



Dianna Tickner
Illinois Power Generating Company
Luminant
1500 Eastport Plaza Drive
Collinsville, IL 62234

June 21, 2021

Mr. Darin LeCrone, P.E.
Manager, Industrial Unit
Bureau of Water, Division of Water Pollution Control, Permits Section
Illinois Environmental Protection Agency
1021 North Grand Avenue, East
Springfield, IL 62794-9276

Re: Cost Estimate for Closure, Post-Closure, and Preliminary Corrective Action at the Coffeen Power Plant
Ash Pond 1 (W1350150004-01); Ash Pond 2 (W1350150004-02); and GMF Pond System (W1350150004-03/04)

Dear Mr. LeCrone:

Pursuant to 35 I.A.C. 845.930(a), Illinois Power Generating Company ("IPGC") submits this written cost estimate for (1) closure and post-closure care and (2) the preliminary corrective action costs for the Ash Pond 1 and GMF Pond System at the Coffeen Power Plant. IPGC is providing the "total cost for closure and post-closure care" under Part 845 along with a preliminary corrective cost estimate "that is equal to 25% of the costs" for closure and post-closure care. 35 I.A.C. 845.930(b), (c).

Taking into account the requirements of 35 I.A.C. 845.930(b)—including the use of "prevailing wages" (845.930(b)(3)); the exclusion of any zero costs for CCR that might have an economic value (845.930(b)(5)); and the exclusion of any salvage value of the facility, structures, or equipment (845.930(b)(4))—IPGC estimates that the closure and post-closure care costs at its existing CCR surface impoundments at Coffeen are \$10,533,191 for Ash Pond 1 and \$13,208,211 for the GMF Pond System. The requirements of Part 845 result in the cost estimates overstating the actual expected future costs.

In accordance with 35 I.A.C. 845.930(c)(1), IPGC's preliminary corrective action cost estimate is \$3,302,053 for the GMF Pond System. Ash Pond 1 does not have a release that has caused an exceedance of the groundwater protection standard in Section 845.600 or groundwater quality standard in 35 Ill. Adm. Code 620. For the closed inactive CCR surface impoundment at Coffeen, IPGC's preliminary corrective action cost estimate is \$841,529 for Ash Pond 2.

The closure and post-closure estimates for existing CCR surface impoundments were derived based on the construction process and items detailed below.

A professional engineering firm will be retained to complete the Ash Pond 1 and GMF Pond System closure design and preparation of the construction bid documents. A contractor will be selected to complete the closure and final cover construction. Construction management ("CM") and construction quality assurance ("CQA") will be performed during Ash Pond 1 and GMF Pond System closure by qualified CM and CQA companies/engineering firms.

Ash Pond 1 and the GMF Pond System will be dewatered as necessary to facilitate closure by leaving the coal combustion residuals ("CCR") in place. The Secondary cell of the GMF Pond System will be dewatered as necessary to facilitate closure by removing the CCR. Water removed from both the Ash Pond 1 and GMF Pond System will be discharged through the NPDES-permitted outfalls. Dewatering for the Ash Pond 1 and the Primary cell of the GMF Pond System will be performed to the extent needed to allow CCR regrading activities to be completed to sufficiently stabilize the CCR and to provide a stable subgrade base for the final cover system. Dewatering for the Secondary cell of the GMF Pond System will be performed to the extent needed to allow CCR to be removed.

The CCR in Ash Pond 1 and the Primary cell of the GMF Pond System will be shaped and graded to the design subgrade limits and elevations. The final cover systems will be placed directly on top of the subgrade layer in each pond to achieve final cover design grades. Ash Pond 1 and the Primary cell of the GMF Pond System final cover system construction will be initiated upon the mobilization of the construction contractor to the ponds. The existing Ash Pond 1 and Primary cell of the GMF Pond System and necessary surrounding areas will be cleared of vegetation and structures (removal or abandonment) to allow for the construction of the CCR subgrade.

The GMF Pond System closure construction will be initiated upon the mobilization of the construction contractor. CCR will be removed from the Secondary cell of the GMF Pond System. The existing liner system in the Secondary cell of the GMF Pond System will be removed, and necessary structures will be removed or abandoned. The former Secondary cell area of the GMF Pond System will be restored by regrading and the placement of soil fill materials as needed.

In accordance with 40 C.F.R. Part 257 and the process in 35 I.A.C. 845.750(c) that allows IEPA to approve an alternative cover, the Ash Pond 1 final cover will include, at a minimum, 18 inches of compacted earthen material with a permeability less than or equal to the permeability of the natural subsoils present in Ash Pond 1 or no greater than 1×10^{-7} cm/sec, whichever is less and 6 inches of soil capable of sustaining vegetative growth.

In accordance with 40 C.F.R. Part 257 and the process in 35 I.A.C. 845.750(c) that allows IEPA to approve an alternative cover, the Primary cell of the GMF Pond System final cover will include, at a minimum, a geomembrane, a geocomposite drainage layer, 18 inches of earthen material, and 6 inches of soil capable of sustaining vegetative growth. The permeability of the final cover system will be equal to or less than the permeability of the existing liner system in the Primary cell of the GMF Pond System or no greater than 1×10^{-7} cm/sec, whichever is less. Since the existing liner system in the Primary cell of the GMF Pond System includes a geomembrane, a geomembrane will be included in the final cover system.

The final cover surfaces of the Primary and Secondary cells of the GMF Pond System and Ash Pond 1 will be seeded and vegetated and will also include necessary storm water management system components to promote positive drainage and to minimize erosion. Access roads will be constructed as part of the Ash Pond 1 and Primary cell of the GMF Pond System final cover systems to provide access to the closed Ash Pond 1 and GMF Pond System. Upon completion of the closure construction, the contractor will demobilize from the project site.

Post-closure care for the Ash Pond 1 and GMF Pond System will be performed for the duration of the specified post-closure care timeframe. Groundwater monitoring will be performed at the required frequency, and the groundwater monitoring system will be inspected and maintained on a routine basis. Throughout the post-closure care period, periodic visual observations of the Ash Pond 1 and Primary cell of the GMF Pond System final cover systems and stormwater management systems will be performed. If repairs are required, the repair activities may include, but are not limited to, replacing and compacting soil cover, repairing eroded drainage channels, filling in depressions with soil, regrading, and reseeding repaired and existing vegetated areas as necessary.

The scope of any groundwater corrective action is not known at this time, and therefore the preliminary corrective action cost estimate for the existing CCR surface impoundments is based on 25% of the closure and post-closure care cost. For the

closed inactive CCR surface impoundments, the preliminary corrective action cost estimate is based on 25% of the post-closure care cost.

If you have any questions regarding this submittal, please contact Phil Morris at 618-343-7794 or phil.morris@vistracorp.com.

Sincerely,

A handwritten signature in blue ink that reads "Dianna Tickner". The signature is written in a cursive style with a large initial 'D'.

Dianna Tickner
Director Decommissioning & Demolition