

## **INITIAL STRUCTURAL STABILITY ASSESSMENT**

**40 C.F.R. Part 257.73**

**PLANT HAMMOND ASH POND 2 (AP-2)**

**GEORGIA POWER COMPANY**

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257 and Part 261), §257.73(d), requires 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 to 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.

The CCR surface impoundment known as Plant Hammond AP-2 is located in Coosa, Georgia, approximately 1 mile west of the Rome, Georgia city limits in Floyd County on Plant Hammond property. AP-2 is formed by an engineered perimeter earth embankment. The embankment foundation generally consists of sandy clays of low plasticity.

The upstream slopes (inboard) are either vegetated or covered by ash. Wave action is not a concern at this site due to the characteristics of the impoundment. The 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. These analyses have indicated that the slopes are stable for rapid drawdown under current slope conditions, and vegetation provides protection against erosion, where needed. The downstream slopes (outboard) are adequately vegetated with portions containing rip rap due to past limited surface erosion and surface sloughing.

The perimeter earth embankments have been properly constructed using mechanical stabilization and compacted to a density sufficient to withstand the range of loading conditions.

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

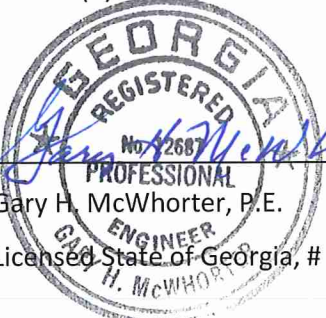
AP-2 is divided into a northern and southern cell, each having an independent, primary spillway (corrugated metal pipe) to a smaller basin located in the northeast corner of the impoundment. The

discharge from this basin is routed to AP-1 through a fiberglass reinforced pipe which penetrates the top of the dike. An independent auxiliary emergency spillway for the northern and southern cells consists of a corrugated metal pipe which penetrates the separator dike and discharges to a basin located in the southwest corner of the pond. From the basin, flows discharge through a 24-inch diameter high density polyethylene (HDPE) pipe to a tributary of the Coosa River. There is no evidence of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the structures. The original auxiliary discharge structure could not be located and is assumed to be abandoned during the installation of the 24-inch HDPE pipe. The 24-inch HDPE outlet and inlet are visually inspected semi-annually.

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

The downstream slopes of the embankment are subject to inundation from the 100-year flood of the Coosa River. The downstream slopes are well vegetated with some sections covered with rip-rap due to historic shallow surface sloughing of surficial soils.

I hereby certify that the structural stability assessment was conducted in accordance with 40 C.F.R. Part 257.73 (d).



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