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Interstate Power and Light Company
Lansing Generating Station
CCR Surface Impoundment Annual Inspection Report
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Executive Summary

This annual inspection report for the Coal Combustion Residual (CCR) Lansing Generating Station (LAN) Upper Ash Pond has been prepared in accordance with the requirements of the United States Environmental Protection Agency published Final Rule for Hazardous and Solid Waste Management System – Disposal of CCR from Electric Utilities (40 CFR Parts 257 and 261, also known as CCR Rule) and Extension of Compliance Deadlines for Certain Inactive Surface Impoundments.

This annual inspection report has been prepared to assess the condition of a CCR surface impoundment. Primarily, the annual inspection report focuses on the structural stability of the CCR surface impoundment and to ensure that the operation and maintenance of the CCR surface impoundment is in accordance with recognized and generally accepted good engineering standards.

After conducting the annual inspection, reviewing available information provided by Interstate Power and Light Company pertaining to the status and condition of the CCR surface impoundment, and having discussions with facility personnel who oversee and perform the operation, maintenance, and inspection activities of the CCR surface impoundment, we conclude that there are no operating deficiencies and there have been no changes that have affected the stability or operation of the CCR surface impoundment since the previous annual inspection. The surface impoundment no longer receives process water or CCR materials or retains stormwater.

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1. INTRODUCTION

This annual inspection report has been prepared in accordance with the requirements of §257.83(b) of the United States Environmental Protection Agency (USEPA) published Final Rule for Hazardous and Solid Waste Management System – Disposal of Coal Combustion Residual (CCR), herein referenced as the CCR Rule.

1.1 CCR Rule Applicability

The CCR Rule requires annual inspections by a qualified professional engineer (PE) for CCR surface impoundments with a height of 5-feet or more and a storage volume of 20 acre-feet or more or for CCR surface impoundments with a height of 20 feet or more (40 CFR §§ 257.73(b), 257.73(d) and 257.83(b)).

1.2 Annual Inspection Applicability

The Interstate Power and Light Company (IPL), Lansing Generating Station (LAN) in Lansing, Iowa, has one existing CCR surface impoundment that meets the requirements of Section 1.1, identified as the LAN Upper Ash Pond. Closure earthwork has been completed, including hydraulic dredging of CCR from the northern (lowest) part of the upper ash pond and placement of the dredged material into geo-tubes at the southern (highest) end of the impoundment and placement of capping soils atop of the CCR Unit and sloping the final grade to drain stormwater runoff into the creek. SCS Engineers conducted a Geotechnical Slope Stability Analysis dated December 8, 2022, on the Upper Ash Pond Closure activities. This stability analysis concludes that the closure activities meet the stability requirements of 40 CFR 257.73(e).

The CCR surface impoundment has been assigned a state identification number by the Iowa Department of Natural Resources (IDNR), which is 03-SDP-13-23C.

The annual inspection of the CCR surface impoundment at LAN was completed by a qualified PE on September 18th, 2025. The annual inspection was completed to ensure that the design,

construction, operation, and maintenance of the CCR surface impoundment at LAN is consistent with recognized and generally accepted good engineering standards.

The annual inspection of the CCR surface impoundment at LAN included a review of available information regarding the status and condition of the CCR surface impoundment. The information reviewed included all relevant files available in the operating record at the time of the annual inspection, as well as the Alliant Energy CCR Rule Compliance Data and Information website entries for LAN (ccr.alliantenergy.com). These files for the CCR surface impoundments at LAN include, but are not limited to, CCR surface impoundment design and construction information (history of construction), hazard potential classification, structural stability assessment, safety factor assessment, hydrologic and hydraulic capacities (inflow flood control plan), results of 7-day inspections and instrumentation monitoring by a qualified person, and results of the previous annual inspection.

The annual inspection also included a visual inspection of the CCR surface impoundment to identify signs of distress or malfunction of the CCR surface impoundments and appurtenant structures. Additionally, the visual inspection included hydraulic structures underlying the base of the CCR surface impoundment or passing through the dikes of the CCR surface impoundment for structural integrity and continued safe and reliable operation.

2. ANNUAL INSPECTION REPORTING CRITERIA

The following sub-sections address the annual inspection reporting criteria per §257.83(b)(2) of the CCR Rule for the CCR surface impoundment located at LAN.

2.1 LAN Upper Ash Pond (existing)

2.1.1 Changes in Geometry (§257.83(b)(2)(i))

After conducting the annual inspection, as well as review of available information provided by LAN pertaining to the status and condition of the CCR surface impoundment, and discussions with LAN facility personnel who oversee and perform the operation, maintenance, and inspection activities of the CCR surface impoundment, there have been no changes in the geometry since the previous annual inspection.

2.1.2 Existing Instrumentation (§257.83(b)(2)(ii))

Historical instrumentation that supported the operation of the LAN Upper Ash Pond included flow monitoring equipment on water discharged from the northeast corner of the #5 settling area. The instrumentation was located within a Weir Box (installed in 2021) and was associated with the NPDES Outfall 010 at LAN. As part of the closure activities all associated discharge structures were demolished and removed. The impoundment has been regraded to direct storm water runoff into the adjacent unnamed creek, as allowed by Iowa DNR NPDES General Permit Number 2. Because of these closure activities, no flow data has been generated.

2.1.3 Depth and Elevation of Impounded CCR and Water (§257.83(b)(2)(iii))

The approximate minimum, maximum, and present depths, and elevations of the impounded CCR and water in the LAN Upper Ash Pond since the previous annual inspection were determined using information that was collected during the annual inspection, as well as from historical information that was previously provided from IPL.

- At the time of the annual inspection, water was not observed to be present within the LAN Upper Ash Pond due to the dewatering and final grading from the closure activities. Therefore, the minimum and present depth and elevation of water within the CCR surface impoundment was not recorded.
- Water is no longer retained within the impoundment, therefore there is not a maximum water elevation recorded since the last annual inspection.
- From the 1974 original design drawing contours of the LAN Upper Ash Pond, the original design bottom contour elevation of the CCR surface impoundment was approximately 624 feet.
- Closure activities included hydraulic dredging of the CCR in the northern portion and placement of the CCR into geo-tubes within the southern portion of the impoundment. The final elevation, as provided by SCS Engineers, at the highest point is 696.5 feet, which is a deposition maximum thickness of 72.5 feet.

2.1.4 Storage Capacity of Impounding Structure (§257.83(b)(2)(iv))

The storage capacity (i.e., water volume) of the CCR surface impoundment at the time of the annual inspection was not estimated because the impoundment had been regraded to drain stormwater to the unnamed creek and no longer retains water.

2.1.5 Volume of Impounded CCR and Water (§257.83(b)(2)(v))

The volume of impounded CCR and water (i.e., total volume, not including freeboard) within the LAN Upper Ash Pond at the time of the annual inspection was estimated based on the original design drawing contours and the closure activities as-built survey. The volume of water was zero cubic feet, while the estimated volume of CCR from SCS Engineers was 622,000 cubic yards below the final cap.

2.1.6 Structural Weaknesses and Disruptive Conditions (§257.83(b)(2)(vi))

After review of available information provided by LAN pertaining to the status and condition of the CCR surface impoundment, discussions with LAN facility personnel who oversee and maintain the operation, maintenance, and inspection activities of the CCR surface impoundment, as well as conducting the on-site visual inspection of the CCR surface impoundment, there have been no identified appearances of an actual or potential structural weakness of the CCR surface impoundment. Additionally, there were no identified issues with the structural integrity of the hydraulic structure because the structures were demolished and removed from the impoundment.

There were no conditions identified along the upstream and downstream slopes of the embankments that were disrupting or have the potential to disrupt the operation and safety of the CCR surface impoundment.

2.1.7 Other Changes Affecting Stability or Operation of Impounding Structure (§257.83(b)(2)(vii))

After review of available information provided by LAN pertaining to the status and condition of the CCR surface impoundment, as well as discussions with LAN facility personnel who oversee and maintain the operation, maintenance, and inspection activities of the CCR surface impoundment, there have been no identified changes since the previous annual inspection.

3. CERTIFICATION

To meet the requirements of 40 CFR 257.83(b), 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 257.83(b).

By: _____

Name: Mark Loerop

Date: Nov 21, 2025