

PERIODIC STRUCTURAL STABILITY ASSESSMENT
391-3-4-.10(4) and 40 C.F.R. Part 257.73
PLANT SCHERER ASH POND (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)¹. 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)¹.

The CCR surface impoundment known as Plant Scherer Ash Pond (AP-1) is located on Plant Scherer property, approximately 8 miles northeast of Forsyth, Georgia. The Notification of Intent to Initiate Closure was placed in the Operating Record on 10/30/2020 and closure has been designed to have no negative impacts on the stability of the perimeter embankments.

The ash pond is formed by engineered cross-valley embankments. The foundations and abutments generally consist of Piedmont Physiographic Province residual soils consisting of stiff to hard sandy silts and loose to very dense silty sands with varying clay and mica content. A transitional layer of partially weathered rock is present between the residual soils and the underlying bedrock. The bedrock consists primarily of feldspathic biotite gneiss with localized lenses of feldspathic hornblende gneiss/ amphibolite.

Slope protection against surface erosion consists of gravel surfaced roads along the crest and benches and well vegetated downstream slopes. Wave action is not a concern at the ash pond due to the characteristics of the impoundment and the Fabriform concrete erosion mat on the upstream slopes. The ash pond is not operated in such a manner as to normally be subjected to rapid drawdown conditions. However, historic stability analyses have been conducted for such conditions and these

^[1] 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.

analyses have indicated that the slopes are stable for rapid drawdown under current slope conditions and are protected from surface erosion by Fabriform.

The cross-valley embankments have been properly constructed using mechanical stabilization and earthen soils compacted to a density sufficient to withstand the range of loading conditions.

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

The principal spillway is a morning glory drop-inlet structure located along the west side of the ash pond and it is constructed of 72-inch diameter reinforced concrete pipe. The auxiliary spillway is an 85-foot wide concrete broad crested weir that flows into a vegetated trapezoidal channel. The spillways are designed, constructed, operated, and maintained to adequately manage flow during the peak discharge from the probable maximum flood.

The CCR unit does not have a discharge structure that passes through or under the embankment. The principal spillway is located along the west side of the ash pond and was installed by excavating through residual soils. Recent inspections of this structure revealed that it is free of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the structure.

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).

