTENTIAL CLASSIFICATION ASSESSMENT**

**INITIAL HAZARD POTENTIAL CLASSIFICATION ASSESSMENT
FORMER ASH BASIN
POWERTON STATION
APRIL 2018**

This Initial Hazard Potential Classification Assessment has been prepared pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Part 257, Subpart D, §257.73(a)(2) for the Former Ash Basin (the FAB) at the Midwest Generation, LLC Powerton Station in Pekin, Illinois (Powerton Station FAB).

1.0 PURPOSE

40 CFR 257.73(a)(2) requires the owner or operator of an existing coal combustion residual (CCR) surface impoundment to conduct an initial hazard potential classification assessment, to document the hazard potential classification, and to document the basis for the classification of the impoundment as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The purpose of this assessment is to conduct and document the basis for the initial hazard potential classification for the Powerton Station FAB.

2.0 HAZARD CLASSIFICATION

2.1 Site Description

The FAB is an inactive surface impoundment that is scheduled to begin closure in 2018. Approximately 30 acres in size, the FAB has not received bottom ash or ash slag since at least the late 1980s. In 2010, the FAB was sectioned into a North Pond and South Pond to accommodate a new railroad embankment and the geometry has remained unchanged since. A site plan showing the FAB location is attached as Figure 1. The site plan also includes the topography of the FAB and surrounding area.

CEC has visually inspected both the North Pond and South Pond; both ponds appear to be primarily incised with the surrounding ground at or higher in elevation. Other than an over flow from the adjacent Ash Surge Basin into the South Pond and used only on an emergency basis, operations have no in-flow to either the North or South Pond. The water elevation in the North and South Ponds is noted to fluctuate with the local groundwater level, which due to its close proximity, fluctuates with the elevation of the adjacent Illinois River.

2.2 Basis for Classification

An assessment was performed to evaluate potential hazards associated with failure of both the North and South Pond containment berms. As noted, the ground surface adjacent to the ponds is the same or higher for most sections of the FAB and therefore a breach is unlikely to occur to the south, east, or west of both the North and South Ponds.

Visual analysis of the North Pond showed a section of perimeter berm that is lower in elevation where a breach failure scenario was evaluated for potential downstream impacts to structures, infrastructure, frequently occupied facilities and areas, and waterways. The potential for impacts was evaluated by determining breach flow paths using available topography overlain onto imagery of the North and South Ponds. A breach of the North Pond berm that is lower in elevation would not likely result in the probable loss of human life. However, a breach of the lower section of the North Pond berm could cause water and ash to be released toward the Illinois River, which could result in environmental damage to downstream areas.

2.3 Hazard Potential Classification

40 CFR 257.53 defines hazard potential classification as possible adverse incremental consequences that a result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazardous potential classifications include high hazard potential CCR surface impoundment, significant hazard potential CCR surface impoundment, and low hazard potential CCR surface impoundment, as defined below.

- (1) High hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.
- (2) Significant hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.
- (3) Low hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

Based on the results of our analysis as summarized above, the FAB would be defined as a significant hazard potential CCR surface impoundment.

3.0 LIMITATIONS AND CERTIFICATION

This Initial Hazard Potential Classification Assessment was prepared to meet the requirements of §257.73(a)(2) and was prepared under the direction of Mr. M. Dean Jones, P.E.

By affixing my seal to this, I do hereby certify to the best of my knowledge, information, and belief that the information contained in this report is true and correct. I further certify I am licensed to practice in the State of Illinois and that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Seal:



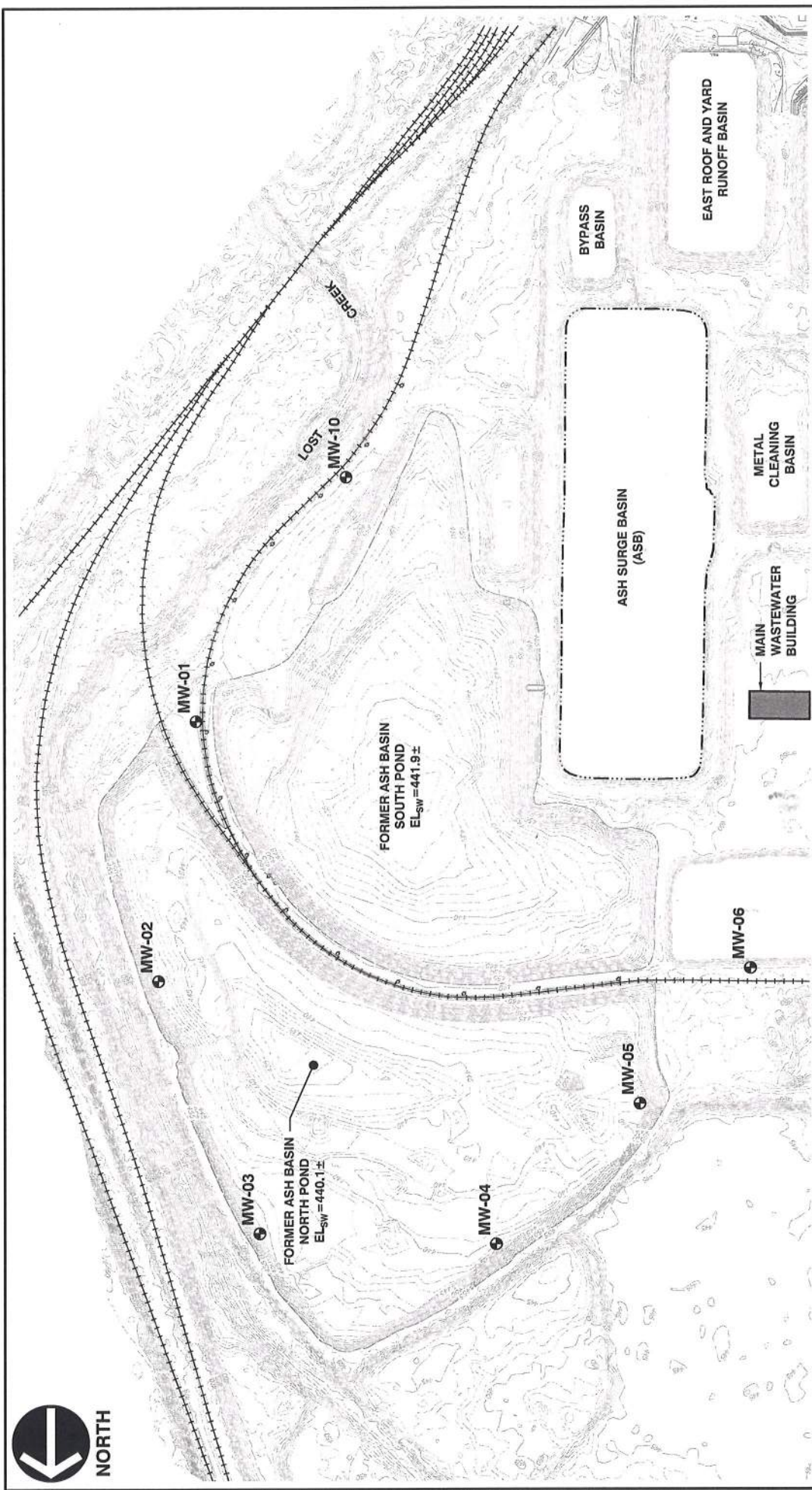
Signature: Maurice Dean Jones

Name: M. Dean Jones, P.E.

Date of Certification: April 10, 2018

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2019



REFERENCE

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY BY RIDGELINE CONSULTANTS PERFORMED IN FEBRUARY AND MARCH 2016 AND APPENDED TO AERIAL SURVEY PERFORMED BY AEROMETRIC, INC. DATED JUNE 19, 2008. SURFACE WATER ELEVATION, E_{sw} , DATED JUNE 23, 2017.
2. MONITORING WELL (LOCATION APPROXIMATE)

LEGEND

- TOPOGRAPHY (1-FOOT INTERVAL)
- WATER LINE
- MONITORING WELL (LOCATION APPROXIMATE)



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POWERTON STATION
 FORMER ASH BASIN
 PEKIN, ILLINOIS

SITE PLAN

DRAWN BY: MSK | CHECKED BY: MDJ | APPROVED BY: MDJ | FIGURE NO.: 1
 DATE: 04/12/2018 | DWG SCALE: 1"=200' | PROJECT NO.: 180-205.0100