

INITIAL STRUCTURAL STABILITY ASSESSMENT
40 C.F.R. Part 257.73
PLANT YATES ASH POND B' (AP-B')
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 an 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.

The CCR surface impoundment known as Plant Yates AP-B' is located northwest of Newnan, Georgia, on Plant Yates property. AP-B' was originally formed by an engineered cross-valley embankment. The foundations generally consist of silty sand with gravel, silty sand, partially weathered rock and a localized area of soft clayey sand with organics.

Slope protection against surface erosion consists of grassy vegetation on the interior and exterior dike slopes. Wave action on interior dike slopes is not a concern at AP-B' due to the length and width characteristics of the impoundment. AP-B' 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 analyses have indicated that the slopes are stable for rapid drawdown under current slope conditions. Furthermore, the current grassy vegetation present on the interior slopes will provide protection against potential rapid drawdown related erosion.

The cross-valley 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 to allow for routine inspection.

The primary spillway is an open-channel earthen ditch. The spillway is designed, constructed, operated and maintained to adequately manage flow during and following the peak discharge from a 100-year, 24-hour storm.

AP-B' is divided into northern and southern cells, each having an independent discharge structure consisting of a corrugated metal pipe passing through the embankment. These pipes discharge into AP-3. There is no evidence of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the structure.

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. Part 257.73 (d).

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

