

PERIODIC SAFETY FACTOR ASSESSMENT (REVISION 2)
391-3-4-.10(4) and 40 C.F.R. PART 257.73
PLANT MCMANUS ASH POND (AP-1)
GEORGIA POWER COMPANY

The Federal CCR Rule and the Georgia CCR Rule (391-3-4-.10) require the owner or operator of a CCR surface impoundment to conduct initial and periodic safety factor assessments. *See* 40 C.F.R. § 257.73(e); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b)¹. A direct final rule revision to a partial vacatur of the Final Rule became effective on October 4, 2016. This revision eliminated the exemption for inactive CCR surface impoundments and required such units to meet the same requirements as existing CCR surface impoundments. The owner or operator must conduct an assessment of the CCR unit and document that the minimum safety factors outlined in § 257.73(e)(1)(i) through (iv) for the critical embankment section are achieved. 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 McManus AP-1 is located in Glynn County, just northwest of Brunswick, Georgia, on Plant McManus property. AP-1 has undergone CCR removal in accordance with 40 C.F.R. § 257.102(c). On November 27, 2019, Georgia Power submitted a certification of removal report demonstrating completion of CCR removal activities for McManus AP-1. Based on review of the report and an inspection of AP-1 on December 13, 2019, Georgia EPD acknowledged the completion of CCR removal in a letter dated January 10, 2020.

The cross-section of AP-1 is relatively consistent across the length of the embankment. Therefore, a generalized cross section of the dam is deemed to represent the “critical section.”

Factor of Safety analyses performed in 2019 following the completion of removal of CCR to determine the updated minimum safety factor for the critical section resulted in the following minimum safety factors, which remain current:


^[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.

Loading Condition	Minimum Calculated Safety Factor	Minimum Required Safety Factor
Long-term Maximum Storage Pool (Static)	2.27	1.5
Maximum Surcharge Pool (Static)	1.69	1.4
Seismic	1.69	1.0

The embankments of AP-1 are constructed of silty sands that are not susceptible to liquefaction. An assessment of liquefaction potential was performed using Standard Penetration Test N-values, the soils' percent finer than a No. 200 sieve, a seismic event on the order of 6M to 6.5M and a PGA of approximately 8 percent. Factors of Safety against liquefaction were greater than approximately 1.8.

In accordance with 40 C.F.R. § 257.73(f)(3) and 40 C.F.R. § 257.73(e), the Factor of Safety Assessment will be updated every 5 years until such time the Georgia EPD indicates they are no longer required under their regulations.

I hereby certify that the safety factor assessment was conducted in accordance with 40 C.F.R. §257.73(e)(1).



 James C. Pegues, P.E.
 Licensed State of Georgia, PE No. 17419