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October 13, 2026
File No. 0216304

Associated Electric Cooperative, Inc.
Thomas Hill Energy Center
5693 Highway F
Clifton Hill, Missouri 65244

Attention: Blake Pinkerton
Manager, Environmental

Subject: Periodic Hazard Potential Classification Assessment
Ash Pond 1 – Cell 001
Thomas Hill Energy Center
Clifton Hill, Missouri

Dear Mr. Pinkerton:

This document presents the results of our Periodic Hazard Potential Classification Assessment (HPCA) for the Associated Electric Cooperative, Inc. (AECI) coal combustion residual (CCR) surface impoundment referred to as Ash Pond 1 – Cell 001 (Cell 001; the Unit) located at the Thomas Hill Energy Center (THEC) near Clifton Hill, Missouri.

Haley & Aldrich, Inc. (Haley & Aldrich) completed this Periodic HPCA for Cell 001 on behalf of AECI in accordance with the U.S. Environmental Protection Agency's Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, Title 40 Code of Federal Regulations (CFR) Part 257, Subpart D (CCR Rule), effective October 19, 2015, including subsequent revisions, specifically related to 40 CFR §257.73(a)(2).

The initial HPCA was completed on October 16, 2016, and the first Periodic HPCA was completed on October 15, 2021. This document serves as the second five-year periodic assessment, as required by the CCR Rule.

1.1 DESCRIPTION OF CELL 001 IMPOUNDMENT

Cell 001 was historically used for settling and temporary wet storage of bottom ash and boiler slag sluiced from THEC Units 1 and 2. In September 2021, the Unit ceased receiving CCR and non-CCR wastestreams from THEC and initiated closure thereafter. CCR material has been removed since the previous periodic assessment, and the area was reconfigured as a secondary (non-CCR) impoundment to support management of low-volume wastewater discharges at the site. Cell 001 remains regulated as a

CCR surface impoundment because closure was not complete when Haley & Aldrich performed this periodic assessment, although it no longer treats, stores, or disposes of CCR material.[1]

Cell 001 was designed by Burns & McDonnell between 1978 and 1979 and constructed soon afterward. The embankments consist of clayey fill over naturally deposited clay with varying amounts of sand and gravel, underlain by shaley to sandy clay.

After reconfiguration, the bottom of the non-CCR impoundment was raised, and the impoundment now has an area of approximately 1.8 acres. Its embankments remain generally 10 feet or less in height, with a crest width generally ranging from 15 to 20 feet. A former processing and containment pad exists adjacent to the southwestern edge of the impoundment. The southern edge of this pad is defined by a 5-foot-high containment berm. Beyond the containment berm, ground surface slopes downward toward a non-CCR impoundment with a slope height of up to 30 feet.

1.2 HAZARD POTENTIAL CLASSIFICATION ASSESSMENT

1.2.1 General

In accordance with 40 CFR §257.73(a)(2)(i), the owner or operator must document the hazard potential classification of the CCR surface impoundment as high, significant, or low and document the basis for that classification. A hazard potential classification addresses the potential consequences of a failure or mis-operation; it does not characterize the likelihood of failure or the current structural stability of the CCR unit.

For purposes of this assessment, the hazard potential classification terms are defined in 40 CFR §257.53:

- High hazard potential CCR surface impoundment – A diked surface impoundment where failure or mis-operation will probably cause loss of human life.
- Significant hazard potential CCR surface impoundment – A diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.
- Low hazard potential CCR surface impoundment – A diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

1.2.2 Hazard Potential Classification

Based on observations made during our July 21, 2026 site visit and our review of available information, Haley & Aldrich has judged the Cell 001 as a **low** hazard potential CCR surface impoundment under the CCR Rule. Cell 001 meets the **low** hazard potential criteria because failure or mis-operation would result

[1] According to 40 CFR §257.53, "active life or in operation" is defined as the period of operation beginning with the initial placement of CCR in the CCR unit and ending at completion of closure activities in accordance with 40 CFR §257.102.

in no probable loss of life in the event of a failure, low economic and environmental impacts, and losses limited to the impoundment owner's property, which extends approximately 5 miles south (downstream) of Cell 001. The findings from this Periodic HPCA are consistent and remain unchanged from the initial and first periodic HPCA completed in October 2016 and October 2021, respectively.

1.3 CERTIFICATION

40 CFR §257.73(a)(2)(ii): The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.

I certify that this periodic hazard potential classification for the Ash Pond 1 – Cell 001 CCR surface impoundment at the AECI Thomas Hill Energy Center was conducted in accordance with 40 CFR §257.73(a)(2) of the CCR Rule.

Signed: _____
Qualified Professional Engineer

Printed Name: Steven F. Putrich
Missouri License No.: 2014035813
Title: Principal Consultant
Company: Haley & Aldrich, Inc.

Professional Engineer's Seal:



Steven F. Putrich

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