INITIAL STRUCTURAL STABILITY ASSESSMENT
40 C.F.R § 257.100(f)(2)(iv) and 40 C.F.R. § 257.73(d)
PLANT ARKWRIGHT ASH POND 3 (AP-3)
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 unit known as Plant Arkwright Ash Pond 3 (AP-3) is located in Bibb County, Georgia, approximately six (6) miles northwest of the city of Macon. Plant Arkwright began operation in 1941 and was retired in 2002. Demolition of the plant was completed in 2003. AP-3 was initially constructed as a surface impoundment in the late 1970's and began to receive and store CCR produced during the electric generating process at Plant Arkwright from construction completion until 2002. There is a man-made pond north of the unit preventing surface run-on from a small drainage channel from entering AP-3. Discharge from this small pond is routed around AP-3 through a constructed diversion channel. Beaverdam Creek is located south of the unit.

AP-3 was created by construction of the main dam across the existing valley. The remaining portions of the impoundment are contained by natural ground. AP-3's impounding dam is a homogenous structure comprised of compacted clayey and sandy fill sourced from foundation materials in the interior of the unit along the eastern edge, supported by the residual foundation soils. In general, the abutment foundation soils consist of undisturbed residual soils varying from a firm to stiff silty clay, loose to medium dense silty sand, and medium dense to dense sand and gravel overlying weathered bedrock and/or bedrock. Annual inspections for AP-3 have been performed and documented regularly since 1978. No actual or potential structural weaknesses of the dam or abutments for the AP-3 unit, or any

existing conditions that are disrupting or have the potential to disrupt the operation and safety of AP-3 were documented in the most recent annual inspection, dated October 21, 2024.

The AP-3 unit has been closed in place in accordance with Georgia Solid Waste Rules 391.3-4. A Closure Certificate was issued by GA EPD for AP-3 on August 19, 2010. AP-3 has been capped and no longer impounds water or receives waste. Closure construction activities completed on AP-3 have rendered the former surface impoundment incapable of receiving, discharging or impounding water. Since AP-3 has been closed and is no longer capable of impounding water, rapid drawdown failure of inboard slopes cannot occur.

Protection against surface erosion consists of vegetated slopes and riprap in select areas at the toe of slopes. Roads along the crest are gravel surfaced. Wave action is not a concern at this site given that there is no water impounded within the AP-3 unit.

The dam has been properly constructed using mechanical stabilization and earthen soils compacted to a density sufficient to withstand the range of loading conditions. Documentation related to the material placement and compaction for the original construction of AP-3 is not available. Construction records related to the modification of the AP-3 dam detail material placement and compaction and indicate that fill materials were placed in lifts not exceeding six (6) inches deep and compacted by making a minimum of four (4) passes with a sheepsfoot roller. The available geotechnical data and project performance indicate that appropriate compaction exists within the dam of the AP-3. Vegetated cover on slopes of the dam is properly maintained to a manageable height that allows for routine visual inspections. Documented site inspections have indicated appropriate maintenance of slope vegetation.

There are no hydraulic structures associated with AP-3.

AP-3 does not have a spillway and does not impound water; therefore, the 24-hour, 1000-year storm event is not applicable. Stormwater from the cap drains to the south through culverts in the southeast and to a man-made pond at the North end, which both drain into a concrete lined diversion channel on the east side of AP-3. The current closed drainage configuration adequately manages flow during and following the peak discharge from a 24-hour, 25-year storm event.

A review of current conditions indicates the outboard slopes of the AP-3 embankment are not subject to inundation from adjacent water bodies. Therefore, AP-3 does not have any features that are subject to slope failure due to sudden drawdown of the adjacent water body.

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).

Jeffrey S. Dingrando, PE

Licensed State of GA, PE No. 050669