

**PERIODIC STRUCTURAL STABILITY ASSESSMENT REVISION 1**  
**391-3-4-.10(4) and 40 C.F.R. Part 257.73**  
**PLANT YATES ASH POND 2 (AP-2)**  
**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 Yates AP-2 is located on Plant Yates property, northwest of Newnan, Georgia. A Notification of Intent to Initiate Closure was placed in the Operating Record on 04/17/2019. AP-2 is currently undergoing closure-by-removal. AP-2 was initially subdivided by a temporary cofferdam bisecting the impoundment into an East and West section. All CCR has been removed from the west portion of the original footprint, and CCR removal is ongoing in the east portion. The cofferdam is now being removed as a part of the closure by removal activities. Following the completion of CCR removal activities, a portion of AP-2 will be repurposed for use as a service water pond. As a part of the closure operations and future development for the new service water pond, a new cross-valley dam has been constructed, basically bisecting the original footprint of AP-2. Although closure removal activities are ongoing, the new dam has now been placed into service.

The new AP-2 dam is constructed as an engineered cross-valley embankment. The foundation materials vary across the alignment of the embankment and predominately include partially weathered to relatively unweathered rock, with some stiff to hard silts and medium dense to dense silty, clayey and/or clean sands (SM/SC/SP/SW).

<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.

Slope protection against surface erosion consists of riprap armoring on both the upstream and downstream slopes. The upstream riprap armoring also protects against wave action and rapid drawdown surficial sloughing.

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

As stated previously, most of the embankment slopes are protected with riprap. Where present, vegetation on or around the embankment is properly maintained to a manageable height to allow for routine inspections.

Primary discharge from AP-2 occurs on the north end of the embankment where water flows into a neutralization sump controlled with a stoplog structure. Current overflow operational elevation is set at approximately EL 716 ft. There is no active discharge pipe passing through or under the embankment. However, there is a surficial siphon spillway located at approximately Station 7+25 that can be used to lower future water levels in the event it is necessary to do so. This siphon is not expected to be operational until closure by removal construction activities are complete and the new service water pond is allowed to fill and becomes operational. Additionally, there is an auxiliary labyrinth chute spillway constructed of cast-in-place concrete over the crest of the dam. Both the auxiliary spillway entrance and downstream outlet channel are riprap lined.

The spillways are designed, constructed and maintained to adequately manage flow during and following the peak discharge from a 1,000-year, 24-hour storm.

The downstream slopes of the embankment could be subject to inundation from adjacent water bodies under flood conditions. The downstream toe of the embankment is located approximately 500 feet from normal flow edge of the Chattahoochee River (at its nearest point.) The elevation of the toe is approximately EL 698 ft, and normal pool of the river is approximately EL 687 ft. The downstream riprap armoring will protect the downstream slope of the dam during periods of flooding should it reach or exceed the elevation of the toe.

I hereby certify that the inflow design flood control system plan meets the requirements of 40 C.F.R. § 257.82 and Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(b).

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