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MEMORANDUM

17 April 2018 File No. 129342-015

SUBJECT: Updated Notification of Intent to Initiate Closure of an Inactive CCR Surface Impoundment - Inactive Lined Pond New Madrid Power Plant New Madrid, Missouri

Associated Electric Cooperative, Inc. (AECI) prepared an initial Notification of Intent to Initiate Closure of an Inactive CCR Surface Impoundment for the Inactive Lined Pond (Lined Pond) at the New Madrid Power Plant dated 16 December 2015 in accordance with §257.100(c)(1) of the USEPA CCR Rule, 40 CFR Part 257 (CCR Rule). Based on the USEPA Partial Vacatur (40 CFR Part 257 EPA-HQ-OLEM-2016-0274; FRL-9949-44-OLEM) effective 4 October 2016, the Lined Pond is now "subject to all of the requirements of this subpart applicable to existing CCR surface impoundments" [§257.100(a)]. As such, AECI intends to complete the closure of the Lined Pond within five years of the commencement of closure consistent with standard closure timeframes by no later January 2021, in accordance with §257.102(f)(ii).

Proposed Design Description

AECI has initiated closure of the Inactive Lined Pond in January 2016. AECI reserves the right to close the unit in accordance with the alternate closure options. AECI has initiated closure design and has completed subsurface geotechnical investigations to support the design. Appropriate engineering calculations will be completed to verify stability of the final cover system and settlement calculations to assist in the design of the cover subgrades.

The CCR surface impoundment will be closed by initially unwatering remaining standing water that is impounded within the perimeter dikes. AECI has to date managed the water level within the impoundment in accordance with applicable site NPDES permit. Fill material is being placed to elevations that will prevent the future ponding of water (with rainwater being the source of water in the unit's current condition). Additionally, fill material will be placed to develop appropriate grading to develop positive drainage to adequately manage surface water runoff of the final cover system. In combination with the final cover system, the drainage crown and drainage controls will be designed and constructed to manage run-off and minimize post-closure infiltration of water. The cap system will be graded to convey stormwater runoff towards appropriate discharge locations as deemed appropriate based on the final design.

The final cover system is proposed to be designed and constructed to meet the USEPA's CCR Rule requirement of \$257.102(d)(3). The proposed final cover system will have a permeability less than or equal to any bottom liner system or any natural subsoils present, or no greater than 1×10^{-5} cm/s,

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whichever is less, and an 18-inch infiltration layer will minimize the infiltration of liquids through the CCR unit. An equivalent alternative may also be chosen. Erosion of the final cover system will be minimized by the placement of a minimum 6-inch erosion layer, capable of supporting native plant growth. It is anticipated that soils will be imported from adjacent borrow areas proximate to the unit and plant. AECI will be preparing a closure plan in accordance with the Partial Vacatur for the inactive Lined Pond consistent with §257.102(b) providing additional closure detail by 17 April 2018.

Anticipated Closure Schedule

Commence Closure	January 2016
Closure Completion	January 2021

Professional Engineer Certification

I certify that the above-referenced proposed final cover system for AECI's closure of the Inactive Lined Pond at the New Madrid Power Plant meets the USEPA's CCR Rule requirements of §257.102(d)(3).

Certifying Engineer



