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MEMORANDUM

18 May 2021
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 001 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 001 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 001 - CCR Rule Inspections and SSA Deficiency Remedies

Document	CCR Rule Reference	Deficiency	Remedy
2020 Annual Inspection	§257.83	A small gouge was observed in the dense graded aggregate base along the perimeter berm of the dewatering pad.	Gouge will be repaired prior to completion of current reconfiguration projects at Cell 001.
		Cell 1 currently has no instrumentation for determining water elevation.	AECI has recently purchased a staff gauge for monitoring the water elevation and anticipate the instrumentation will be installed soon.
2019 Annual Inspection	§257.83	A small gouge was observed in the dense graded aggregate base along the perimeter berm of the dewatering pad.	Riprap was placed in the area of the noted gouge and the berm was regraded to achieve an adequate slope.
		Cell 1 currently has no instrumentation for determining water elevation.	AECI has ordered depth gages and will be installed in 2020.
2018 Annual Inspection	§257.83	Vegetation on the downstream embankment face was estimated to provide about 50% surface cover at the time of inspection.	As part of the AECI THEC's operation and maintenance plan, seeding and fertilizing is applied to barren and thinly vegetated areas on an as-need basis.
		A small seepage area was observed near the toe of the embankment.	AECI continues to monitor seepage; the seep has not been noted to change.
		Cell 1 currently has no instrumentation for determining water elevation.	AECI has ordered depth gages and will be installed in 2020.
2017 Annual Inspection	§257.83	Vegetation on the downstream embankment face was estimated to provide about 50% surface cover.	As part of the AECI THEC's operation and maintenance plan, seeding and fertilizing is applied to barren and thinly vegetated areas on an as-need basis.
2016 Structural Stability Assessment	§257.73	The grass on the Cell 001 exterior slopes was typically 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.
		Update Operating and Management Plan to reflect recent modifications to Cell 001 including the new processing and containment pad.	The changes to Cell 001 included addition of a staging pad for slag. Operations include water and dust management, but overall operation was changed in a minor way. AECI may revise O&M Plan in the future if additional changes are made.

Updated: 5/18/2021