

INFLOW DESIGN FLOOD CONTROL SYSTEM PLAN
ASH POND 2 - JOLIET STATION 29
SEPTEMBER 2026

This inflow design flood control system 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 for Ash Pond 2 at Joliet Station 29 in Joliet, Illinois (Station). The purpose of this project is to prepare the 2026 Inflow Design Flood Control System Plan of Ash Pond 2 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.

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 both the initial 2016 Inflow Design Flood Control System Plan by Geosyntec Consultants and the 2025 Inflow Design Flood Control System Plan for Ash Pond 2 prepared by Sargent & Lundy, 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 Station is located at 1800 Channahon Road in Joliet, Illinois and is currently retired and in the process of decommissioning. Ash Pond 2 only receives precipitation and stormwater through runoff. Placement of CCRs ceased in 2016 and placement of process water ceased in 2021. CEC inspected Ash Pond 2 on September 21, 2026, and at the time of our inspection contained no CCRs. CEC's inspection noted no modifications to geometry nor identified signs of distress that would suggest the stability or operation of the impounding structure is compromised.

1.0 INPUTS

1.1 Inflow Design Flood Control System

The inflow design flood control system for Ash Pond 2 is documented in the pond's initial inflow design flood control system plan, which was prepared by Geosyntec Consultants in October 2016, and subsequent annual reports prepared by Sargent & Lundy. There have been no documented changes to the inflow design flood control system since the 2025 annual inflow design flood control system plan.

1.2 Inflow Design Flood Event

Ash Pond 2 is classified as a Class 2 CCR surface impoundment pursuant to 35 IAC 845.440(a)(1) and as a significant hazard potential CCR surface impoundment pursuant to 40 CFR 257.73(a)(2). The inflow design flood event used in the 2016 and subsequent annual hydrologic and hydraulic assessments were based on the 1,000-year storm. The precipitation depth for the 1,000-year, 24-hour storm event is 14.2 inches, unchanged from the previous assessments.

1.3 Site Topography

The topography of and areas surrounding Ash Pond 2 has remained unchanged since the initial assessments conducted in 2016.

1.4 Aerial Images

Other than removal of CCRs from Ash Pond 2 and recent Station decommissioning activities, aerial images of the Station and the areas surrounding Ash Pond 2 show the site has remained relatively unchanged since the initial assessment conducted in 2016.

1.5 Ash Pond Condition

The operating and physical conditions of Ash Pond 2 are based on discussions with Station personnel and observations from the 2026 annual inspection. Placement of CCRs into Pond 2 ceased in 2016 and placement of process water ceased in 2021. Other than removal of CCRs in 2019, the condition of Ash Pond 2 has been unchanged since 2016.

1.6 Mean Annual Precipitation Depth

The mean annual precipitation depth for the Station is documented in the previous inflow design flood control system plans. The mean annual precipitation depth at the site is 38.0 inches, unchanged from the previous assessments.

2.0 ASSUMPTIONS

There are no assumptions in this document that require verification.

3.0 HYDROLOGIC & HYDRAULIC ASSESSMENT

The inputs for the latest hydrologic and hydraulic calculations performed for Ash Pond 2 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 2025 calculations. Hydrologic and hydraulic calculations performed for 2025 inflow design flood control system plan for Ash Pond 2 are considered valid.

4.0 CONCLUSIONS

Based on results of the 2026 impoundment inspection and review of the initial 2016 and 2025 annual inflow design flood control system plans, Ash Pond 2 has adequate hydraulic capacity to retain the 1,000-year flood event without water discharging from or overtopping the Ash Pond 2 berms. Therefore, provided the Station maintains a low water level, Ash Pond 2 can collect and control the inflow design flood event specified in Section 845.510 and Section 257.82.

5.0 LIMITATIONS AND CERTIFICATION

This 2026 Inflow Design Flood Control System Plan was prepared to 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: Dean Jones

Name: M. Dean Jones, P.E.

Date of Certification: September 28, 2026

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2027