
solutions and action

**Interstate Power and Light Company**
Sixth Street Generating Station
Hazard Potential Classification Assessment – Revision 0
154.018.028.007.001
Report issued: Month 6, 2026

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# Executive Summary

This Hazard Potential Classification Assessment (Report) for the former Sixth Street Generating Station (SSS) has been prepared in accordance with the requirements of the United States Environmental Protection Agency rules for Hazardous and Solid Waste Management System – Disposal of CCR from Electric Utilities (40 CFR Parts 257 and 261, also known as CCR Rule).

On May 8, 2024, the EPA issued the Final Legacy Coal Combustion Residual (CCR) Surface Impoundment Rule ("Legacy Surface Impoundment Rule") that established regulations for CCR surface impoundments at inactive facilities (40 C.F.R. § 257.100). The Legacy Surface Impoundment Rule requires that legacy surface impoundments that no longer receive CCR but contain both CCR and liquid on or after October 19, 2015 and that are located at an inactive electric utility, generally comply with the EPA requirements for inactive CCR surface impoundments in accordance with Title 40 of the Code of Federal Regulations, Part 257 Subpart D Hazardous and Solid Waste Management System; Disposal of CCR from Electric Utilities.

This Report assesses hazard potential classification for the SSS Closed Ash Pond in Cedar Rapids, Iowa and is focused on classifying its legacy surface impoundment based on the probable loss of human life, and the impacts on economic, environmental, and lifeline interests in the event of an unintentional release.

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# 1. INTRODUCTION

In accordance with the requirements set forth in §257.73(a)(2) of the CCR Rule, an owner or operator of an existing CCR surface impoundment or legacy surface impoundment must conduct initial and periodic hazard potential classification assessments of their CCR surface impoundment, except for those that are incised. The owner or operator must determine each CCR surface impoundment hazard potential classification through a hazard potential classification assessment.

This Report serves as the initial assessment and has been prepared in accordance with the requirements of §257.73(a)(2) of the CCR Rule and the Legacy CCR Surface Impoundment Rule amendment under § 257.100.

## 1.1 CCR Rule Requirements

The CCR Rule requires an initial and periodic hazard potential classification assessment by a qualified professional engineer (PE) for all CCR surface impoundments including existing, new, lateral expansions, and for all legacy CCR impoundments (§257.73(a)(2)(ii)).

## 1.2 Hazard Potential Classification Assessment Applicability

The Interstate Power and Light Company (IPL), Sixth Street Generating Station (SSS) in Cedar Rapids, Iowa (Figure 1) has one legacy CCR surface impoundment, identified as the SSS Closed Ash Pond. The Closed Ash Pond was historically referred to as Ash Pond 1, Ash Pond 2, Ash Pond 3, and Ash Pond 4. These ash ponds were operated collectively, contiguous to one another, and were closed in place under one continuous cover system. Because of this, the ash ponds are being considered a single legacy surface impoundment.

## 2. FACILITY DESCRIPTION

SSS was located near the center of Cedar Rapids on the eastern shore of the Cedar River in Linn County at 509 6th St NE, Cedar Rapids, Iowa 52401 (Figure 1). Cedar Lake is located to the north of the facility while the commercial and industrial areas of Cedar Rapids border the east and south.

SSS originated as a town lighting plant in 1888, in a 70-foot by 70-foot building. In 1891, a 40-foot building extension was constructed with a 153-foot stack. SSS became a fossil-fueled electric generating station that initiated operations in 1921. Over the years, the facility consisted of five dual-compartment boiler steam electric generating units detailed below. SSS did not operate after June of 2008 due to a catastrophic flood, was retired at that time, and then demolished in 2015.

General Facility Information:

| | |
|---|---|
| Date of Initial Facility Operations: | 1888 |
| Historical NPDES Permit Number: | IA-5715109 |
| Latitude / Longitude: | 41° 59’ 5.31” N 91° 40’ 6.70” W |
| Unit Nameplate Ratings: | Unit 1 & 2 (1921) 10.0 MW - Coal |
| | Unit 3 & 4 (1925) 10.0 MW - Coal |
| | Unit 5 & 6 (1925) 10.0 MW - Coal |
| | Unit 7 & 8 (1945) 15.0 MW – Coal |
| | Unit 9 & 10 (1950) 28.7 MW – Coal or Natural Gas |
| Impoundment IDNR State ID | 57-SDP-34-04C |

## 2.1 SSS Closed Ash Pond Location

The SSS Closed Ash Pond is located northeast of the former SSS facility and is situated underneath Interstate 380, which includes several highway foundations and supports throughout the closed impoundment. The Closed Ash Pond was historically referred to as Ash Pond 1, Ash Pond 2, Ash Pond 3, and Ash Pond 4. These ash ponds were operated collectively, contiguous to one another, and were closed in place under one continuous cover system. Because of this, the ash ponds are being considered a single legacy surface impoundment.

An engineered cap was constructed atop of the SSS Closed Ash Pond in 2017 and 2018. The current configuration includes a stormwater retention pond on top of the cap, which handles stormwater runoff from Interstate 380. This stormwater pond largely evaporates, although in case of a significant storm event, a drainage ditch carries water to the south where an overflow structure can discharge water from a corrugated metal pipe to the south, outside the boundary of the SSS Closed Ash Pond. A vegetated drainage ditch drains to a culvert that discharges to below the railroad tracks and into Cedar Lake.



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# 3. HAZARD POTENTIAL CLASSIFICATION - §257.73(a)(2)

FEMA (FEMA Publication 333, Federal Guidelines for Dam Safety, Hazard Potential Classification System for Dams, April 2004) developed a hazard potential classification to classify surface impoundments based on the probable loss of human life, and the impacts on economic, environmental, and lifeline interests in the event of an unintentional release from a surface impoundment. Three hazard potential classification levels are identified as:

1. High Hazard Potential – Assigned to surface impoundments where failure or mis-operation will probably cause loss of human life.
2. Significant Hazard Potential – Assigned to surface impoundments where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, or disruption of lifeline facilities or can impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be located in areas with population and significant infrastructure.
3. Low Hazard Potential – Assigned to surface impoundments where failure or mis-operation has no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner's property.

## 3.1 Applicable SSS Closed Ash Pond Siting Information

The SSS Closed Ash Pond is located east of the former SSS location and is situated underneath Interstate 380, which includes several highway foundations and supports throughout the impoundment. When the impoundment was operational, prior to the closure construction activities, the impoundment received the following process influents: ash sluicing water, bilge water, and stormwater from the track hopper building and the fly ash loading facility.

Prior to closure, the ash pond system consisted of four ponds identified as follows: Pond 1 (0.45 acres), Pond 2 (0. 50 acres), Pond 3 (4.0 acres), and Pond 4 (3.2 acres). Pond 1 and Pond 2 were

the main receptors of the sluiced bottom ash from the generating station and were intended to settle out the majority of the CCR that was produced. The process water flowed sequentially through the impoundments from 1 to 4. Pond 3 was the largest of the ponds and was used to provide the longest settling time. The effluent from Pond 4 was discharged under a National Pollutant Discharge Elimination System (NPDES) permit (NPDES Permit IA-5715109) through Outfall 002 to adjacent lowlands that drained northeast under the railroad embankment to nearby Cedar Lake.

Immediately to the northwest of the SSS Closed Ash Pond is a railroad spur and switching area with approximately 10 sets of railroad tracks. Cedar Lake lies to the northwest of the railroad tracks. To the north and east of the Closed Ash Pond are parking lots, one of which is at ground level and one of which is elevated. There is a small lowland area that separates the SSS Closed Ash Pond and the elevated parking garage. To the southwest of the Closed Ash Pond is a vegetated area and a drainage ditch below Interstate 380 which surface drains to the same area as Outfall 002.

The U.S. Fish and Wildlife Service National Wetland Inventory indicates that there are no wetlands in the surrounding area of the SSS Closed Ash Pond (Figure 2). The total area of the SSS Closed Ash Pond is approximately 9 acres and has an embankment height of approximately 13 feet at the tallest point, relative to the immediate surrounding topography. As documented in the Coal Ash Impoundment Site Assessment Final report (February 28, 2013), the estimated volume of CCR was 40,000 cubic yards.



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## 3.2 Hazard Potential Classification

The SSS Closed Ash Pond has been assigned a **Significant Hazard Potential** classification as losses may not principally be limited to the owner's property. Mis-operation or failure will likely not result in loss of life as there are no occupied buildings or residences located in the immediate vicinity of the CCR surface impoundment, and the adjacent spaces are not generally occupied. Failure would be unlikely to affect Interstate 380 or reach a navigable water body. A release to the northwest would likely impact the railroad switch yard. A release to the northeast would likely impact the parking lot and any parked vehicles. A release to the east and southeast would likely impact the lowland area and possibly the parking garage. A release to the southwest would likely be limited to IPL's property.



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## 4. QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

To meet the requirements of 40 CFR 257.73(a)(2)(ii), I Mark W. Loerop hereby certify that I am a licensed Professional Engineer in the State of Iowa; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR 257.73(a)(2).

By: _____

Name: MARK LOEROP

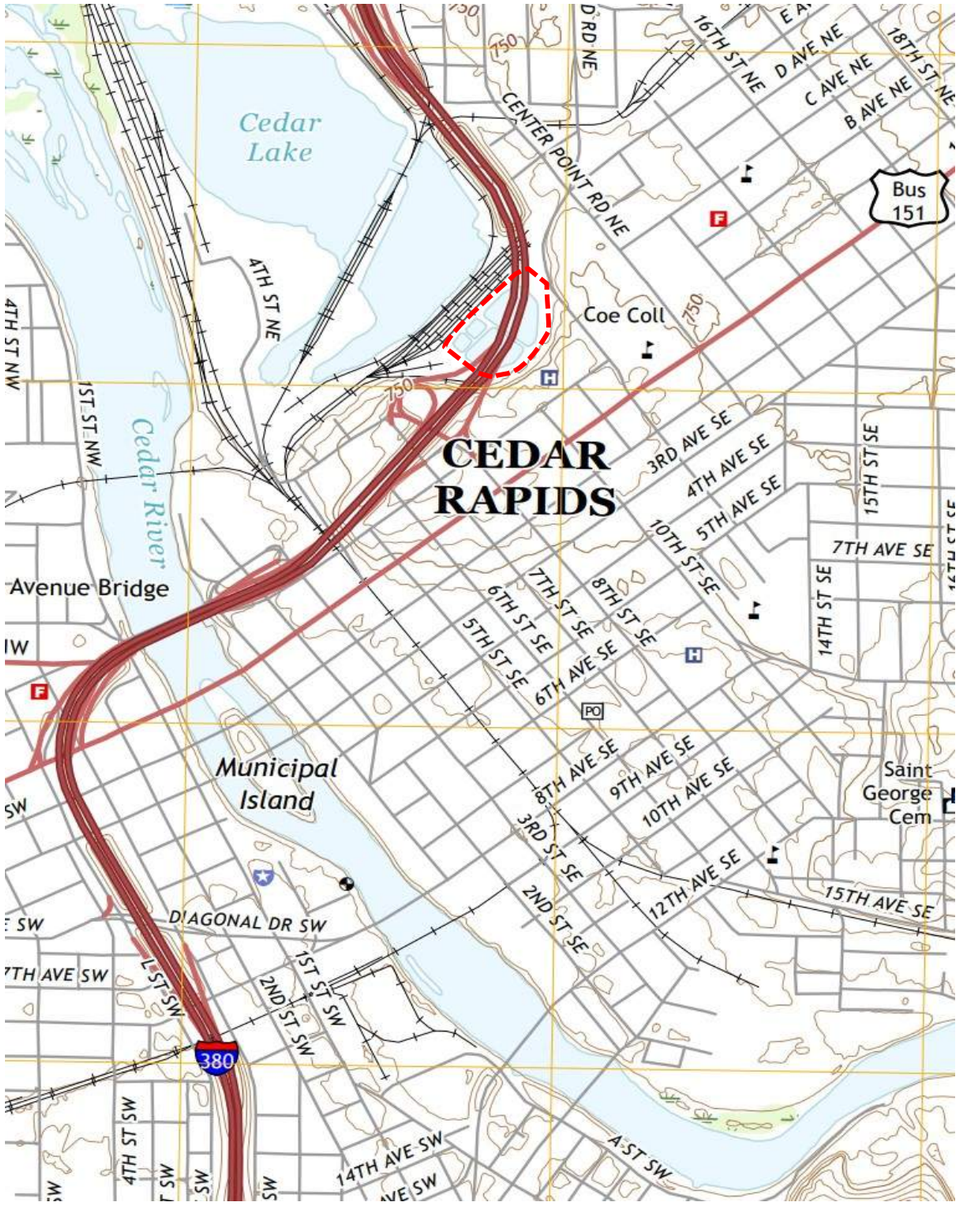
Date: MAY 6, 2026

## FIGURES

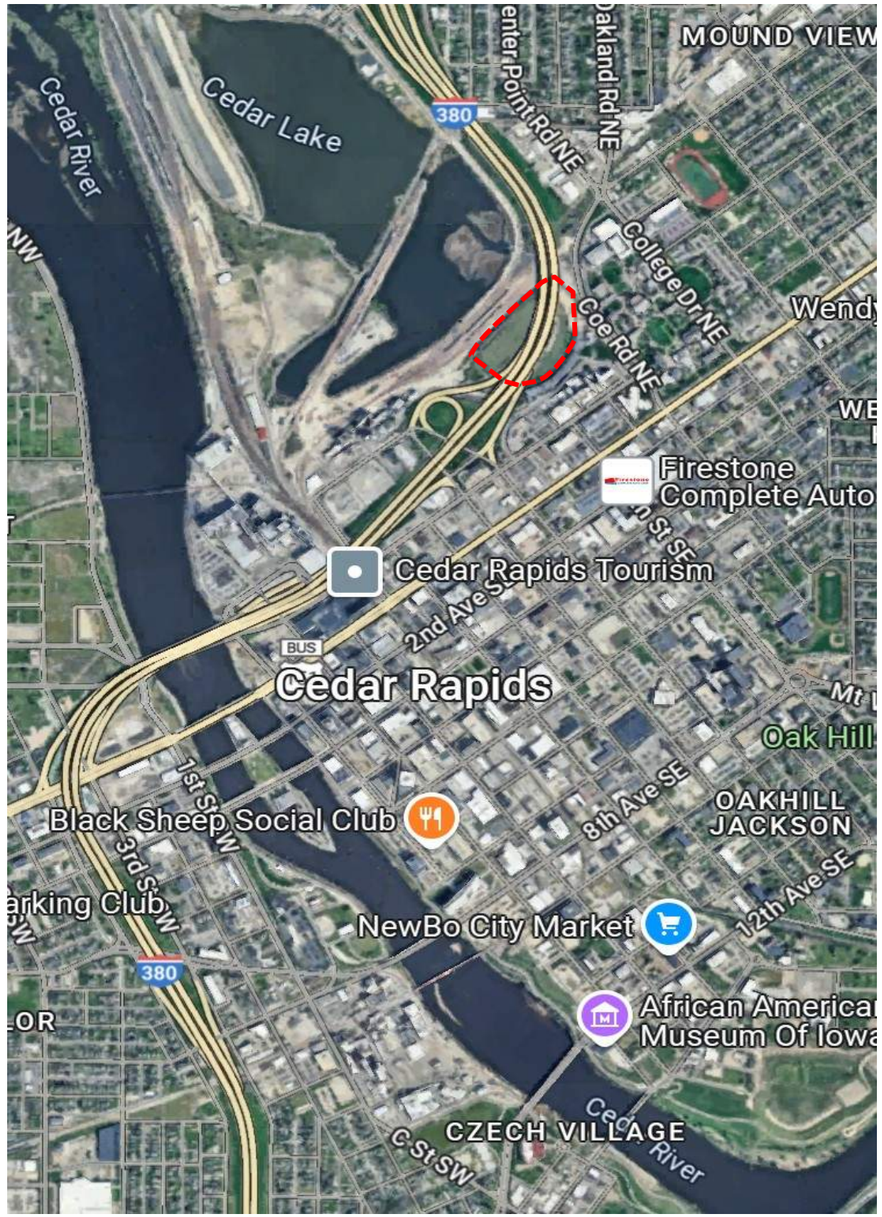
Alliant Energy
Wisconsin Power and Light Company
Columbia Energy Center
Pardeeville, Wisconsin

Hazard Potential Classification Assessment

**Topography Map**




**Aerial Photo**




**Approximate Property Boundary**

| | | |
|---|---|---|
| hard hat SERVICES | Site Location<br>Sixth Street Generating Station<br>Interstate Power and Light Company | Drawing<br>Figure 1<br>Date<br>2/3/2026 |


Approximate Property Boundary

SSS Closed Ash Pond

| | | |
|---|---|---|
| hard hat SERVICES | Wetland Inventory Map<br>Sixth Street Generating Station<br>Interstate Power and Light Company | Drawing<br>Figure 2<br>Date<br>2/3/2026 |