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File No. 40616-108

SUBJECT: Liner Design Criteria for Existing CCR Surface Impoundments  
Associated Electric Cooperative, Inc.  
New Madrid Power Plant – Pond 004  
New Madrid, Missouri

Haley & Aldrich, Inc. has developed this Liner Design Criteria demonstration on behalf of Associated Electric Cooperative, Inc. (AECI) New Madrid Power Plant (NMPP) located in New Madrid, Missouri. AECI operates the existing coal combustion residuals (CCR) surface impoundment referred to as Pond 004 for management of CCRs generated. This document has been developed to address the liner design criteria certification from the U.S. Environmental Protection Agency's Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 40 CFR Part 257 (CCR Rule), specifically §257.71.

*§257.71(a)(1): No later than October 17, 2016, the owner or operator of an existing CCR surface impoundment must document whether or not such unit was constructed with any one of the following:*

- (i) A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec;*
- (ii) A composite liner that meets the requirements of §257.70(b); or*
- (iii) An alternative composite liner that meets the requirements of §257.70(c).*

Pond 004 was not constructed with materials listed above as defined by the USEPA. Therefore, for purposes of the CCR Rule, Pond 004 is considered an unlined CCR surface impoundment.

§257.71(b): *The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer attesting that the documentation as to whether a CCR unit meets the requirements of paragraph (a) of this section is accurate.*

I certify that Pond 004 at the AECl New Madrid Power Plant was not constructed with the USEPA defined liners listed under §257.71(a)(1) of the CCR Rule based on available documentation and that the existing CCR surface impoundment is considered unlined.

Signed: \_\_\_\_\_



Certifying Engineer

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Title: Project Principal

Company: Haley & Aldrich, Inc.

Professional Engineer's Seal:

