Notification of Intent to Initiate Closure of the Inactive CCR Surface Impoundment

Prepared for Interstate Power and Light Company
M.L. Kapp Generating Station
Clinton, IA

Issue Date: December 14, 2015
Issue Purpose: For Use

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Date

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Date

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Date

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CERTIFICATION OF REPORT PAGE

NOTIFICATION OF INTENT TO INITIATE CLOSURE OF INACTIVE CCR SURFACE IMPOUNDMENT AT M.L. KAPP GENERATING STATION

I certify that this Notification of Intent was prepared by me or under my direct supervision and that I am a registered professional engineer under the laws of the State of Iowa.

SEAL(S)

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<th>Issue:</th>
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<td>For Use, Rev. 0</td>
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</table>

December 14, 2015
1. Introduction

The Interstate Power and Light Company (IPL) M.L. Kapp Generating Station located south of Clinton, IA, in Clinton County, has one surface impoundment that contains coal combustion residuals (CCR) known as the Main Ash Pond Area. The Main Ash Pond Area was commissioned in 1965 and was used as a bottom ash settling impoundment until the station’s conversion to natural gas in June of 2015. As a result of accumulated CCR, the impoundment was reconfigured into a two-pond system in 2002. The two smaller ponds, located completely within the original diked impoundment of the Main Ash Pond Area, are known as the Primary and Secondary Settling Ponds. The station is currently planning decommissioning activities for the coal yard and ponds that were previously used to manage CCR. To comply with the requirements of the USEPA CCR Final Rule (40 CFR 257.50-107) published on April 17, 2015, and amended on July 2, 2015, Alliant Energy, on behalf of the subsidiary IPL, proposes to close the entire Main Ash Pond Area at the M.L. Kapp Generating Station before April 17, 2018, by leaving the CCR in place and providing a cover system that satisfies the performance requirements as stipulated in the CCR Rule and in the Iowa Administrative Code (IAC). Figure 1 identifies the Main Ash Pond Area and the smaller interior settling ponds scheduled for closure in an aerial photograph of the M.L. Kapp Generating Station.

![Figure 1 – Location of M.L. Kapp Generating Station’s Main Ash Pond Area](image-url)
2. Inactive Classification per CCR Rule

Due to the presence of CCR within the Main Ash Pond Area, the surface impoundment is subject to requirements of the CCR Rule. Moreover, since the Main Ash Pond Area ceased receipt of CCR prior to October 19, 2015, yet still contains both CCR and liquids, it is classified as an inactive CCR surface impoundment. The CCR Rule addresses “inactive” impoundments independently from impoundments classified as “existing.” The definition for inactive CCR surface impoundments, as defined by §257.53 of the CCR Rule, is listed below for reference.

- **Inactive CCR surface impoundment** means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 and still contains both CCR and liquids on or after October 19, 2015.

The CCR Rule provides specific closure requirements for inactive CCR surface impoundments (§257.100). IPL intends to close the Main Ash Pond Area at the M.L. Kapp Generating Station pursuant to §257.100(b) of the CCR Rule.

3. Intended Closure Approach

Per §257.100(b) of the CCR Rule, there are two methods by which an owner or operator may close an inactive CCR surface impoundment. The impoundment may be closed by leaving the CCR in place and covering with a cap that satisfies several performance requirements. Alternatively, the impoundment may be closed by complete removal of CCR, otherwise known as a “clean closure.” Given the size of the Main Ash Pond Area (approximately 32 acres) and the amount of CCR disposed of in the Main Ash Pond Area (estimated to be approximately 470,000 cubic yards), IPL intends to close the Main Ash Pond Area, and thereby close the two smaller interior ponds (Primary and Secondary Settling Ponds), by leaving the CCR in place and providing the required cover system that adheres to state and federal requirements.

Closure of the Main Ash Pond Area will include the following tasks:

- Removal of existing CCR slurry discharge pipe where it enters the impoundment,
- Dewatering of both the Primary and Secondary Settling Ponds,
- Re-grading of Primary Settling Pond dikes and use of in-situ material to fill remainder of Secondary Settling Pond storage capacity,
- Establish minimum slopes to promote positive drainage of stormwater,
- Provide final cover system (“Cap”) in accordance with State and Federal regulations to control, minimize, or eliminate post-closure infiltration of liquids into the CCR below, and
- Seed the final cover with native vegetation to minimize erosion.
The proposed final cover shall consist of a base layer of appropriate low-permeability material ($<10^{-5}$ cm/s) having a minimum thickness of two feet, overlaid with 18 inches of earthen material (infiltration layer), which in turn is overlaid with six inches of topsoil that shall be seeded with selected vegetation. Crushed aggregate may be used in place of topsoil for the proposed perimeter and ridgeline access road.

4. Schedule

Closure of the Main Ash Pond Area is anticipated to be commenced, performed and completed according to the following schedule.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Expected Task Completion</th>
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<tbody>
<tr>
<td>Complete Site Topographic and Bathymetric Survey</td>
<td>1st Quarter of 2016</td>
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<tr>
<td>Permitting, Engineering and Contract Development</td>
<td>2nd Quarter of 2016</td>
</tr>
<tr>
<td>Execute Contract with a General Work Contractor</td>
<td>3rd Quarter of 2016</td>
</tr>
<tr>
<td>Dewatering of the Inactive CCR Surface Impoundment</td>
<td>2nd Quarter of 2017</td>
</tr>
<tr>
<td>Placement and Grading to Final Slopes</td>
<td>3rd Quarter of 2017</td>
</tr>
<tr>
<td>Provide Final Cover System (“Cap”) and Seed with Native Vegetation</td>
<td>3rd Quarter of 2017</td>
</tr>
<tr>
<td>Certification and Documentation of Closure of the CCR Surface Impoundment</td>
<td>4th Quarter of 2017</td>
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5. Certifications

It is S&L’s opinion that the proposed final cover as described herein meets the design requirements specified by the CCR Rule §257.100(3)(i) and the IAC.

Based on the size of the M.L. Kapp Generating Station Main Ash Pond Area, the selected closure approach and the proposed schedule above, it is S&L’s opinion that closure of the CCR surface impoundment under §257.100(b)(1) through (4) is technically feasible within the timeframe specified in §257.100(b) with closure complete before April 17, 2018.