INITIAL STRUCTURAL STABILITY ASSESSMENT
40 C.F.R. § 257.100(f)(2)(iv) and 40 C.F.R. § 257.73(d)
PLANT HARLLEE BRANCH ASH POND D (AP-D)
GEORGIA POWER COMPANY

A rule amendment to the Federal CCR Rule became effective on November 8, 2024. S*ee* Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments, 89 Fed. Reg. 38950 ("Legacy Rule"). This Legacy Rule defines the term "legacy CCR surface impoundment" and establishes regulatory requirements for units that meet the definition of a legacy CCR surface impoundment. The Legacy Rule requires the owner or operator of a legacy CCR impoundment to conduct an initial and periodic structural stability 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. Part 257, § 257.100(f)(2)(iv) and § 257.73(d). 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).

The legacy CCR surface impoundment known as Ash Pond D (AP-D) at Georgia Power Company's (Georgia Power) Plant Harllee Branch (Plant Branch) property is located on the northern shore of Lake Sinclair, off State Route 24 (US 441) near Milledgeville and Eatonton in Putnam County, Georgia. AP-D is impounded by an earthen dam on the southwest side and by natural ground on the remaining sides. The dam crest elevation varies with a minimum elevation of 402 feet (ft). The maximum height of the dam is approximately 58 ft from the crest of the dam to the downstream toe at Elevation (El.) 344 ft. The upstream slope is approximately 2 Horizontal:1 Vertical (2H:1V), and the downstream slope is approximately 2.5H:1V.

Georgia Power submitted a CCR handling permit application to the Georgia Environmental Protection Division (GA EPD) in November 2018 in accordance with the Georgia Rules for Solid Waste Management, Chapter 391-3-4-.10 (State CCR Rule). The CCR handling permit application is currently under review by GA EPD. Georgia Power intends to close AP-D in accordance with 40 C.F.R. § 257.102(c) and corresponding State CCR Rule 391-3-4-.10(7)(b) by removing and relocating the CCR to a permitted on-site landfill and/or selling the CCR for beneficial use.

AP-D encompasses approximately 46 acres. Construction of the AP-D dam was completed in 1980 by excavating alluvium adjacent to Lake Sinclair and placing fill material on top of existing saprolite. The fill material was sourced from the borrow area in the northeastern portion of AP-D. According to the design drawings, the "most impervious material" was placed at the center of the dam, while the "least impervious material" was placed upstream and downstream of this central zone. The subsurface stratigraphy beneath the AP-D dam and abutments includes, from top to bottom, saprolite, partially weathered rock, and competent bedrock.

In 1981, a minor repair was implemented on the downstream toe of the dam to mitigate seepage through the application of a reverse filter with #57 stone. In 1985, the concrete ditch below the previous repair buckled/uplifted and was replaced with a combined sand/gravel drain. No additional remedial measures were implemented.

AP-D does not currently hold ponded water. Wave action within the CCR surface impoundment is not a concern due to the operational characteristics of the impoundment. Additionally, AP-D is not operated in such a manner as to normally be subjected to rapid drawdown conditions.

Based on the review of available information and visual observations, the AP-D dam has been properly constructed using mechanical stabilization and compacted to a density sufficient to withstand a range of loading conditions. Inspections of the AP-D dam are conducted on a regular basis. No actual or potential structural weaknesses of the dam or abutments, nor any existing conditions that disrupt or may disrupt the operation and safety of AP-D, were documented in the recent inspection reports (i.e., 2024 and 2025).

The exposed portions of the upstream slope, crest, and downstream slope are vegetated with grass, and the vegetation is properly maintained to a manageable height that allows for routine visual inspections. Additionally, the downstream slope includes one minor area with filter stone. Documented site inspections indicate appropriate maintenance of slope vegetation.

The primary outlet structure, including a high-density polyethylene (HDPE) pipe with accompanying upgradient and downgradient concrete flumes, discharges by gravity to Ash Pond C (AP-C). The upgradient concrete flume features a trapezoidal configuration with a bottom width of 6 ft, depth of 2 ft, 0.5H:1V side slopes, and length of 109 ft. The upgradient invert elevation (i.e., toe of the flume within AP-D) is El. 397.69 ft. The 48-inch diameter HDPE pipe connecting AP-D to AP-C is 48 ft long with an upgradient invert elevation of El. 398.45 ft and a downgradient invert elevation of El. 398.05 ft. The downgradient concrete flume features a trapezoidal configuration with a bottom width of 6 ft, depth of 2 ft, 0.5H:1V side slopes, and length of 46 ft. The downgradient invert elevation (i.e., toe of the flume within AP-C) is El. 396.99 ft. There is no evidence of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the primary outlet structure. AP-D does not include a permitted auxiliary spillway under the National Pollutant Discharge Elimination System.

The inflow design flood is the 1,000-year flood for a significant hazard potential CCR surface impoundment (§ 257.82(a)(3)(ii)). With a maximum allowable starting water surface elevation of El. 397.8 ft, the primary outlet structure at AP-D adequately can manage the 1,000-year, 24-hour storm event without overtopping the dam (i.e., El. 402 ft).

A review of current conditions indicates the downstream slope of the dam is not subject to inundation from the one percent annual chance flood (i.e., the 100-year storm event) of Lake Sinclair. The Federal

Emergency Management Agency's base flood elevation is El. 340.8 ft, and the downstream toe of the dam is at El. 344 ft.

I hereby certify that the structural stability assessment was conducted in accordance with 40 C.F.R. § 257.100(f)(2)(iv) and 40 C.F.R. § 257.73(d).

05/06/2026

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