HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

MEMORANDUM

28 May 2020
File No. 129638-007

TO: Associated Electric Cooperative, Inc.
Jenny Jones – Senior Environmental Analyst

FROM: Haley & Aldrich, Inc.
Jason M. Pokorny, P.E. (OH) -
Senior Project Manager
Steve F. Putrich, P.E. – Principal
Consultant

SUBJECT: Thomas Hill Energy Center
Cell 003 CCR Surface Impoundment
Annual Inspection and Stability Assessments Documentation of Corrective Measures

Mrs. Jones:

Haley & Aldrich, Inc. (Haley & Aldrich) has prepared this documentation on behalf of Associated Electric Cooperative, Inc. (AECI) related to deficiencies identified during annual impoundment inspections or periodic stability assessments (SSA) for the coal combustion residuals (CCR) impoundment referred to as Cell 003 at the Thomas Hill Energy Center located in Clifton Hill, Missouri. The attached table provides a summary of the completed inspection or SSA, the identified deficiencies, and the corrective measures completed by AECI to address the identified deficiency. This documentation has been completed in accordance with the US Environmental Protection Agency's (EPA's) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 40 CFR Part 257 effective 19 October 2015 including subsequent revisions, specifically related to §257.73(d) and §257.83(b).

Haley & Aldrich has provided a summary of the remedies based on correspondence with AECI regarding the noted deficiencies in the attached Table I.

Associated Electric Cooperative, Inc.
Thomas Hill Energy Center
Clifton Hill, MO

Table I
Cell 003 - CCR Rule Inspections and SSA Deficiency Remedies

Document	CCR Rule Reference	Deficiency	Remedy
2019 Annual Inspection	§257.83	Cell 3 currently has no instrumentation for determining water elevation.	AECI has ordered depth gages and will be installed in 2020.
		The emergency spillway elevation has been slightly increased since the last annual inspection. We recommend removing the recently placed aggregate base such that the emergency spillway maximum elevation is a minimum of two feet lower than the dam's crest elevation.	AECI has removed some aggregate and recompacted the remaining aggregate to achieve revised grades.
		A few burrows were observed along the perimeter of Cell 3 and a muskrat was observed swimming in Cell 3 during our annual inspection.	AECI THEC works with U.S. Fish and Wildlife Service to relocate muskrats offsite.
2018 Annual Inspection	§257.83	Cell 3 currently has no instrumentation for determining water elevation.	AECI has ordered depth gages and will be installed in 2020.
2017 Annual Inspection	§257.83	Cell 3 currently has no instrumentation for determining water elevation.	AECI has ordered depth gages and will be installed in 2020.
2016 Structural Stability Assessment	§257.73	The vegetation on the interior and exterior slopes of Cell 003 was generally 6 to 12 inches in height.	As part of the AECI THEC's operation and maintenance plan, vegetation is controlled through mowing and other mitigating measures on an as-needed basis to limit vegetation and woody growth.
		Ruts on crest of the north embankment.	As part of the AECI THEC's operation and maintenance plan, eroded roadway areas are filled and compacted as needed.
		Confirmation of Cell 003 structural stability following a sudden drawdown of Cell 004.	AECI will consider this evaluation in the future if determined necessary to complete.

Updated: 05/28/2020