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

MEMORANDUM

17 October 2018
File No. 128064-005

SUBJECT: Location Restriction Demonstration - 40 CFR §257.62 Fault Areas
Thomas Hill Energy Center
Pond 1 – Cell 003
Clifton Hill, MO

Associated Electric Cooperative, Inc. (AECI) owns and operates the coal-fired Thomas Hill Energy Center (THEC, Plant) located near Clifton Hill, Missouri. Pond 1 – Cell 003 (Unit) is an existing coal combustion residuals (CCR) surface impoundment at the Plant. This demonstration addresses the requirements of 40 CFR §257.62 *Fault Areas* of the U.S. Environmental Protection Agency's (EPA's) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 40 CFR Part 257 rule (CCR Rule), effective 19 October 2015, with Amendments effective 29 August 2018, for the Unit.

> *§257.62(a): New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the CCR unit.*

A review of available data from the U.S. Geological Survey (USGS), the Missouri Department of Natural Resources (MDNR), and other available information was completed for this demonstration. The USGS database indicates the nearest fault is the Middle Fork Chariton River fault, approximately 1.2 miles to the west of the Unit; however this fault is older than Holocene time. MDNR has also confirmed that there are no known surface ruptures or deformations directly in the vicinity of the Unit. Based on the available published geologic data and information reviewed, there are no known active faults or fault damage zones that have had displacement in Holocene time reported or indicated within 60 meters (200 feet) of the Unit.

§257.62(b): The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration meets the requirements of paragraph (a) of this section.

I, Steven F. Putrich, being a Registered Professional Engineer in good standing in the State of Missouri, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering. I certify, for the above-referenced CCR Unit, that the demonstration that the CCR Unit is not located within 60 meters (200 feet) of the outermost damage zone of a fault that has had a displacement in Holocene time meets the requirements of 40 CFR §257.62(a).

Signed: _____
Consulting Engineer

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

Professional Engineer's Seal: