

**PERIODIC STRUCTURAL STABILITY ASSESSMENT**  
**391-3-4-.10(4) and 40 C.F.R. PART 257.73**  
**PLANT MCINTOSH ASH POND 1 (AP-1)**  
**GEORGIA POWER COMPANY**

The Federal CCR Rule, and, for Existing Surface Impoundments where applicable, the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing CCR surface impoundment to conduct initial and periodic structural stability assessments. The owner or operator must conduct an assessment of the CCR unit and document whether the design, construction, operation and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. *See* 40 C.F.R. § 257.73(d); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b)<sup>1</sup>. In addition, the Rules require a subsequent assessment be performed within 5 years of the previous assessment. *See* 40 C.F.R. § 257.73(f)(3); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b)<sup>1</sup>.

The CCR surface impoundment known as Plant McIntosh AP-1 is located on Plant McIntosh property in Effingham County, east of Rincon, Georgia. AP-1 is formed by an engineered perimeter embankment. The Notification of Intent to Initiate Closure was placed in the Operating Record on 4/17/2019 and closure has been designed to have no negative impacts on the stability of the perimeter embankment. The facility has been undergoing closure by removal; all CCR has been removed and the impoundment has been substantially dewatered.

The foundations generally consist of natural medium stiff silty, and sandy clay, medium dense to very dense silty and clayey sands, and compacted silty clay fill under portions of the embankment where the natural soils have been excavated.

Slope protection against surface erosion consists of grassy vegetation on the exterior dike slopes. Previous vegetation and gravel on the inner slopes were removed during closure construction activities. Wave action is not a concern at AP-1 due to the characteristics of the impoundment (limited width of cells) and the fact that the impoundment has been substantially dewatered as a part of closure. Due to dewatering, AP-1 is no longer potentially subject to rapid drawdown conditions.

<sup>[1]</sup> In a typographical error, 391.3-4.10(4)(b) references the “structural integrity criteria in 40 CFR 247.73,” when the reference to such criteria should be 40 CFR 257.73.

The perimeter embankment has been properly constructed using mechanical stabilization and compacted to a density sufficient to withstand the range of loading conditions.

Vegetated slopes of the dike are properly maintained to the manageable height that allows for routine visual inspections.

AP-1 is subdivided into four cells, known as Cells A, B, C, and D, which are separated from each other by interior containment berms. Cells A, B, and C served as storage cells on a rotating basis, and Cell D served as a clear pond for the management of CCR from Plant McIntosh. The CCR was first sluiced into the active cell (Cell A, B, or C), and when the active cell reached capacity, the CCR was removed by excavation. The decant water from Cells A, B, and C drained to Cell D via interior concrete risers and reinforced concrete pipes passing through the interior cell berms. These pipes have been temporarily plugged as a part of the closure construction. The decant water from Cell D normally returned to the plant via a pumping station that was located near the northwest corner of Cell D. The primary spillway for AP-1 was previously a rectangular concrete riser located near the southwest corner of Cell D. All water is now routed through the temporary water treatment system. The facility can safely manage flow during and following the peak precipitation from the 100-year flood.

The primary discharge structure riser was removed during closure construction and the previously functioning discharge pipe which passes through or under the embankment to south of AP-1 has been grouted to prevent flow. Recent inspections of this structure revealed that it was free of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris prior to it being taken out of service.

A review of current conditions indicates the downstream slopes of the embankment are not subject to inundation from adjacent water bodies.

I hereby certify that the structural stability assessment was conducted in accordance with 40 C.F.R. §257.73(d).

