PERIODIC STRUCTURAL STABILITY ASSESSMENT
PLANT MILLER ASH POND
ALABAMA POWER COMPANY

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (40 C.F.R. Part 257 and Part 261) and the State of Alabama's ADEM Admin. Code Chapter 335-13-15 require the owner or operator of an existing CCR surface impoundment to conduct periodic structural stability assessments. Per §257.73(d) and ADEM Admin. Code r. 335-13-15-.04(4)(d) the owner or operator must 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. In addition, §257.73(f)(3) and ADEM Admin. Code r. 335-13-15-.04(4)(f)3. require a subsequent assessment be performed within 5 years of the previous assessment.

The CCR surface impoundment located at Alabama Power Company's Plant Miller referred to as the Plant Miller Ash Pond, is located on Plant Miller's property in west Jefferson County, approximately 20 miles northwest of Birmingham, Alabama. The CCR surface impoundment is formed by a primary cross-valley embankment on the southwest-west side of the impoundment. A smaller saddle dike is located on the northeast side of the impoundment. This saddle dike directly retains little to no free water, as dry CCR has been stacked against it to near the crest elevation of the dike. The foundations and abutments for the embankments consist of stable, stiff to hard residual sandy and silty clays and partially weathered rock.

Slope protection against surface erosion consists of grass on the downstream slopes of both the primary embankment and the saddle dike. Concrete lined drainage ditches are in place on both embankments to move surface water away from the structures. Wave action is not a concern at the primary embankment due to the presence of riprap armament on the upstream slope, and the presence of dry stacked CCR adjacent to the upstream slope of the saddle dike. 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, and these analyses have indicated that the slopes are stable for rapid drawdown under current slope conditions. Vegetation and riprap protect against erosion associated with potential rapid drawdown.

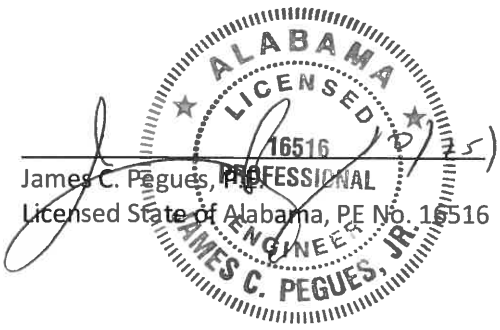
The perimeter embankments have been properly constructed using mechanical stabilization, compacted to a density sufficient to withstand the range of loading conditions.

The discharge structure at Plant Miller consists of a vertical drop inlet connected to a nearly horizontal pipe that carries the discharge to a concrete flume on the downstream side of the dam. The discharge structure is designed to adequately manage flow during and following the peak discharge from the 1000-year 24-hour flood event. As the impoundment is currently in the process of being closed in place, the free water levels are down since process flows are no longer directed to the pond. In addition, a temporary water treatment system has been installed to support closure activities. All water discharge from the pond flows through the treatment system and is directed to a new energy dissipation outfall before entering the original discharge flume.

Recent inspections of the original discharge structure revealed that it is free 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. §257.73(d) and ADEM Admin. Code r. 335-13-15-.04(4)(d).



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