ANNUAL INFLOW DESIGN FLOOD CONTROL SYSTEM PLAN
FORMER ASH BASIN
POWERTON STATION
OCTOBER 2026

This inflow design flood control system plan has been prepared for the Former Ash Basin (FAB) at Powerton Station in Pekin, Illinois (the Station). The purpose of this project is to prepare the inflow design flood control system plan by a licensed professional engineer to ensure that the design, construction, operation, and maintenance of the coal combustion residuals (CCR) unit is consistent with recognized and generally accepted good engineering standards. This plan has been prepared pursuant with Title 35 of the Illinois Administrative Code (35 IAC) Section 845.510 and Title 40 of the Code of Federal Regulations (40 CFR) Section 257.82.

Civil & Environmental Consultants, Inc. (CEC) completed the following scope of services in preparing this annual inspection report:

- Performed the annual CCR impoundment inspection in accordance with the requirements of 35 IAC Section 845.540 and 40 CFR Section 257.83.

- Reviewed the inflow design flood control system plans for the FAB, including the initial 2018 plan and the 2025 plan, including information pertaining to the following:

    - Inputs and assumptions used to determine whether the impoundment can manage the inflow design flood;
    - Methodology used to determine whether the impoundment can manage the inflow design flood;
    - Assessed potential changes to the design inputs used in the hydrologic and hydraulic assessments completed for the impoundment; and
    - Reviewed and assessed the results of the hydrologic and hydraulic calculations performed to support the conclusion of whether the impoundment meets the hydrologic and hydraulic requirements for CCR surface impoundments promulgated by both 35 IAC Section 845.510 and 40 CFR Section 257.82.

The following provides a description of the site followed by the assessments and certification.

1.0 SITE DESCRIPTION

At the time of this report, the FAB is an inactive CCR surface impoundment. The basin is approximately 30 acres in size. Originally a single pond, in 2010 the single pond was bisected by the construction of a railroad embankment splitting the single pond into a northern and southern

portion. On July 6, 2026, CEC inspected the FAB and our observations showed no signs of distress that would suggest the stability or operation of the impounding structure is compromised.

2.0 INPUTS

2.1 Inflow Design Flood Control System

The inflow design flood control system plan for the FAB is documented in the basins' initial 2018 plan and subsequent plans prepared in 2021 and 2025. There are no documented changes that have been made to the inflow design flood control system plan since the 2025 plan.

2.2 Inflow Design Flood Event

The FAB is classified as a Class 2 CCR surface impoundment pursuant to 35 IAC Section 845.440(a)(1) and as a significant hazard potential CCR surface impoundment pursuant to 40 CFR Section 257.73(a)(2). The inflow design flood event used in the 2021 and subsequent annual hydrologic and hydraulic assessments were based on the 1,000-year storm. The precipitation depth for the 1,000-year, twenty-four-hour storm event is 9.00 inches, unchanged from the previous assessments.

2.3 Site Topography

The topography of and areas surrounding the basins has remained unchanged since the previous assessments conducted in 2025.

2.4 Aerial Images

The aerial images show the site has remained relatively unchanged since the initial assessment conducted in 2018.

2.5 Ash Pond Condition

The operating and physical conditions of the basin is based on discussions with Station personnel and observations from the 2026 annual inspection. The FAB is currently inactive and the condition of the basin has been unchanged since 2018.

3.0 ASSUMPTIONS

There are no assumptions in this document that require verification.

4.0 HYDROLOGIC AND HYDRAULIC ASSESSMENT

The inputs for the latest hydrologic and hydraulic calculations performed for the basins were reviewed to determine if changes have occurred since these previous calculations. No changes were identified thereby resulting in no impact on the results and conclusions of the 2018 and 2021 calculations. Hydrologic and hydraulic calculations performed for 2025 inflow design flood control system plan for the FAB are considered valid.

5.0 CONCLUSIONS

Based on results of the 2026 impoundment inspection and review of the initial 2018, 2021, and 2025 inflow design flood control system plans, the FAB has adequate hydraulic capacity to retain the 1,000-year flood event without water discharging from or overtopping the pond berms. Therefore, provided the Station maintains a low water level in the FAB, the FAB can collect and control the inflow design flood event specified in Section 845.510 and Section 257.82.

6.0 LIMITATIONS AND CERTIFICATION

Prepared under the direction of Mr. M. Dean Jones, P.E., the annual structural stability and safety factor assessments were prepared and meet the requirements of 35 IAC Section 845.510 and 40 CFR Section 257.82 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: _____

Name: M. Dean Jones, P.E.

Date of Certification: October 22, 2026

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2027